RADIANCE1: Reducing delAys in enDometrIAl caNcer CarE Symptoms Through Gynecologic Oncology Referral

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Introduction

- The American Cancer Society (ACS) estimates over 65,000 new diagnoses of uterine cancer will be made during 2022 in the US[1]
- ACS estimates over 12,000 deaths attributable to uterine cancer for 2022[1]
- Endometrial cancer is the most common type of uterine cancer in the US[1]
- Endometrial cancer more frequently impacts Black patients[1]
- Black patients are more likely to die of endometrial cancer than white patients[1]

Objective:
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

- Multicenter, IRB-approved retrospective chart review
- Included 449 women diagnosed with Stage I-IV endometrial cancer from 2013 to 2022
- 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
- Ordinal logistic regression was performed to determine if there was an association between patient demographics and how long AUB had taken place.
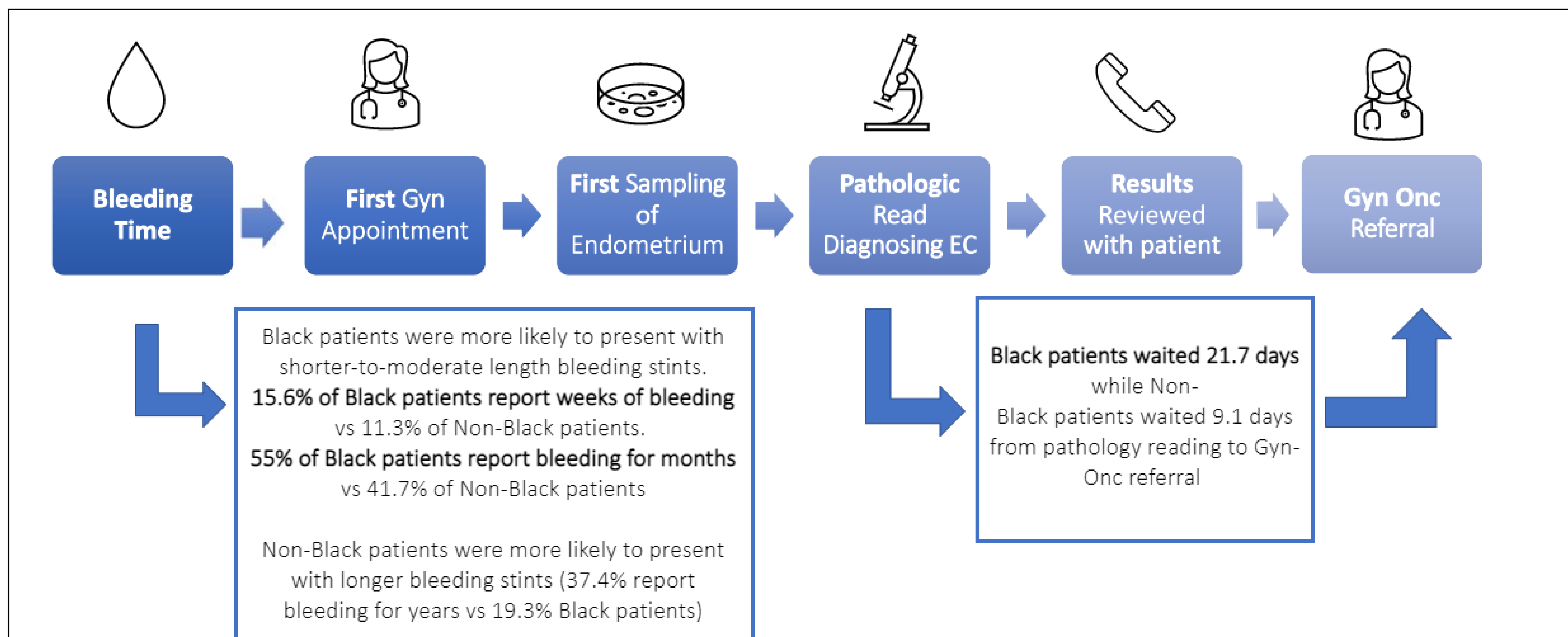
Results

Figure 1: A representative time-frame schematic for the typical patient with endometrial cancer from the time of AUB to the time of referral to gynecologic oncology.

- Black patients waited 2.64 times as long as other patients to be referred (95%CI=1.19-6.15, p=0.021)
- Time from pathologic diagnosis of EC to GON referral was similar between all groups with regards to insurance status, cancer stage, BMI, CCI, and distance from clinic site.

Results Continued

	All (224)	Black patients (103)	Non-black patients (150)
Days of irregular bleeding	22 (9.8%)	11 (10.1%)	11 (9.6%)
Weeks of irregular bleeding	30 (13.3%)	17 (15.6%)	13 (11.3%)
Months of irregular bleeding	108 (48%)	60 (55.0%)	48 (41.7%)
Years of irregular bleeding	65 (28.9%)	21 (19.3%)	43 (37.4%)

Table 1: Ordinal logistic regression demonstrating length of time Black vs. Non-Black patients reported experiencing AUB prior to workup for endometrial cancer. Data is presented as total number of patients experiencing AUB followed by percent of patients in parenthesis.

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 (15.6% vs 11.3%), months (55.0% vs 41.7%), or years (19.3% vs 37.4%) (p value 0.025).

Conclusion

- 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

References
1. American Cancer Society. *Facts & Figures 2022*. American Cancer Society. Atlanta, Ga. 2022.