



Identifying Women with an Undiagnosed Bleeding Disorder in Eastern North Carolina

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BACKGROUND

- Undiagnosed bleeding disorders can have life-threatening consequences in a women's life particularly during childbirth and surgery. This risk increases due to delays in diagnosis and often leads to patients being diagnosed during complications.
- A significant portion of women with a bleeding disorder typically present to their gynecologist with menorrhagia or abnormal uterine bleeding.
- Often, patients are treated from a symptomatic standpoint without further diagnostic workup for inherited or acquired bleeding disorders.
- In Eastern NC, disparities in access to care and poor health literacy contributes to the current diagnostic trends for bleeding disorders.

OBJECTIVE

The objective of this study is to increase utilization of a bleeding risk assessment tool to screen all women presenting to the ECU OB/GYN outpatient clinic with the goal of decreasing diagnostic delay and improving patient care.

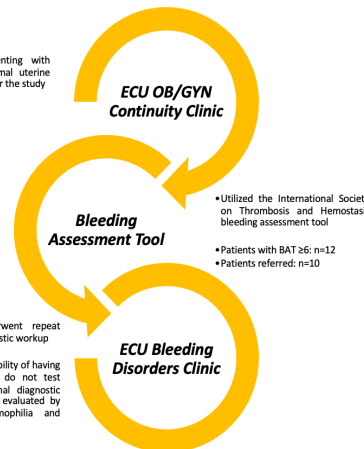
MATERIALS & METHODS

A quality improvement study was conducted in the ECU OB/GYN outpatient clinic. Subjects of this study were patients ≥ 18 years old presenting to the ECU OB/GYN outpatient clinic for low- risk care with heavy menses and dysfunctional uterine bleeding. Patients who scored ≥ 6 on the International Society on Thrombosis and Hemostasis bleeding assessment tool and did not have a prior diagnosed bleeding disorder were referred to Dr. Liles at the Bleeding Disorders clinic. We collected data on the number of patients referred, their ultimate diagnosis, their zip codes and lowest hemoglobin to date. Primary outcomes reported were the prevalence of positive screening in Eastern North Carolina. We related this data to current health factors including income, education and access to care as these factors contribute to the ongoing diagnostic delay experienced by patients.

- Patients ≥ 18 y/o presenting with heavy menses or abnormal uterine bleeding were recruited for the study
- Patients screened: n=68

- Referred patients underwent repeat screening & further diagnostic workup

- Patients with a high probability of having a bleeding disorder but do not test positive through traditional diagnostic measures will be further evaluated by Dr. Ma at UNC Hemophilia and Thrombosis Center

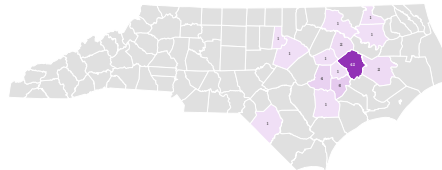


Utilized the International Society on Thrombosis and Hemostasis bleeding assessment tool

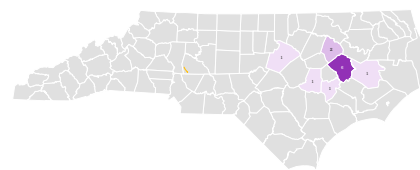
- Patients with BAT ≥ 6 : n=12
- Patients referred: n=10

RESULTS

Total Patients Screened

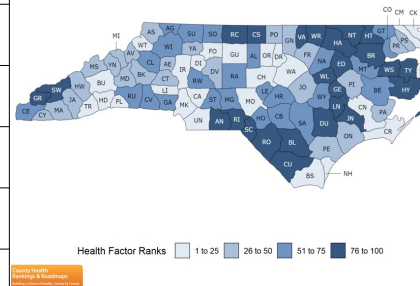


Positive Screen: BAT ≥ 6



County	Uninsured %	High School Completion %	Patient:PCP Ratio
Pitt	12	90	880:1
Lenoir	13	81	2,060:1
Wayne	15	86	2,140:1
Edgecombe	11	85	2,990:1
Beaufort	14	88	2,350:1

2023 Health Factors - North Carolina



Health Factor Ranks 1 to 25 26 to 50 51 to 75 76 to 100

- Out of total patients screened (n=68), 61.1% are from Pitt County, 8.8% are from Lenoir County and 5.9% are from Wayne County.
- Out of positive screens (n=12), 46.1% are from Pitt County and 16.7% are from Edgecombe County.
- 2 patients with a BAT score ≥ 6 opted out of referral due to distance and financial concerns.
- Remaining patients are awaiting evaluation. 1 patient did not present to their appointment at the Bleeding Disorders Clinic.
- 1 patient was evaluated by the Bleeding Disorders clinic but failed to test positive for a bleeding disorder.
- There are about 20.9% of patients with a BAT score of 4 or 5 without a history of surgery or childbirth.

SUMMARY

- Poverty rate in Eastern NC is an average of 21.6% compared to an average of 13.4% in NC. Majority of the patients with a positive screen reside in impoverished areas and do not have regular access to care, thus contributing to their delay in diagnosis.
- Given our current screening trends, we have potentially identified patients with a bleeding disorder who otherwise would have been missed diagnoses.
- With continued screening and referrals, we will be able to identify areas in Eastern North Carolina which have a significant amount of bleeding disorders diagnosed.

CONCLUSION

- This is an ongoing study.
- Current disparities in Eastern NC contributes to the diagnostic delay faced by women with an undiagnosed bleeding disorder.
- Through a collaborative effort between ECU OB/GYN and ECU Hemophilia and Bleeding Disorders Clinic, we are improving patient care, and raising awareness about inherited and acquired bleeding disorders.
- Future areas of study include developing a modified risk assessment tool that can be utilized to screen younger women who do not have a history of surgery or childbirth to help overcome the disparity in diagnosis.

ACKNOWLEDGEMENTS

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