

Reducing 30-Day Readmissions after Coronary Artery Bypass Grafting for High-Risk Populations: A Focus on Medicaid Insurance

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Introduction

- 30-day readmissions after CABG are costly from a fiscal and quality standpoint with annual rates ranging 12.6-23.6% nationally.^{1,2,3}
- Medicaid insurance and related socioeconomic risk factors increase likelihood of readmission after CABG.^{1,2}
- Most readmissions occur within 10 days from discharge and are considered preventable through the Hospital Readmissions Reduction Program (HRRP).^{1,2,3}
- Multidisciplinary care coordination to ensure timely follow-up after discharge may reduce readmissions for this population.^{2,4}

Purpose

- To reduce 30-day readmissions after CABG for patients with Medicaid insurance by implementing an evidence-based, comprehensive, early postoperative follow-up protocol at discharge.

Project Aims

- To reduce the number of Medicaid-insured patients readmitted within 30 days of discharge after CABG.
- To schedule postoperative follow-up appointments after CABG prior to discharge for 85% of patients with Medicaid insurance.
- To see Medicaid-insured patients after CABG for postoperative follow-up in the surgical clinic within 10 days of discharge.

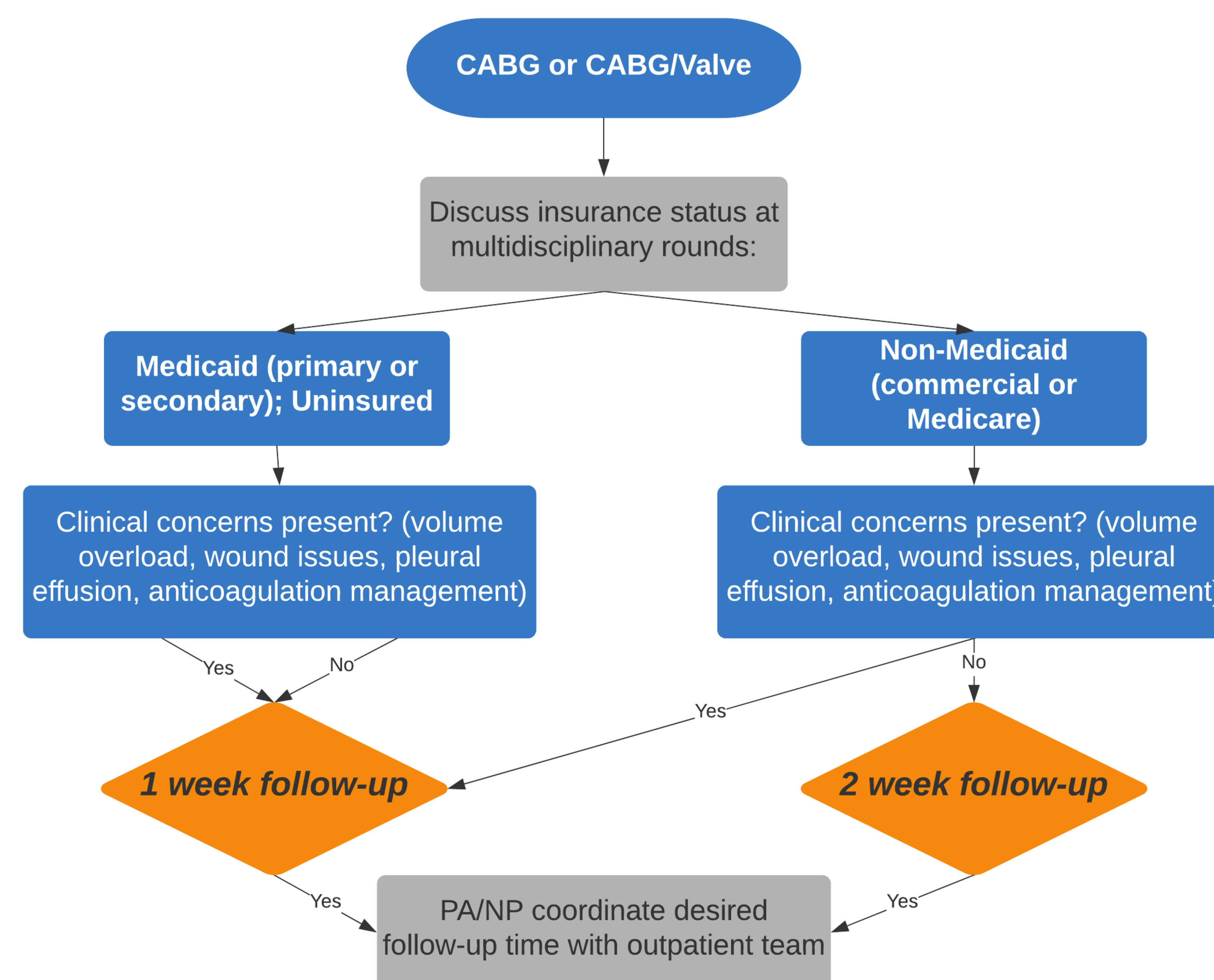
Methods

- Design:** pre/post test intervention design; data from STS database
- Setting:** inpatient step-down unit and outpatient surgical clinics
- Inclusion criteria:** Medicaid-insured and uninsured adult patients who underwent CABG and CABG+valve surgeries
- Exclusion criteria:** other insurance types and other operations

Intervention: Postop Scheduling Algorithm

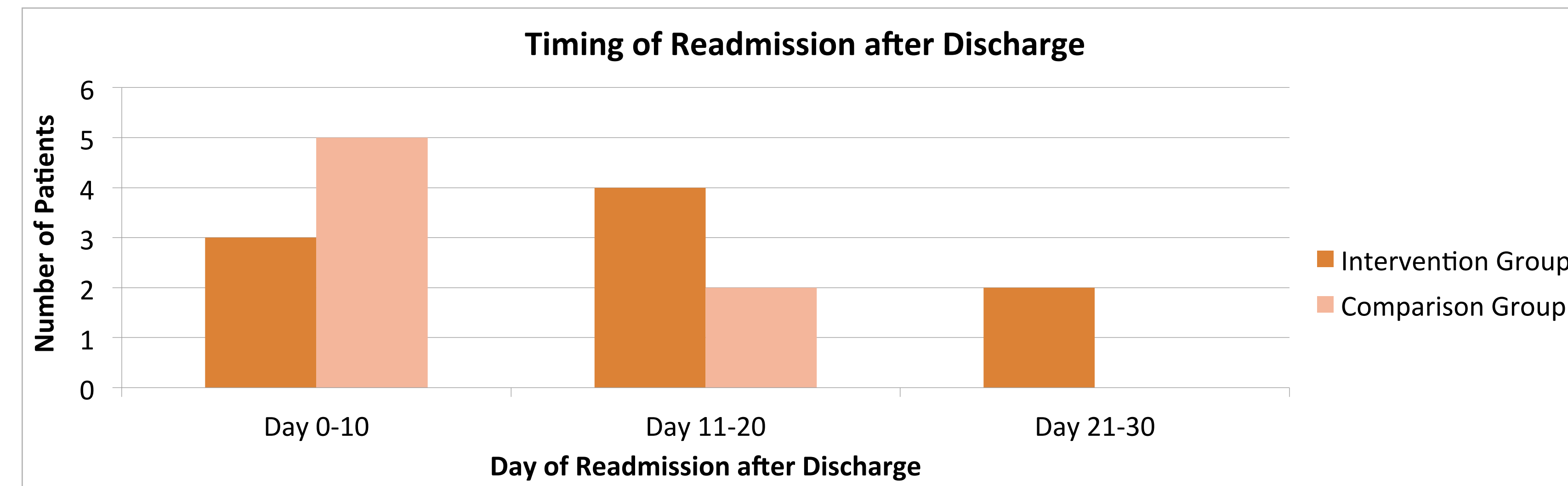
- Discharge providers triage patients for early or usual care post-discharge follow-up visit based on insurance- and clinical-related risk factors.
- Appointments scheduled accordingly for patients prior to discharge.
- Patients seen for post-discharge visit within recommended timeframe in outpatient surgical clinic.

Intervention: Postop Scheduling Algorithm

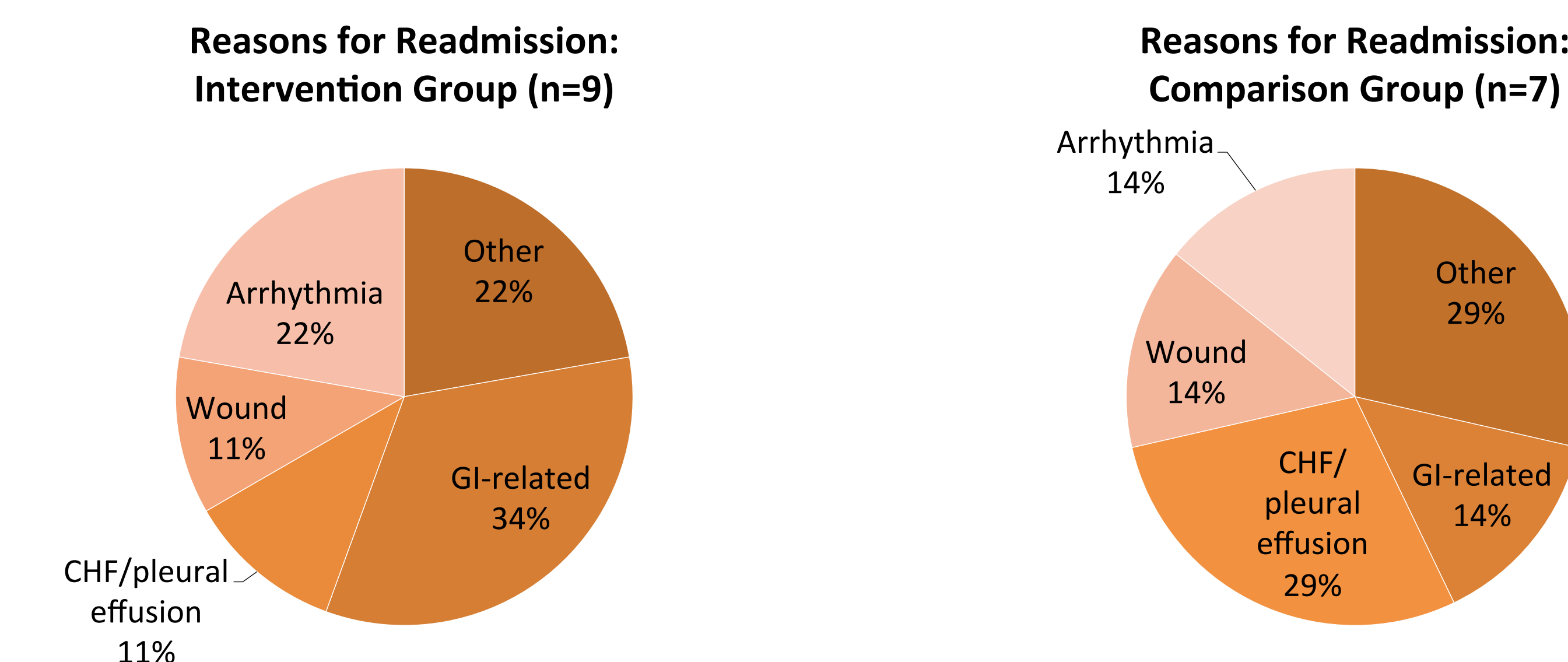


Results

| Aim | Intervention group (n=54) | Comparison group (n=49) | p-Value (Chi-square testing) |
|---------------------------|---------------------------------------|---------------------------------------|------------------------------|
| 1. Readmissions | Yes, n=9 (16.7%) No, n=43 (79.6%) | Yes, n=7 (14.3%) No, n=41 (83.7%) | 0.71 |
| 2. Scheduled appointments | Yes, n=41 (75.9%) No, n=12 (22.2%) | Yes, n=36 (73.5%) No, n=13 (26.5%) | 0.65 |
| 3. POV within 10 days | Yes, n=22 (40.7%) No, n=31 (57.4%) | Yes, n=16 (32.7%) No, n=33 (67.3%) | 0.17 |



Results



Discussion and Limitations

- No significant difference in readmissions between Medicaid groups, but **total CABG readmissions decreased from 9.9% (2019) to 7.5% (2020)**.
- Intervention increased scheduled appointments, increased number of patients seen within 10 days of discharge, decreased early readmissions, and decreased preventable readmissions.
- Scheduling postoperative appointments pre-discharge significantly improved adherence** with early postoperative visits for Medicaid-insured patients (p=0.04).
- COVID-19 pandemic presented challenges in the intervention group.
- Limitations: small sample size, 20-week time frame, single institution

Conclusions

- Improved care coordination and continuity after discharge to ensure timely follow-up after CABG benefits patients with Medicaid clinically.
- Readmissions remain a multifactorial issue.
- Sustainability:** adopted as *standard practice* in Department, strong potential for *wider application/adaptation* to other HRRP diagnoses.
- Future work:** all insurance types, patient satisfaction, financial implications.

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