

Postsurgical Hospital Return Among Patients on Long-Term Opioid Therapy: *A Comparison of Insurance Status*

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BACKGROUND

- Patients on long-term opioid therapy prior to surgery face higher postoperative healthcare costs, longer hospital lengths of stay, and complications following surgery compared to those who are opioid-naïve.¹
- The implications of insurance type on surgical outcomes in this population are unclear.

This study aimed to examine whether patients with Medicaid insurance faced increased rates of hospital return following surgery compared to patients with private insurance.

METHODS

- Retrospective cohort study
 - Patients identified using Michigan Surgical Quality Collaborative database (*Blue Cross Blue Shield database of surgical outcomes across 69 hospitals*)
 - Combined with data from Michigan’s prescription drug monitoring program
- Primary outcome:**
Hospital Return
(An ED visit or readmission within 30 days of discharge from surgery)

 - Multivariable logistic regression
 - Average marginal effect
- Inclusions:**

 - Medicaid or private insurance
 - 18-64 years old
 - On long-term opioid therapy (*>120 total days of opioids supplied or ≥ 10 prescriptions in the year prior to surgery*)²
 - Surgery between Nov 2016-Feb 2021

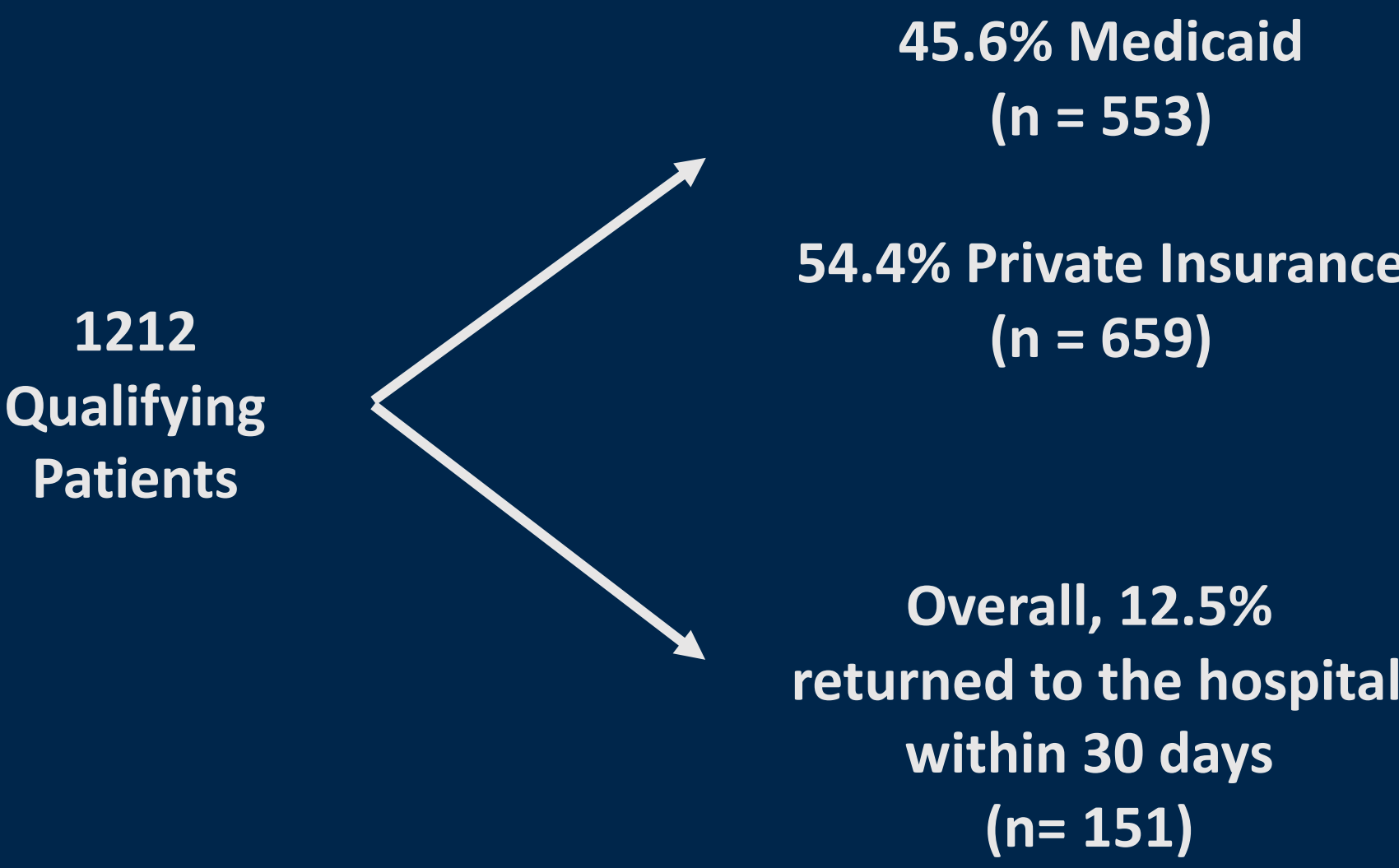
Exclusions:

 - Postoperative complications^{3,4}
 - Patients on buprenorphine for treatment of opioid use disorder

Among patients on long-term opioid therapy, the risk of hospital return following surgery was higher among patients with Medicaid insurance compared to patients who were privately insured.



RESULTS



Odds of Hospital Return within 30 days

	Odds ratio	P value	95% CI	
Medicaid (ref: Private)	1.811	0.004	1.204	2.723
Average Marginal Effect: The risk of postoperative hospital return was 4.5 percentage points higher among patients with Medicaid insurance compared to patients with private insurance (95% CI: 0.5%, 8.4%).				

Odds of an ED visit within 30 days

	Odds ratio	P value	95% CI	
Medicaid (ref: Private)	1.521	0.026	1.052	2.200
Average Marginal Effect: The risk of an ED visit was 5.2 percentage points higher among patients with Medicaid insurance compared to patients with private insurance (95% CI: 1.6%, 8.8%).				

CONCLUSIONS

- These data highlight disparities related to insurance coverage in patients on long-term opioid therapy.
- This may suggest differential access to healthcare resources in the postoperative period.
- Given that patients on long-term opioids are a vulnerable population, this emphasizes the need for further research on the intersection of long-term opioid therapy and insurance status in the postsurgical population and provides opportunities for future policy interventions.

REFERENCES

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