



## I have nothing to disclose.

## **SPEAKER DISCLOSURE**

# Longitudinal Analysis Of Viscoelastic Testing Utilization In Postpartum Hemorrhage Management: Trends Over Time

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## Background & Hypothesis

Postpartum hemorrhage (PPH) is the leading cause of maternal morbidity and mortality worldwide, affecting 14 million women annually [1].

Viscoelastic testing (VET) includes TEG, ROTEM, and Quantra devices. These tests provide real-time evaluation of the coagulation process.

VET has the potential to precisely tailor blood product administration, limit product waste, reduce total blood loss, prevent complications, and improve safety for high-risk patients [2-4].

It is unclear whether VET is being utilized in clinical practice across various healthcare institutions to manage episodes of PPH.





### **Study Design and Methods**





### Results

- 181,267 patients across 79 healthcare organizations (HCOs) comprised the cohort where an instance of PPH occurred without VET ("PPH event").
- 768 patients across 12 HCOs comprised the cohort that utilized VET when an instance of PPH occurred ("VET event").

	PPH event	Total VET events	Mean VET events per year	VET utilization Rate
	Total patients (n)		Mean (n)	(%)
2012-2015	31354	52	13	0.15%
2016-2019	62500	203	51	0.33%
2020-2023	87413	513	128*	0.58%**





### Figure 1

### Figure 2



### Figure 3

Regional Distribution of PPH Incidence



### Figure 4

Regional Distribution of VET Use





### **Conclusion and Discussion**

- Our data demonstrates that the rate of VET utilization in the setting of PPH has significantly increased from 2016-2019 to 2020-2023.
- Use of VET in the setting of PPH has risen in recent years, but utilization of the test across healthcare institutions remains rare.
- Regional differences in VET utilization may exist
- Limitations in uptake:
  - Need for standardized guidelines, evidence from large RCTs,
  - Training individuals to use TEG and ROTEM devices
  - Infrastructure and institutional buy-in to integrate VET testing into clinical workflows





