

# CODE STRONG: A collaborative approach to patient safety and staff satisfaction

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## INTRODUCTION

### Background:

In October 2024, Virtua Our Lady of Lourdes (VOLOL) established a dedicated Rapid Response Team (RRT) to improve early recognition and management of clinically deteriorating patients. Prior to this, ICU charge nurses responded to emergencies without a structured system for proactive rounding on high-risk patients. This limited the hospital's ability to intervene preventatively, potentially impacting patient outcomes. In addition to safety concerns, staff burnout and job satisfaction were identified as areas needing improvement, particularly among frontline nursing staff.

### Purpose:

This quality improvement initiative aims to assess the impact of the RRT on both patient outcomes and staff well-being. Focus areas include improving strategies to prevent central line blood stream infections and reducing the frequency of inpatient cardiac arrests. A staff survey was also conducted to evaluate the perceptions of the RRT's influence on burnout and job satisfaction.

### Framework:

The Plan-Do-Study-Act (PDSA) cycle is the guiding framework for this initiative, supporting ongoing data-driven refinement of the RRT model.

### Objectives of Poster:

- Describe the impact of implementing a Rapid Response Team (RRT) on key patient safety outcomes, including rates of inpatient cardiac arrest and hospital-acquired infections such as CLABSI.
- Examine the potential influence of RRT implementation on nursing staff well-being, by exploring trends in call volume, perceived burnout, and staff satisfaction.

## METHODS

### Setting and Participants:

VOLOL is a historic, Catholic-affiliated teaching hospital deeply embedded in Camden's community. It combines advanced tertiary care with a mission-oriented approach to serving medically complex and underserved populations. The staff/units involved include the rapid response nurses and the nursing staff on the Medical-Surgical and PCU units (2 East/West, 3 East/West, 6 North/5 Main, PCU4, PCU5) as well as Inpatient Rehab. The time frame is from October of 2024 when dedicated RRT team was formed to May 2025.

### Data Collection and Analysis:

Quantitative data was collected to compare outcomes in the six months before and after the RRT's implementation. CLABSI rates were obtained from infection control records, and inpatient cardiac arrest data were extracted from code event logs. Additionally, RRT call logs were analyzed to identify patterns in high call volume by time of day and day of the week. These trends will inform decisions regarding potential staffing adjustments to ensure adequate coverage during peak times. A structured survey was distributed to nursing staff to assess the perceived impact of the RRT on support, stress levels, and workplace satisfaction.

Division	Type of LINE	Infection Date	UNIT	Totals
Our Lady of Lourdes Hospital	CVC Double Lumen   Hemodialysis catheter	2/5/2023	CC1	Quarter 1= 1
Our Lady of Lourdes Hospital	CVC Triple Lumen   Introducer	5/25/2023	CC2	Quarter 2= 2
Our Lady of Lourdes Hospital	CVC Triple Lumen	6/23/2023	CC1	Quarter 3= 2
Our Lady of Lourdes Hospital	CVC Single Lumen	8/29/2023	CC2	Quarter 4= 0
Our Lady of Lourdes Hospital	PICC Double Lumen	9/13/2023	PCU4	2023 (5) CLABSI'S
Our Lady of Lourdes Hospital	Hemodialysis catheter	2/12/2024	CC1	
Our Lady of Lourdes Hospital	CVC Triple Lumen	2/23/2024	CC2	
Our Lady of Lourdes Hospital	Hemodialysis catheter	2/26/2024	CC1	
Our Lady of Lourdes Hospital	Hemodialysis catheter	6/13/2024	3EW	
Our Lady of Lourdes Hospital	CVC Triple Lumen	6/24/2024	CC2	Quarter 1= 3
Our Lady of Lourdes Hospital	Hemodialysis catheter	9/6/2024	IP REHAB	Quarter 2= 2
Our Lady of Lourdes Hospital	Hemodialysis catheter	11/11/2024	SN	Quarter 3= 1
Our Lady of Lourdes Hospital	Hemodialysis catheter	12/7/2024	CC1	Quarter 4= 3
Our Lady of Lourdes Hospital	CVC Triple Lumen   CVC Triple Lumen   Hemodialysis catheter	12/14/2024	CC1	2024 (9) CLABSI'S
Our Lady of Lourdes Hospital	Hemodialysis catheter	5/11/2025	3EW	Quarter 1= 0
Our Lady of Lourdes Hospital	PICC Double lumen	6/11/2025	CC2	Quarter 2= 2
				2025 (2) CLABSI'S

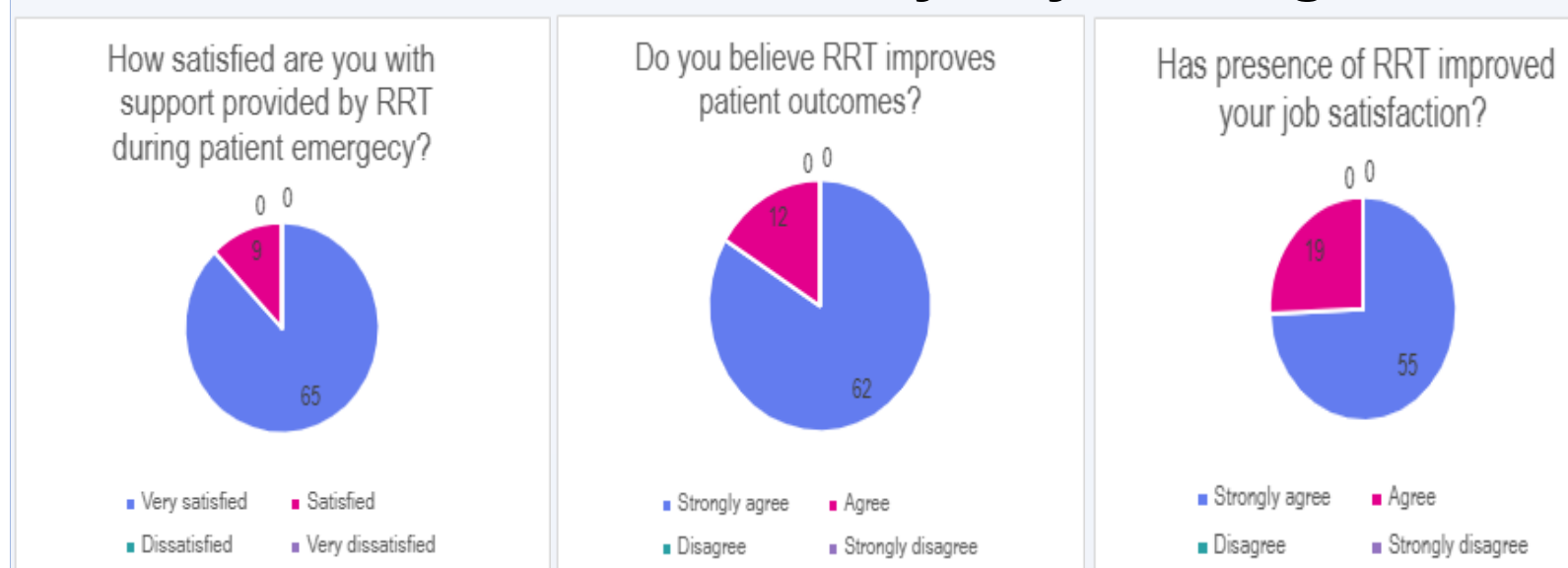
## RESULTS

### Key Findings:

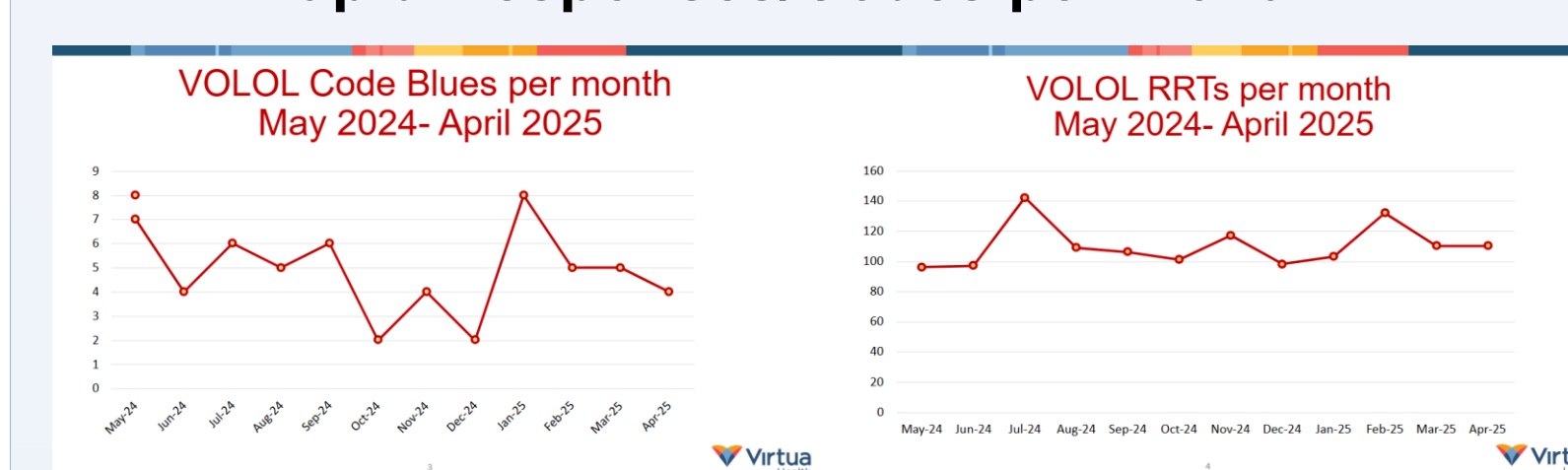
Peer-to-peer observations were conducted by the Rapid Response Nurses in February 2025. Quarter 1 of 2025 resulted in 0 CLABSI and just 2 in Quarter 2. There was no significant difference between the number of in-hospital cardiac arrests from the 6 months before and the 6 months after RRT was created. Code survival increased by 6%. The number of RRTs called 6 months before and 6 months after the creation of the RRT team remained consistent.

### Visuals:

#### Staff Satisfaction Survey Key Findings



#### Rapid Responses/Codes per month



### Code survival:

22% May 24 - Oct 24  
26% Nov 24- April 25

### Actionable Data:

The implementation of more efficient deterioration screening tools may be utilized to identify patients at risk and hence prevent the delay in RRT activation. Current data and research is being used to evaluate the Deterioration Index (DI) and Electronic Cardiac Arrest Risk Triage (E-cart) in the hospital setting. Diligence must persist in placing patients in the appropriate level of care to prevent the need for "rescue".

## CONCLUSIONS

Initial findings indicate a reduction in CLABSI rates and a slight increase in inpatient cardiac arrest survival following the implementation of the RRT, suggesting improved clinical outcomes and early intervention effectiveness. The launch of the Rapid Response Team at Virtua Our Lady of Lourdes has already yielded positive trends in patient safety outcomes. Ongoing analysis of call volume patterns provides a data-driven approach to optimize resource allocation and staffing during high-demand periods. With the continued evaluation of nursing staff satisfaction of RRT, the project will further explore the RRT's influence on workplace efficiency and the reduction of nurse burnout. This initiative reflects a comprehensive approach to quality improvement that integrates patient outcomes, staff well-being, and operational efficiency within the PDSA framework.

## REFERENCES



## ACKNOWLEDGEMENTS

### Contributors:

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