

Introduction

- Pilon fractures require complex surgical management and postoperative follow-up.
- Patient-Reported Outcome Measures (PROMs) assess recovery but have low collection rates.
- Understanding barriers and predictors can guide strategies to improve data completeness and patient engagement.

Objective

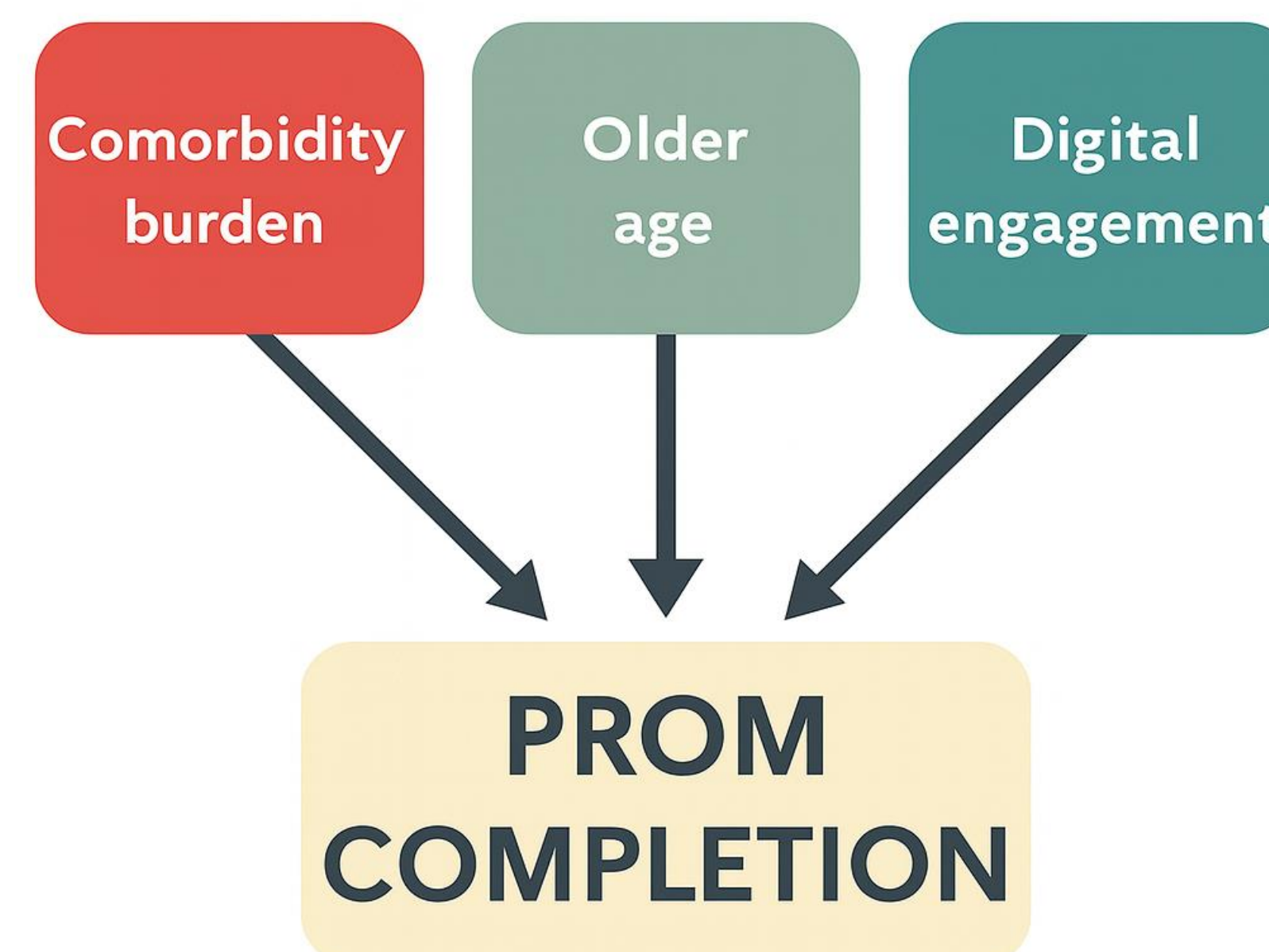
- Identify demographic, clinical, and socioeconomic factors influencing PROM completion after pilon fracture surgery.
- Evaluate barriers and facilitators to PROM collection within a single health system.

Methods

- **Design:** Retrospective review of adult pilon fracture patients (2021–2022).
- **PROMs:** Physical function and pain outcomes collected from EMR at standardized intervals.
- **Variables:**
 - Demographics (age, sex)
 - Comorbidities (Charlson Comorbidity Index, renal disease)
 - MyChart activation status
 - Discharge disposition
 - Socioeconomic indicators (ADI, SVI, multiunit housing)
- **Analysis:**
 - Univariate and multivariate logistic regression
 - Significance at $p < 0.05$

Results

- **Sample:** 59 patients with complete demographic and socioeconomic data
- **Univariate predictors of PROM completion:**
 - Older age → lower completion
 - Higher comorbidity burden → lower completion
 - Renal disease → lower completion
 - Active MyChart → higher completion
 - Discharge home → higher completion
 - Neighborhood disadvantage (multiunit housing) → lower completion
- **Multivariate findings:**
 - ADI and SVI quartiles not consistently predictive after adjustment.
 - Individual-level factors (age, comorbidity, digital engagement) more influential than neighborhood indices.



Conclusion

- PROM collection is primarily influenced by **patient-level** factors rather than community-level socioeconomic indices.
- **Digital engagement** (MyChart activation) improves collection rates.
- **Older age** and **comorbidity burden** are barriers to PROM completion.
- Targeted strategies that promote portal use and address comorbidity-related limitations may enhance PROM data capture.

Key Takeaways

- ✓ MyChart activation strongly predicts PROM completion
- ✓ Comorbidity burden and older age decrease completion rates
- ✓ Socioeconomic indices (ADI, SVI) less predictive in multivariate models
- ✓ Focused digital engagement and patient support can improve outcomes