

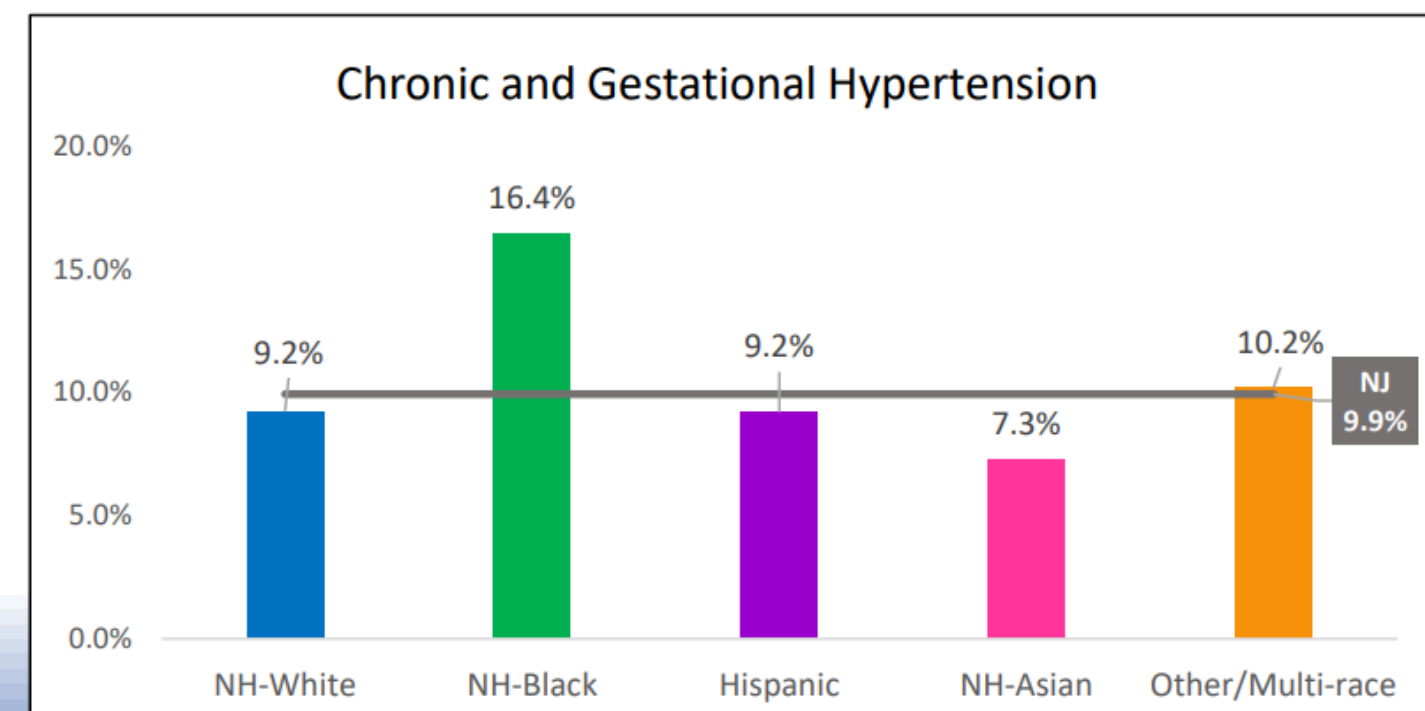
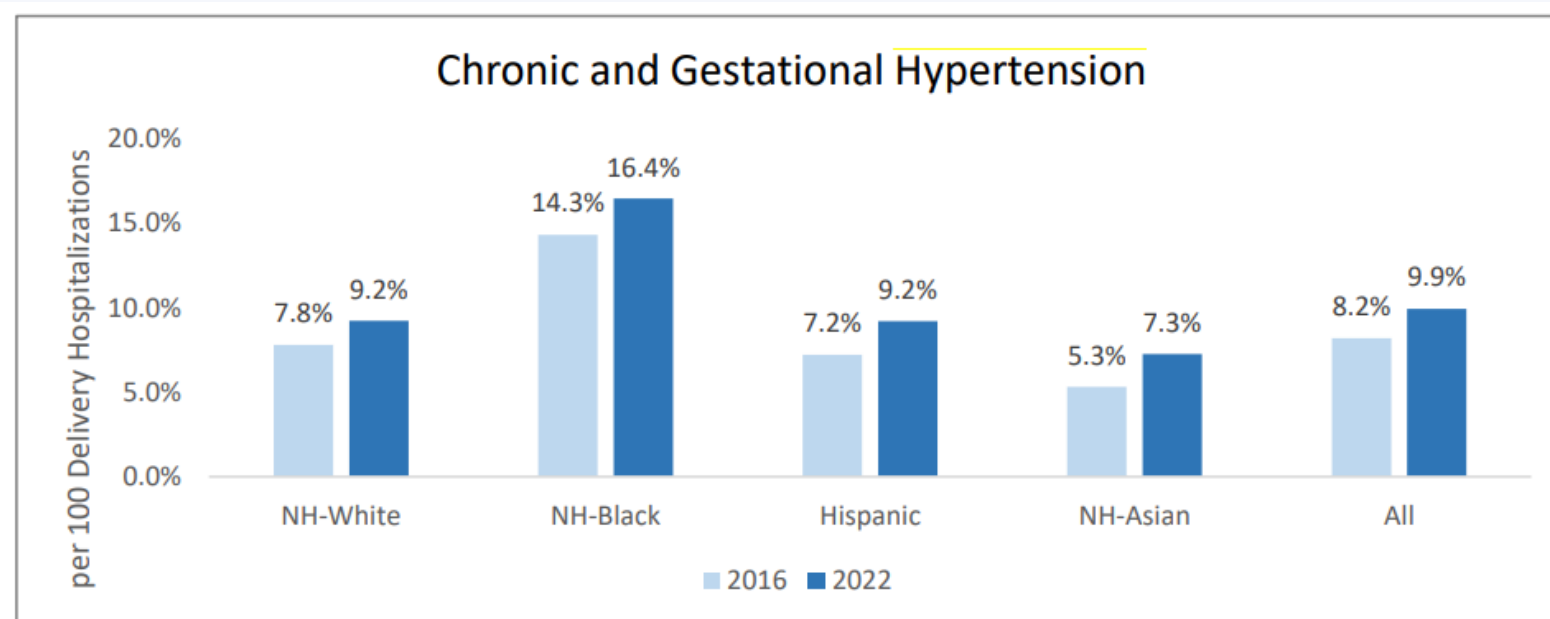
# Pregnancy Under Pressure: Implementation of a Nurse Driven Protocol to Improve Hypertension Management

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## INTRODUCTION

- Hypertensive disorders of pregnancy include gestational hypertension, preeclampsia, and eclampsia.
- Significant cause of maternal and perinatal morbidity and mortality.
- Rates are rising in NJ, with the greatest impact on non-Hispanic black birthing people.



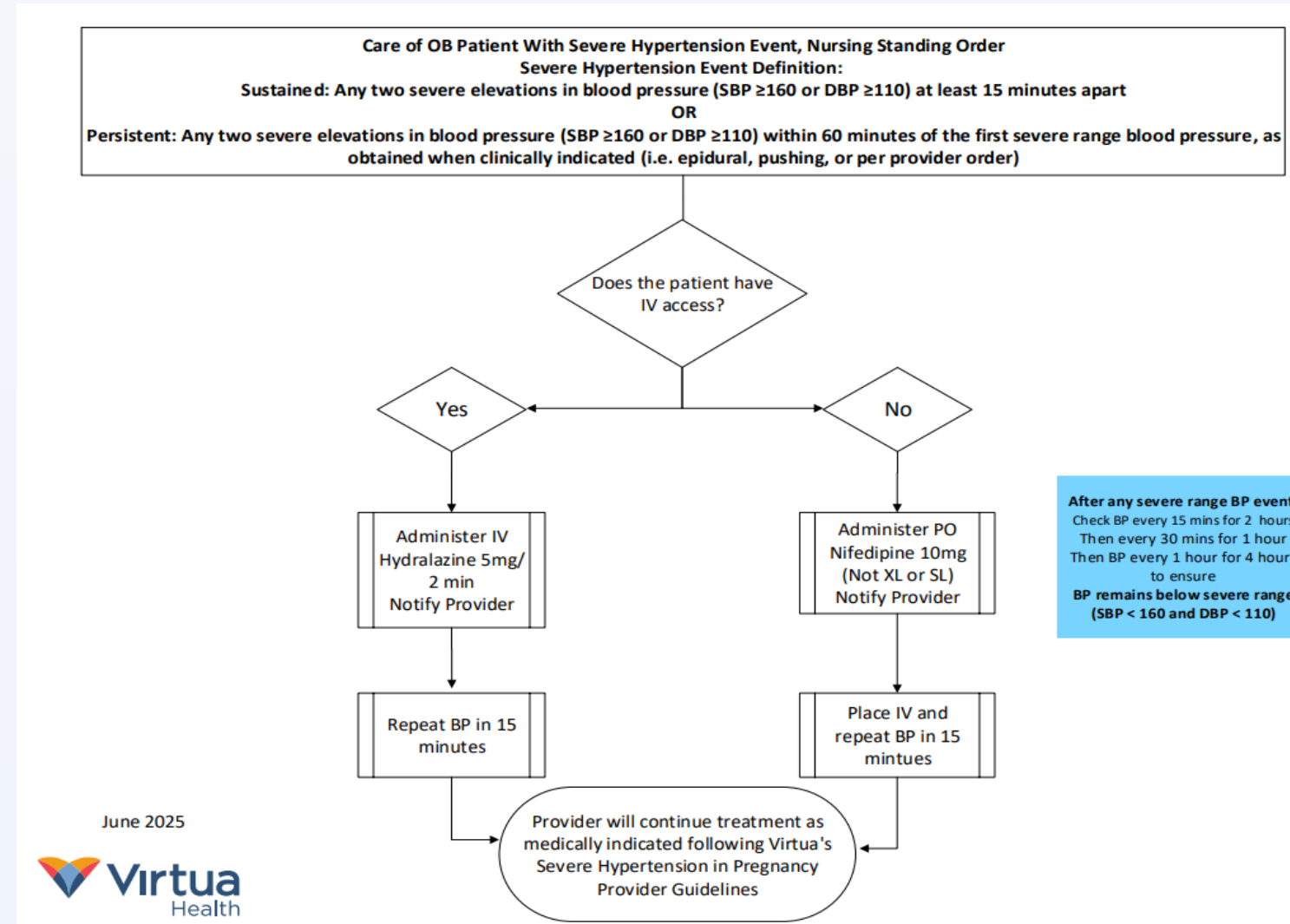
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health  
2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health

- Target: Treat severe hypertension within 60 minutes; best practice is under 30 minutes.
- Treatment delays cause preventable complications like stroke, organ failure, preterm birth, and fetal growth restriction.
- At Virtua, severe hypertension is treated in 37.2 minutes on average, with 84% treated with 60 minutes.

Measure	Facility	Target	Race	Ethnicity	Percent of Total				2025	2024
					Q1	Q2	Q3	Q4		
HTN – Maternal Health	VIRTUA	>= 84	White		82.1	88.4			84.7	83.9
			Black		82.9	80.0			81.8	83.0
			Asian		90.9	50.0			76.5	90.3
			Other		100.0	66.7			83.3	81.0
			Hispanic		88.9	89.5			89.2	81.7

## METHODS

- Aim: implement a nurse-driven protocol to reduce treatment time by 10% and boost compliance to 90%.
  - The Iowa Model for Evidence-Based Practice (EBP) was used as a framework
- An interprofessional team of nursing, obstetrics, maternal-fetal medicine, pharmacy, and informatics, was formed.
- Designed a standardized care pathway for managing hypertensive disorders in pregnancy.



- Used EMR to create a clinical workflow with nursing prompts, decision support, and embedded protocols.



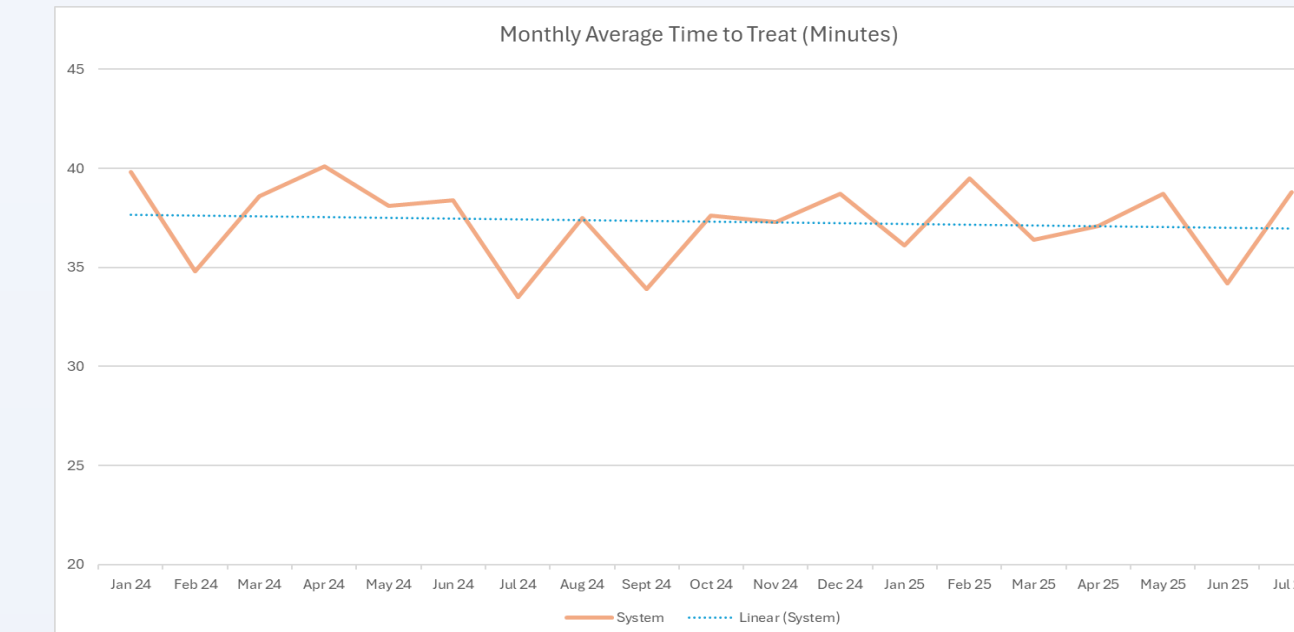
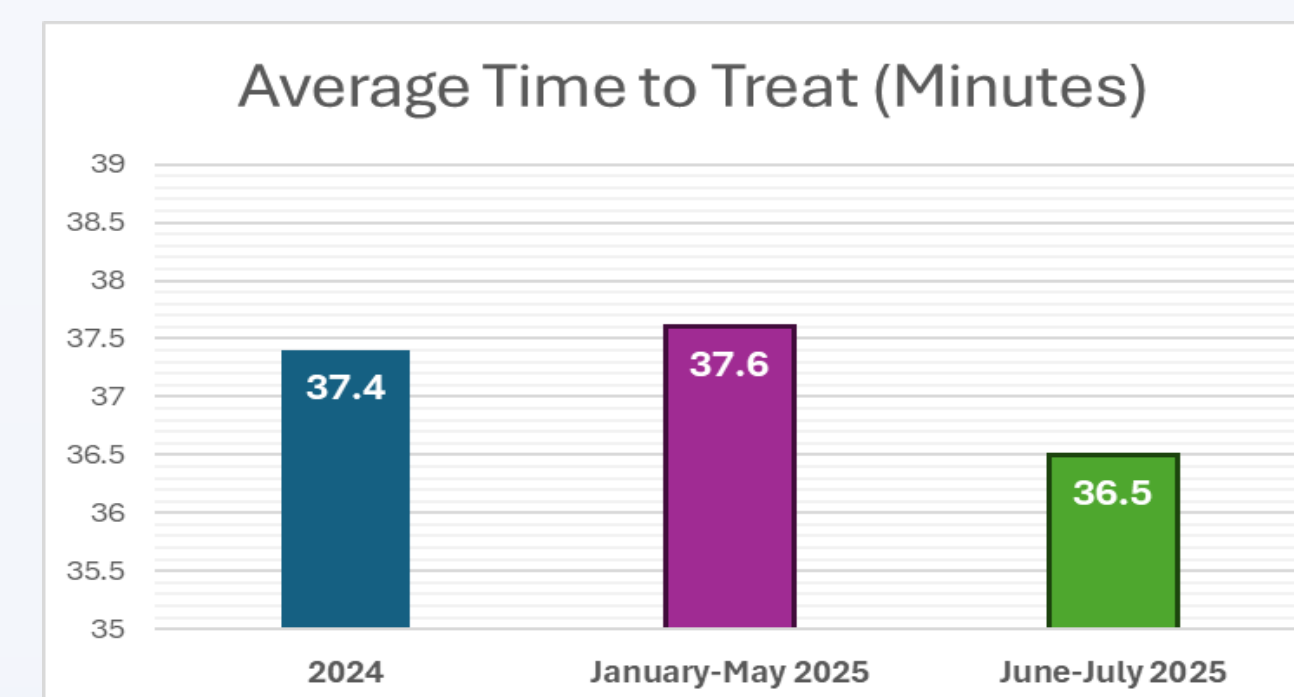
- Comprehensive education was provided to all disciplines involved in obstetric care.

## RESULTS

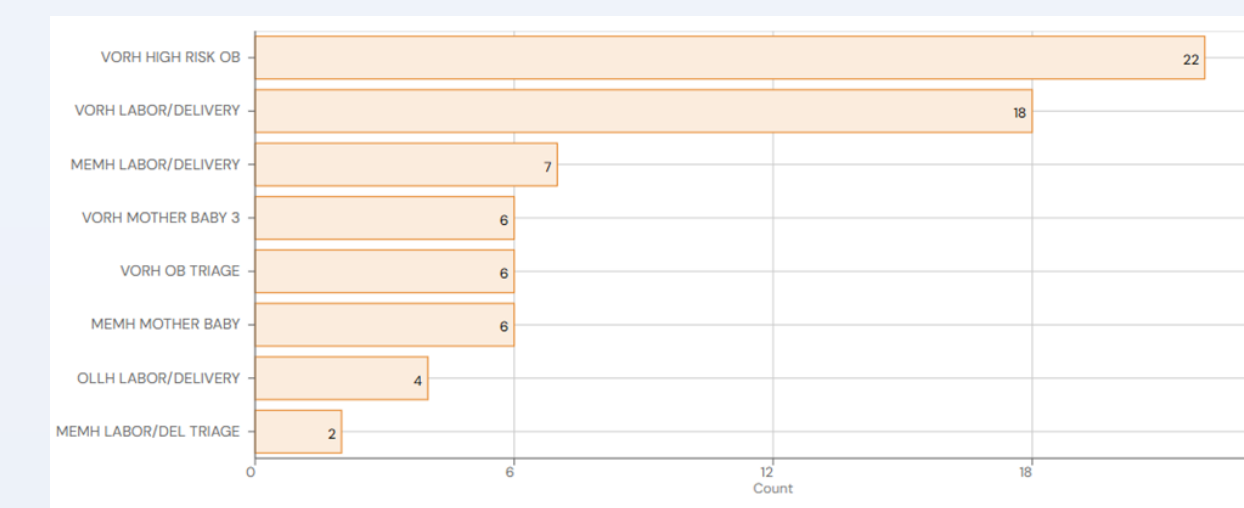
- Compliance with treatment within 60 minutes:

System	2025 Target: 83/84/85												
	2025			Q1			Q2			Q3			2025
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	2025
Numerator	84	62	75	221	79	76	89	244	89	89	554		
Denominator	95	76	92	263	96	86	97	279	100	100	642		
%	88.4%	81.6%	81.5%	84.0%	82.3%	88.4%	91.8%	87.5%	89.0%	89.0%	86.3%		

- Time from 1<sup>st</sup> severe BP to treatment:



- Overall utilization of nurse pathway (n=63):



## NEXT STEPS

- Extend OPA workflow to Critical Care and ED to improve timely, consistent hypertension treatment in obstetric patients.
- Monitor readmissions to assess if early treatment lowers hypertension-related returns.

## CONCLUSIONS

- This initiative highlights the potential of evidence-based, team-driven protocols to enhance hypertensive disorder care in pregnancy.
- Nurses play a key role in early identification and protocol-driven response to hypertensive disorders.
- By implementing a nurse-led protocol for hypertension management in pregnancy, healthcare teams can:
  - Enhance communication
  - Reduce response times
  - Improve maternal and newborn outcomes

## REFERENCES

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Risk/Safety/Quality