

## Manuscript Title:

### *Comparative Effectiveness of Medication-Assisted Treatment (MAT) for Opioid Use Disorder in Residential Settings: A Literature Review*

## Reviewer's Comments:

This manuscript offers a well-researched and comprehensive review of current literature on the comparative effectiveness of MAT options—methadone, buprenorphine, and extended-release naltrexone (XR-NTX)—within residential treatment settings. The topic is highly relevant given the ongoing opioid crisis and the critical role of evidence-based treatment in improving long-term outcomes for individuals with opioid use disorder (OUD). The authors synthesize recent findings clearly and thoughtfully, and the manuscript is generally well-organized and well-written. However, there are a few areas that would benefit from clarification, further development, and revision.

## Area of improvement:

- **Abstract:** Consider adding a brief mention of the methodological approach (i.e., systematic review of 31 studies).
- **Redundancy in the Introduction:**
  - There is some repetition across the first two paragraphs of the introduction (e.g., MAT as the gold standard, mention of the opioid crisis). Consider tightening the introduction to avoid duplication and improve flow.
- **Methodology Clarity:**
  - While the search strategy is outlined clearly, it would be helpful to include a **PRISMA flow diagram** summarizing the literature selection process. This would enhance transparency and adherence to systematic review standards.
  - Specify the **criteria used for quality appraisal** in more detail. Were any quality scores or ratings assigned to included studies?
- **Tables and Study Data Integration:**
  - Tables 1 and 2 are informative but could benefit from improved formatting and consistency (e.g., ensuring all columns are fully labeled, clarifying abbreviations like "PBON/BUP").
  - Consider integrating **summary comparison tables** that consolidate outcomes across the three MAT modalities to enhance accessibility for the reader.

- **Figures/Tables:** Consider adding visual summaries (e.g., bar graphs or heatmaps) to illustrate treatment outcomes across MAT types more dynamically.
- **Evidence Weighting and Bias:**
  - The review presents findings across studies but doesn't fully **differentiate the quality or weight of evidence** (e.g., RCT vs. observational studies). A brief section or paragraph highlighting the most methodologically rigorous studies and their implications would strengthen the analysis.
  - The issue of **selection bias** in XR-NTX studies is mentioned but could be explored in more depth earlier in the "Results" or "Discussion" section to contextualize the outcomes.
- **Synthesis and Practical Implications:**
  - The conclusion synthesizes findings well but could be made more actionable by clearly outlining **clinical or policy recommendations**, particularly for treatment providers in residential settings.
  - Consider briefly discussing implications for **program design**, such as staffing models, medication induction protocols, and discharge planning.
- **Consistency in Writing:**
  - Some paragraphs (e.g., in the "Buprenorphine" and "XR-NTX" sections) contain repeated information or slightly fragmented structure. These should be edited for better coherence and readability.

### **Recommendation for publication: Minor Revision**

The manuscript is strong in its foundation and structure, but would benefit from streamlining, enhanced clarity in data presentation, and modest expansion of synthesis and application sections. Addressing the above comments will significantly improve the overall quality and impact of the manuscript.