RWD251

Association Between Initial Z-Drug Prescription Duration and Long-Term Use

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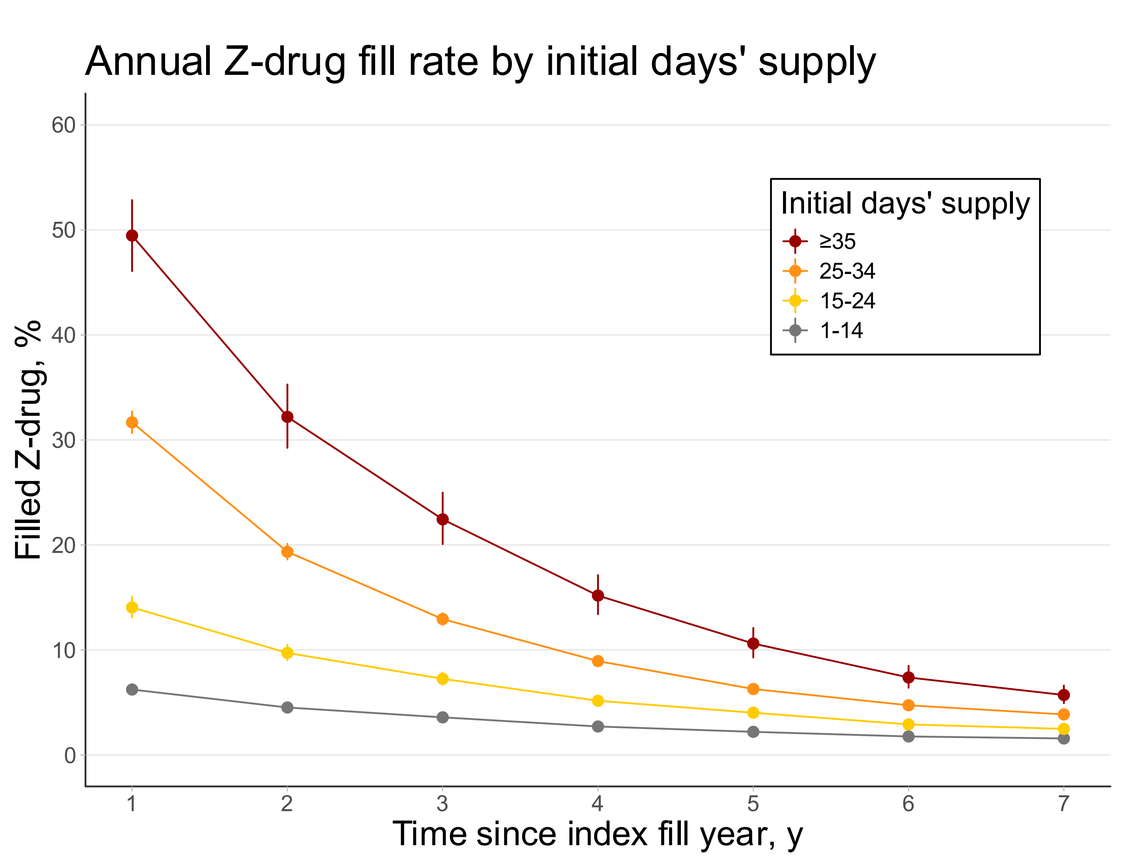
INTRODUCTION

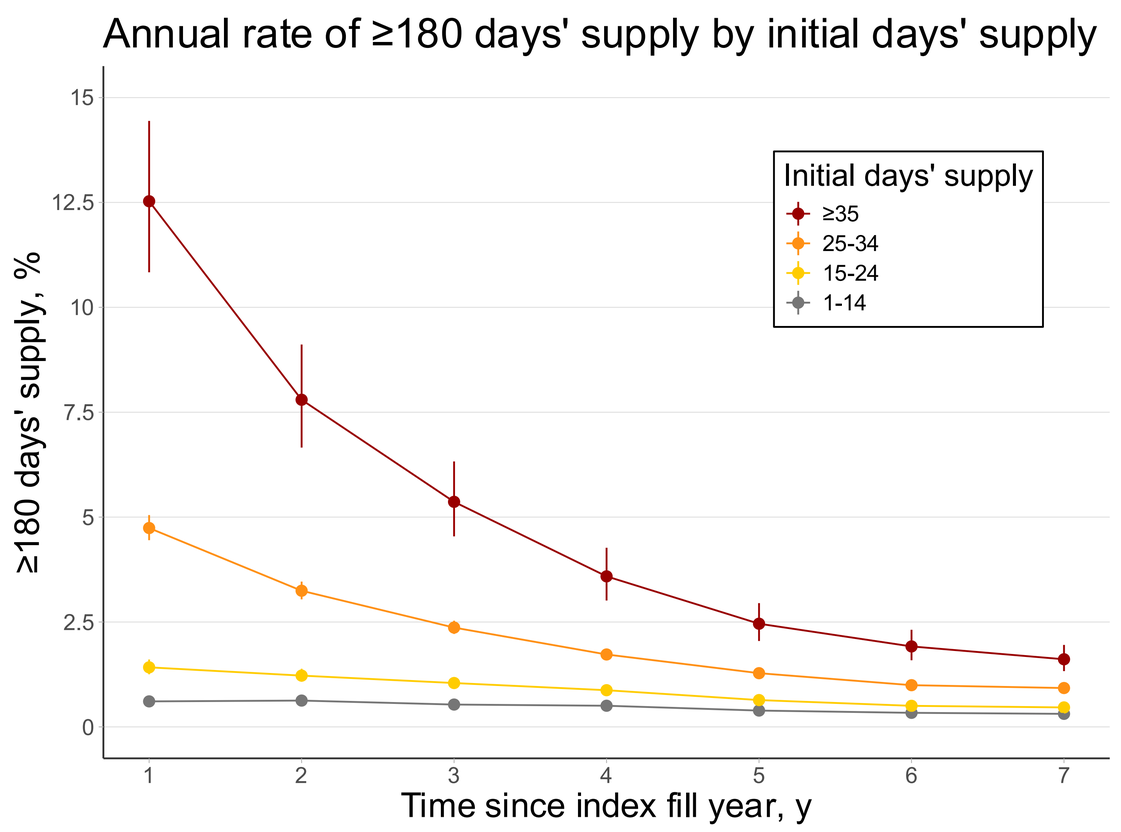
- Zolpidem, eszopiclone, and zaleplon (Z-drugs) are the most prescribed medications for insomnia in the United States.[1]
- Prescriptions often exceed the guideline-recommended duration of no more than than 5 weeks.[1,2]
- Use is associated with risks including dependence and fractures.[3,4]
- Similar to opioids, initial prescribing patterns may contribute to prolonged use.[5]
- We examined the association between the days' supply of an initial Z-drug prescription and long-term use.

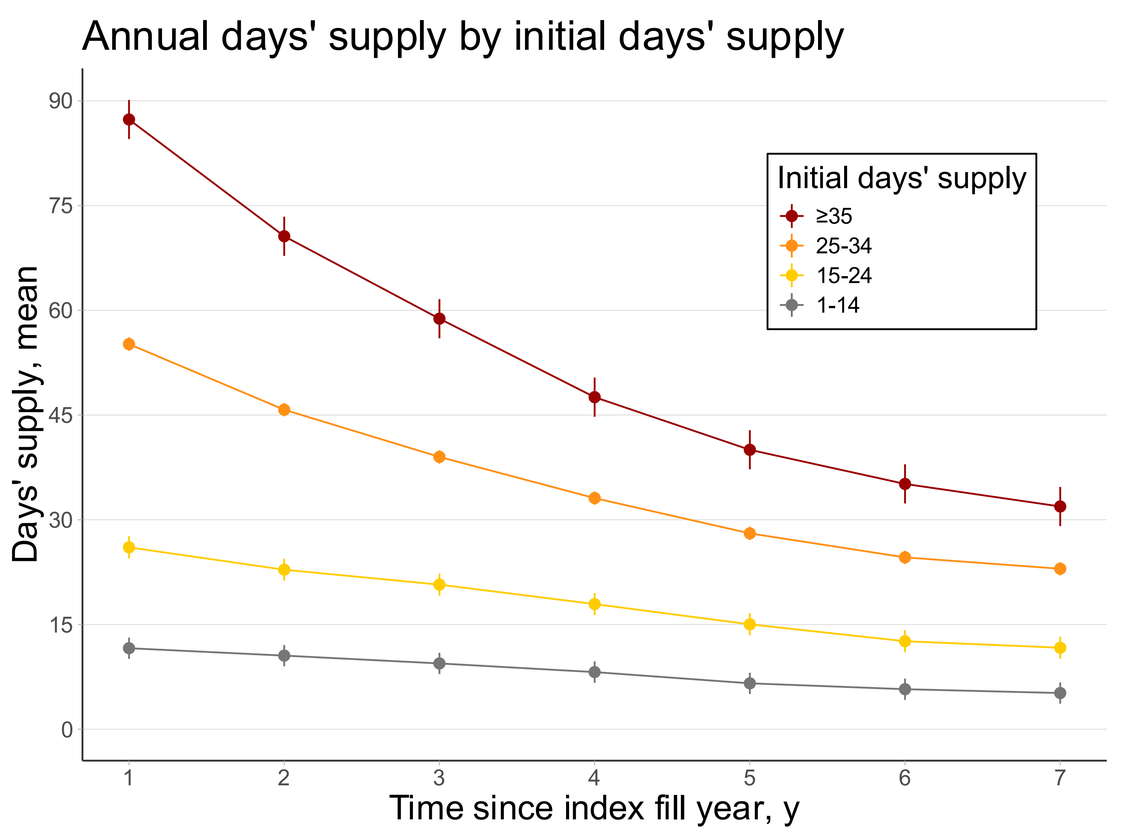
METHODS

- **Retrospective cohort study** from January 1, 2007, to February 29, 2024.
- **Data from** Optum's de-identified Clinformatics® Data Mart Database, which contains administrative health claims for members of large commercial and Medicare Advantage health plans in the United States.
- **Sample included** adults (N = 126,549) who filled a Z-drug prescription, had no Z-drug fills for ≥1 year prior to the index fill, and remained enrolled for ≥8 years after the index fill.
- **Outcomes measured** if the patient (in each year after the index fill year):
  1. Filled a Z-drug
  2. Filled ≥180 days' supply
  3. Days' supply received
- **Regression models estimated** the association between initial Z-drug supply (1–14, 15–24, 25–34, ≥35 days) and outcomes in each post-index year.
- The index year was excluded to avoid bias from the initial prescription contributing to the outcome.
- **Models controlled** for age, sex, race and ethnicity, education, income, net worth, insurance type, and geographic region; a random effect accounted for within-patient repeated measures.

RESULTS







DISCUSSION

- In this retrospective cohort study across the United States, patients who received a larger initial Z-drug supply were more likely to fill additional prescriptions up to seven years after the index fill year, suggesting that early prescribing decisions are associated with long-term use.
- These patients were also more likely to fill ≥180 days' supply and receive a larger supply of Z-drugs seven years after their initial prescription.
- Limitations include a retrospective design, reliance on claims data that do not capture medication use, potential confounding by insomnia severity, and limited generalizability beyond patients with commercial or Medicare Advantage insurance.
- Future research can investigate causal relationships between initial prescribing and long-term use.
- These findings suggest that clinicians consider limiting initial Z-drug prescriptions.

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