

Pre July 2024-Dec 2025  
 Post: Jan-Present  
 Total cohort n=102

Intervention Rollout  
 Jan 1, 2026

# Structured PERT Team Note Improves Documentation and Lovenox Utilization in Pulmonary Embolism

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## Background

Pulmonary Embolism Response Teams (PERT) provide multidisciplinary risk stratification for intermediate and high-risk PE. Despite activation, **documentation quality, anticoagulation standardization, and risk stratification** remained inconsistent at our institution.

Unfractionated heparin was the default MICU and outside hospital transfers preferred anticoagulation despite evidence supporting LMWH (Lovenox) as non-inferior and less labor intensive. Lovenox has been shown to improve anticoagulation time and decrease the risk for bleeding compared to Heparin.

## Objectives

- Increase PERT note documentation
- Improve Lovenox Utilization as the preferred anticoagulation
- Reduce MICU admission for patients with low-intermediate risk

## Intervention

### Structured Note Template

Creation of standardized note with dropdown risk-factor selection and anticoagulation decision support deployed in EPIC EMR on January 1<sup>st</sup> 2026.

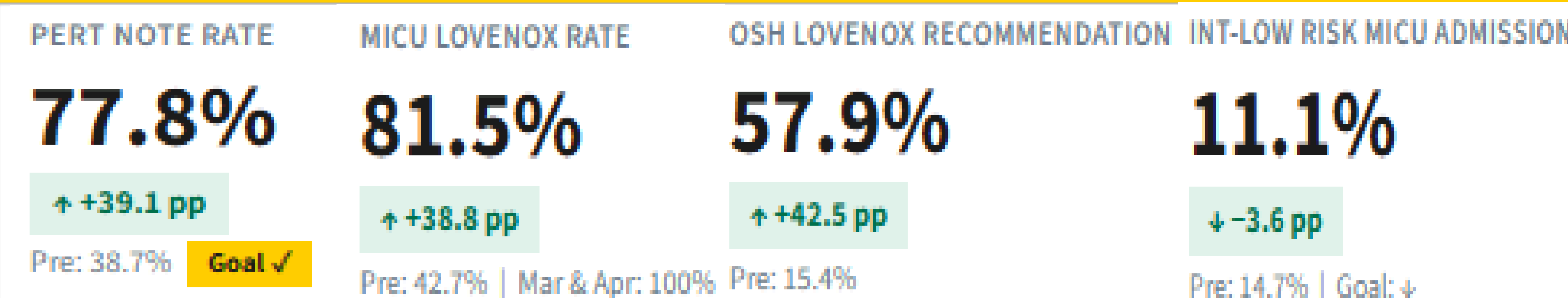
### Study Design

Single-center prospective QI analysis  
 Pre: Jul 2024-Dec 2025 (n=75). Post Jan-Present (n=27)  
 Primary outcomes: Documentation rate, AC choice, and appropriate patient selection for MICU admission

## Patient Population

All MICU admission with PERT activation for confirmed PE (n=102).  
 Risk stratified per ESC criteria:  
**Massive** 9.8% (N=10)  
**Intermediate-High** 75.5% (n=77)  
**Intermediate-Low** 14.7% (n=15)  
 Presentation: OSH transfers 64.7% (n=66), ED 29.7% (n=30), In-House 5.9% (n=6)

## Results



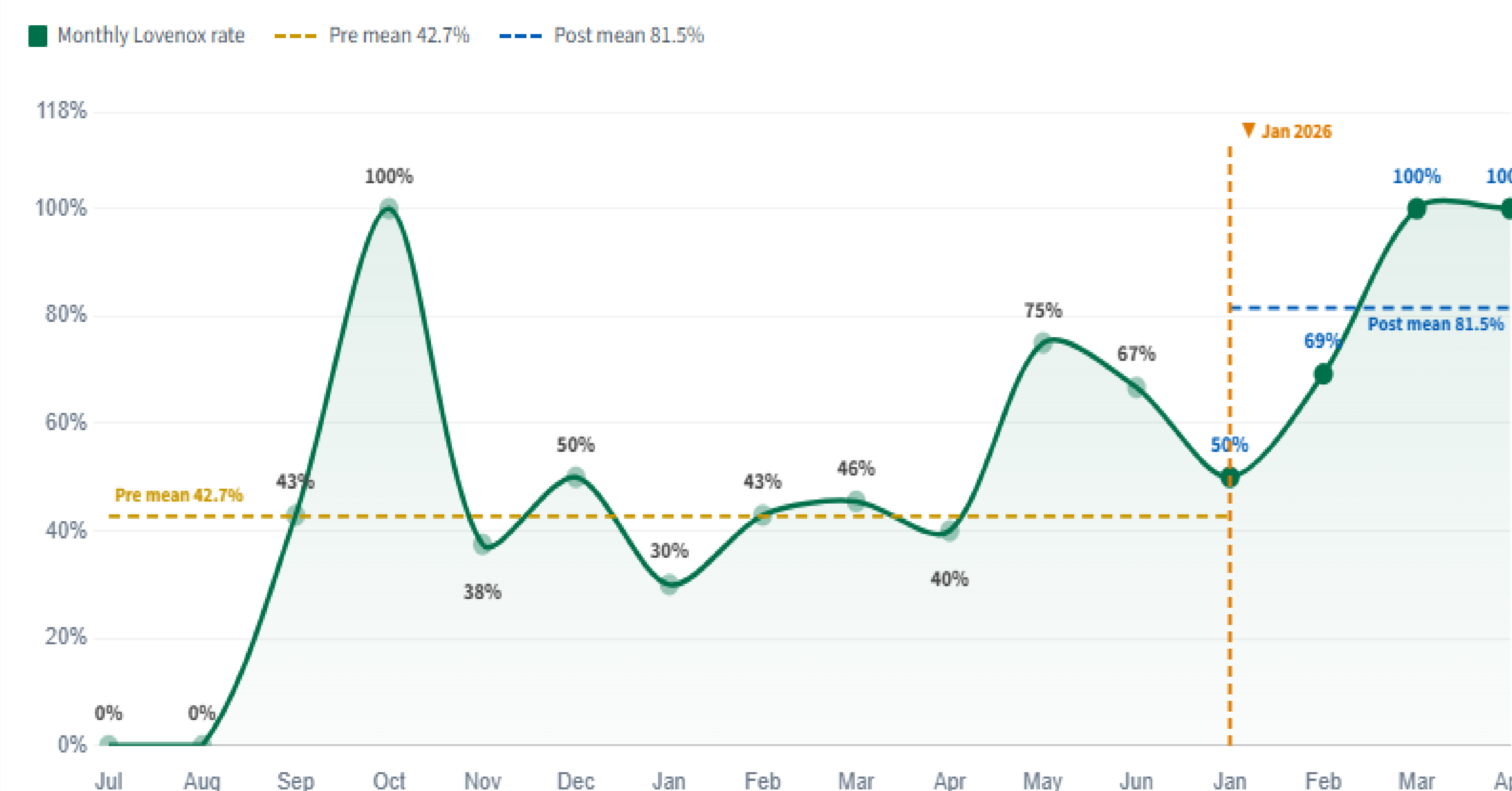
### Structured PERT note completion per activation

Each point labeled. Gold dashed = pre-intervention mean (38.7%). Red dashed = 60% goal. Amber marker = Jan 2026 intervention.



### Lovenox as MICU anticoagulation per activated case

Each point labeled. Gold dashed = pre-intervention mean (42.7%). Blue dashed = post-intervention mean (81.5%). Amber marker = Jan 2026.



## Conclusions

- Documentation goal met: Pert note rate increase 38.7% to 77.8%
- Lovenox standardization achieved: MICU Lovenox utilization increase from 42.7% to 81.5%
- Lovenox recommendations to OSH increased from 15.4% to 57.9%
- Slight decrease in intermediate-low risk admissions from 14.7% to 11.1%

## Limitations

- Post-intervention cohort (n=27, 4 months) remains underpowered for outcome comparisons.
- Single Center and prospective study
- Continued data collection through Dec 2026 is required.

## Next Steps

- Continue to gather data for the rest of the year
- Update note template to be up to date with new recommendations/guidelines
- Provide fellow education and improve note to increase thrombolytic utilization and OSH recommendations for thrombolytic
- Develop strategies to decrease length of stay

## References

- Maughan BC, Kabrhel C, Jarman AF. Evidence-Based Anticoagulation Choice for Acute Pulmonary Embolism. *JAMA Netw Open*. 2025;8(1):e2452850. doi:10.1001/jamanetworkopen.2024.52850
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- Creager, M, Barnes, G, Giri, J. et al. 2026 AHA/ACC/ACCP/ACEP/CHEST/SCAI/SHM/SIR/SVM/SVN Guideline for the Evaluation and Management of Acute Pulmonary Embolism in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *JACC*. 2026 Apr, 87 (13) 1626–1710.