



## Introduction

In this cohort of women seeking care at a university practice in the Gulf South, we aimed to identify specific delays from patient experience of abnormal uterine bleeding (AUB) to referral to gynecologic oncology (GON) with a diagnosis of endometrial cancer (EC).

## Methods

A multicenter, IRB-approved retrospective chart review was performed. Women diagnosed with Stage I-IV endometrial cancer from 2013 to 2022 were included. Demographic and clinical data were collected. Time frames between key events were calculated. Timed events were censored if there was insufficient data to make a calculation. Categorical covariates were summarized with counts and percentages, continuous variables were summarized via means and standard deviations. Categorical covariates were compared across groups using a fisher exact test, while continuous variables were compared using t tests. Multivariable quasi-Poisson regression was performed to predict each treatment time difference for patients to determine if any disparities existed. Time periods were evaluated for difference with regards to race, insurance status, cancer stage, BMI, CCI and distance from the clinic site.

## Data

	Days from referral to first being seen by gyn	Days from first gyn appointment to first sampling of the endometrium	Days from diagnostic sampling of endometrium to pathologic read diagnosis endometrial cancer	Days from pathologic read revealing endometrial cancer to review with patient	Days from pathologic read revealing endometrial cancer to gyn oncology referral
N	89	138	196	155	111
Black Race					
Multiplicative Effect	0.95	1.25	0.79	1.12	2.64
95% CI	0.44-2.06	0.54-2.89	0.27-2.09	0.78-1.61	1.19-6.15
P Value	0.886	0.598	0.636	0.541	0.021
Private Insurance vs all others (inc. unknown)					
Multiplicative Effect	0.66	2.33	0.44	0.78	1.89
95% CI	0.16-1.92	0.97-5.43	0.07-1.62	0.46-1.25	0.7-4.68
P Value	0.509	0.053	0.29	0.324	0.188
Advanced Cancer Stage v non-advanced/unknown					
Multiplicative Effect	0.89	1.36	0.57	1.08	1.29
95% CI	0.35-2.07	0.54-3.17	0.12-1.92	0.71-1.6	0.51-2.99
P Value	0.796	0.487	0.42	0.704	0.57
BMI					
Multiplicative Effect	0.98	0.99	1.02	1	0.99
95% CI	0.04-1.03	0.95-1.04	0.97-1.06	0.98-1.02	0.95-1.03
P Value	0.446	0.758	0.449	0.855	0.592
CCI Total Points					
Multiplicative Effect	1.03	0.89	0.95	0.96	1
95% CI	0.87-1.2	0.73-1.06	0.76-1.16	0.89-1.03	0.83-1.18
P Value	0.755	0.185	0.619	0.297	0.963
Distance					
Multiplicative Effect	1	1	1	1	1
95% CI	0.99-1	0.99-1	0.99-1	1-1	1-1
P Value	-.639	0.601	0.684	0.938	0.589

## Results

Of the 449 women included, 184 (43.7%) were Black-not Hispanic. Most (76.2%) had stage I-II EC. The mean BMI was 37.22 (SD= 10.35) and Charleston Comorbidity Index (CCI) was 4.77 (SD= 2.41). Two-hundred twenty-four patients had documented accounts of AUB prior to diagnosis. Black patients were more likely than non-black patients to report shorter stints of AUB before presenting for evaluation: days (10.1% vs 9.6%), weeks (15% vs 11.3%), months (55.0% vs 41.7%), or years (19.3% vs 37.4%) (p value 0.025). There was no significant difference with regards to days from gynecology (GYN) referral to first GYN appointment, first GYN appointment to first endometrial sampling, endometrial sampling to pathology read diagnosing EC, or EC on pathology read to review with patient. We noted a trend suggesting that privately insured patients took 2.33 times as long to get from first GYN appointment to sampling (95%CI= 0.97-5.43, p=0.053). Black patients waited 21.7 days for a referral after pathology read confirming EC compared to non-black patients who waited 9.1 days; this was 2.64 times as long as other patients to be referred (95%CI=1.19-6.15, p=0.021). Otherwise, the time from pathologic diagnosis of EC to GON referral was similar between groups.

## Conclusion

We report time-to-outcomes for patient workup for EC prior to seeing GON in a diverse patient population. Black patients presented with more advanced disease and comorbidities but reported shorter duration of AUB leading up to their evaluation. This highlights the importance of an expedient work up in this patient population. Time from pathology read to GON referral was 2.6 times longer for Black patients than non-Black patients, representing an opportunity to address systematic delays. These results highlight barriers to diagnosis and work up of EC that are potentially actionable.

## Bleeding Time to Gyn Onc Referral

