**BACKGROUND**

- Opioid use disorder (OUD) is a chronic brain disease characterized by episodes of relapse and remission.
- Relapse is a primary outcome and quality metric in OUD treatment, but no single specific definition exists.
- In clinical settings, opioid relapse can be assessed through positive urine screen results or patient self-report, but this information is not captured in clinical databases.
- Claims databases offer the opportunity to study OUD treatment outcomes in large real-world samples of patients.

**OBJECTIVES**

- This study explored various approaches to measuring relapse using claims data and compared the rates to the literature to assess feasibility.
- A secondary objective was to establish the process of obtaining consensus as to how to define relapse in claims databases.

**METHODS**

**Data Sources and Study Design**

- This retrospective observational study used 2008–2014 administrative claims data from the Truven Health Analytics MarketScan Commercial and Medicare databases.
- The databases contain pooled medical (inpatient, outpatient) and outpatient pharmacy claim(s) data from nearly geographically-dispersed states (Medicaid).

**Sample Selection and Study Period**

- Patients with OUD initiating a new buprenorphine medication-assisted treatment (BMAT) episode were selected. Figure 1 shows the study inclusion and exclusion criteria.
- Patients were followed for 6 months following treatment initiation to assess relapse.

![Figure 1. Patient Selection Criteria](image)

**Relapse Measures**

- Conservative and inclusive binary relapse measures were created, based on service use and administrative claims database data.

**RESULTS**

**Results**

- Relapse rates were compared to recent studies to assess feasibility of the claims-based measures.

- OUD may be under coded in claims data; this study included only patients with a documented diagnosis of OUD.

- Among the IM indicators, abrupt discontinuation was observed in 23.1% of Commercial BMAT episodes.

- Narcotic pain medication claims covering >30 consecutive days were observed among 9.4% of Commercial BMAT episodes.

- Rates were compared to recent studies to assess feasibility of the claims-based measures.

**Comparison with Literature**

- Direct comparisons between relapse rates reported in the literature and the IM and CM rates observed in this study will be difficult due to the diversity of methods and populations examined in the literature.

- Table 2 highlights the findings of several recent studies.

**LIMITATIONS**

- OUD may be under coded in claims data; this study included only patients with a documented diagnosis of OUD.

- Different definitions and data sources may explain the disparity.

- The databases contain the pooled medical (inpatient, outpatient) and outpatient pharmacy claim(s) data from nearly geographically-dispersed states (Medicaid).

**CONCLUSIONS**

- Relapse rates varied widely depending on the measure used. The literature similarly includes variation in rates due to measurement differences between studies.

- Opioid relapse has not been extensively measured in claims data, although several studies identify relapse using service-based proxies. The rates reported in these studies are higher than the CM used in this study.

- While the relapse rates identified from claims databases are lower than those reported in prevailing clinical and observational studies due to the lack of an OUD and/or opioid use treatment that could be identified, it is expected that such prospective studies in large samples would produce lower relapse rates.