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The Problem

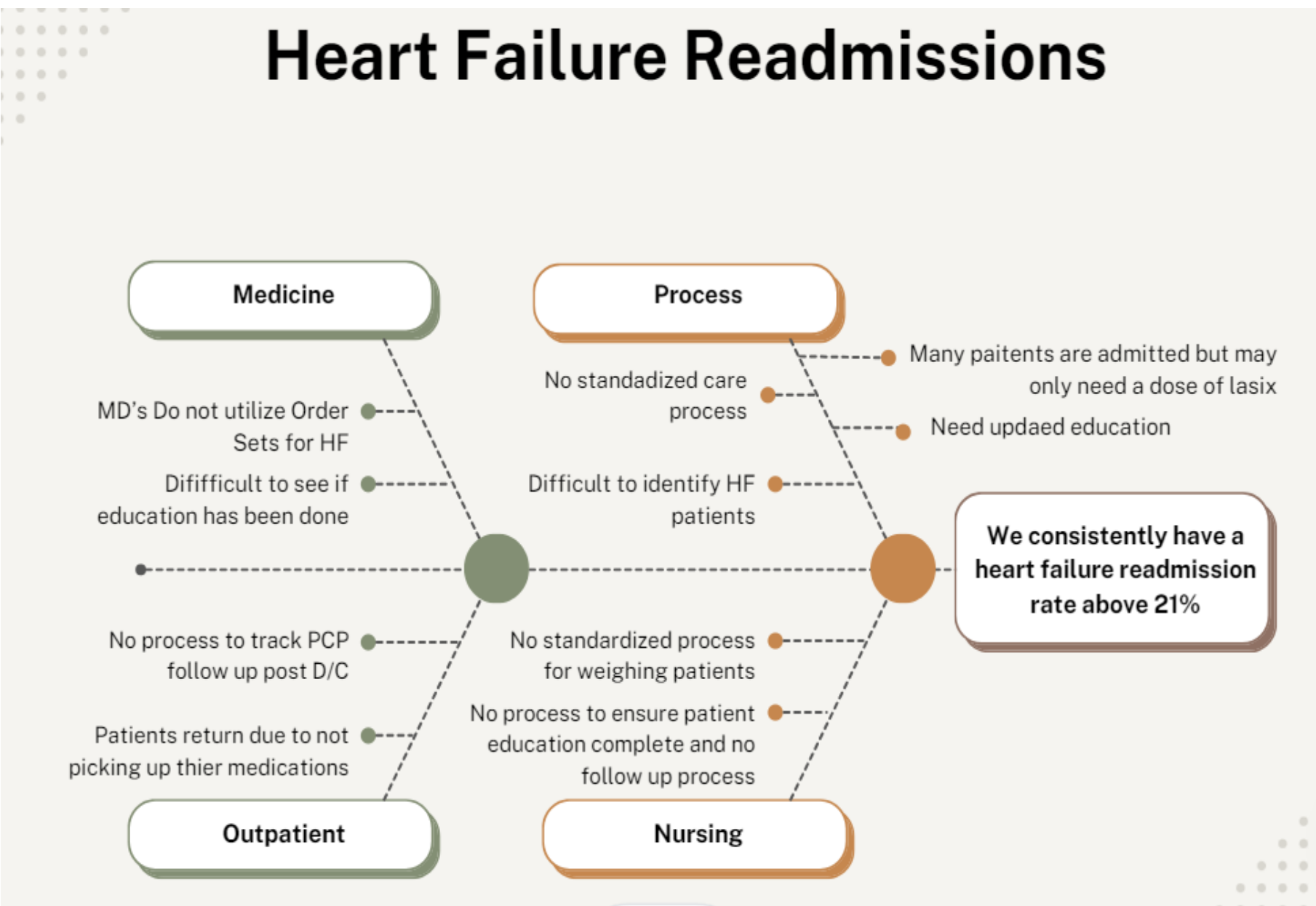
Since 2020 UMMC experienced a steady rise in heart failure (HF) readmissions. In Q3-2022 our HF 30-day readmission rate was 32.54% and our 18-month HF mortality rate was 5.12% (Dec 2021). We lacked a standard approach to this population between our inpatient and outpatient settings. To tackle this complex challenge we developed a multidisciplinary team inclusive of our Department Chair of Medicine, Chief of Cardiology, Chief Medical Officer, Nursing leaders, Care management, Pharmacy, and Quality Coordinator. Using LEAN tools and a Plan-Do-Study-Act (PDSA) framework, we identified gaps and implemented several interventions over two years.

Actions Taken

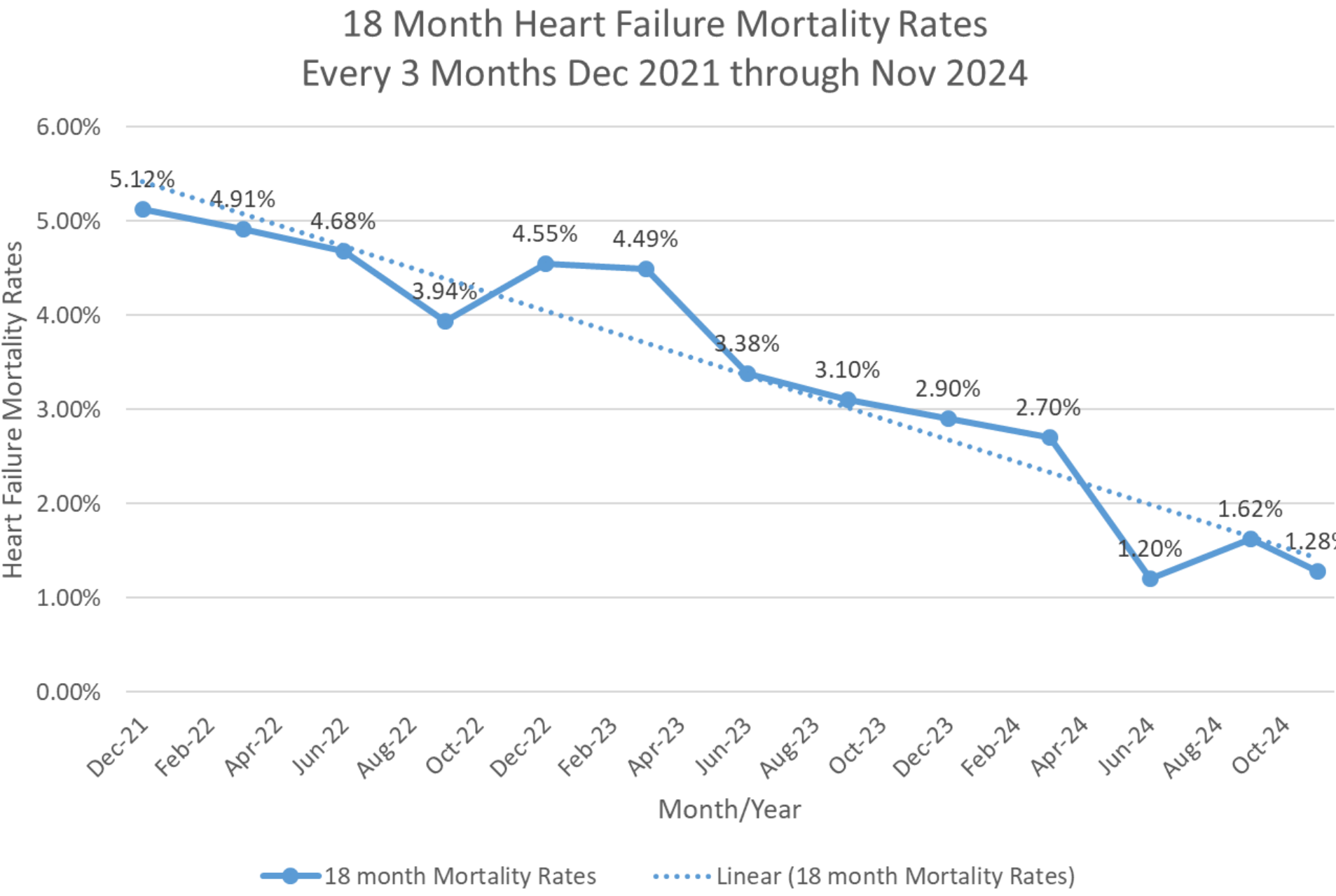
- ✓ Implemented a standardized order set for heart failure treatment
- ✓ Created a standardized weighing process and purchased wheelchair scales for both med-surg units
- ✓ Implemented a Meds to Beds program for patients to receive their new heart failure medications prior to being discharged from the hospital
- ✓ Developed a real time chart review process to ensure proper documentation for coding
- ✓ Developed a collaborative triage process between hospitalists and emergency department physicians to determine potential treat and release patients
- ✓ Educated regional Primary Care providers regarding current heart failure treatments and need for post discharge follow up within 7 days
- ✓ Developed cardiology urgent care offering intravenous Lasix for patients at high risk for readmissions

Results

Fishbone Diagram



Heart Failure Mortality Rates



Lessons Learned

Analysis:

- Process measures were collected for some of the interventions based available data and resources of the group. We also monitored a balancing measure of heart failure mortality to ensure patients were receiving care appropriately. Quantitative and descriptive statistics were analyzed in our outcome metrics.

Implementation:

- Several interventions were implemented across the care continuum. Interventions were prioritized based on available resources as well as potential impact. Quality professionals can utilize a holistic approach to process improvement to improve health of the heart failure population.

Results/Discussion

- As of December 2024, our 30 day heart failure readmission rates decreased from 32.54% in Q1-22 to 5.56% in Q3-24. The 18 month Heart Failure mortalities also showed a steady decline from 5.12% in December 2021 to 1.28% In November 2024. This substantiated the new interventions were allowing patients to obtain the right care at the right time. A prioritization matrix was critical to our success by keeping the team engaged throughout implementation of our interventions.
- This initiative moved into maintenance phase effective September 2024. HF readmission and mortality reports are reviewed monthly to ensure sustainability.

Interventions and Results

