

# Effective Collaboration Towards Positive Perioperative Outcomes for the Cardiac Surgery Patient: A Perioperative Services – Cardiac Surgery Performance Innovation Project



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## INTRODUCTION

- Nurses in the University of Maryland Medical Center (UMMC) Procedure Readiness Evaluation and Preparation (PREP) Center care for complex patients and support multiple surgical specialties, including cardiac surgery.
- Workflows related to cardiac surgery, specifically identification of blood type and antibodies (“blood banding”), presented a particular challenge for the clinic, and cardiac surgery patients were not always ready for the operating room (OR) on the day of surgery.

## PROJECT AIMS

- To provide an efficient outpatient pre-operative 30-day blood band process in the PREP Center for the outpatient adult Cardiac Surgery patient.
- To establish a mutually beneficial internal work flow between UMMC Perioperative Services and Cardiac Surgery staff to minimize downstream OR delays.

## DESCRIPTION OF CURRENT STATE

- A consultative group (TogetherMD) facilitated UMMC Perioperative Services leadership conversations in a review of internal workflow and processes needed to improve UMMC Perioperative Services for Cardiac Surgery.
- Findings from the discussions included:
  - Lack of available blood product(s) and timely antibody identification was key reason for delays into the OR
  - The PREP Center needed to streamline pre-operative blood type and antibody identification up to 30 days prior to surgery
  - Collaboration with Cardiac Surgery clinic, UMMC Transfusion Medicine, and UMMC Patient Administrative Services staff was necessary

## STRATEGY

- Beginning in June 2019, the following performance improvement strategies were implemented:
  - Established workflow with assigned duties and responsibilities between Cardiac Surgery and UMMC Perioperative Services
  - Engaged UMMC Patient Administrative Services to establish an outpatient registration workflow for pre-operative 30-day blood band venipuncture appointments
  - Reinforced and validated PREP Center Patient Care Technician education regarding 30-day blood band lab procurement and associated form storage
  - Established open lines of communication between PREP Center leadership and Cardiac Surgery staff regarding real-time identification of workflow challenges

## EVALUATION & OUTCOMES

- Post-implementation, all available 30-day blood bands and accompanying forms for next-day outpatient Cardiac Surgery patients have been delivered to the UMMC Ambulatory Surgery Care Unit and made available prior to each Cardiac Surgery patient’s arrival.
- Strategies have also demonstrated a success in decreasing delays for On-Time-First Case-Starts (OTFS).

Figure 1: OTFS for Adult Cardiac Surgery by Month

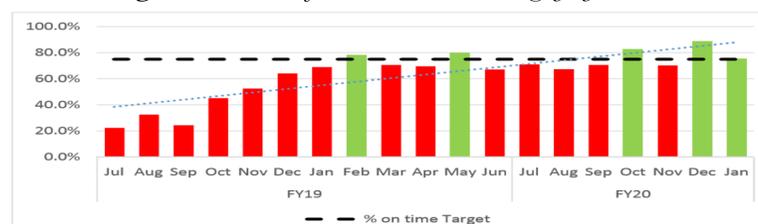


Table 1: Year-To-Date Percent of OTFS for Adult Cardiac Surgery\*

	FY 2018	FY 2019	FY 2020
YTD Cumulative	26.9%	57.2%	75.1%

\* Year-to-date (YTD) determined by the fiscal year

## IMPLICATIONS FOR ADVANCING THE PRACTICE OF PERIANESTHESIA NURSING

- By engaging multiple perioperative disciplines, providers and members of the patient care delivery team, both patient care and organizational goals can be met.
- The PREP Center 30-day blood band management workflow played a “small but mighty” role in tandem with coexisting Cardiac Surgery performance innovation initiatives.

## NEXT STEPS

- Weekly meetings of Perioperative Services leadership will continue in effort to review the data (goal: >80% OTFS) with decreasing reliance of consultative entity guidance.
- Plans to expand this initiative to other surgical services will begin in the near future.
- Continue to energize all staff by sharing successes and how their part were instrumental in providing stellar patient care as well as contributing to the medical center’s financial goals.

## REFERENCES

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