National Trends in Opioid, Benzodiazepine & Anticholinergic Orders in Long-Term Care

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Background

Concurrent use of opioids and benzodiazepines is associated with an increased risk of overdose and death.[1,2]

Use of multiple anticholinergics can lead to cognitive decline.[3]

The Centers for Medicare & Medicaid Services added 2 new quality measures that will impact 2027 Star Ratings[4]:

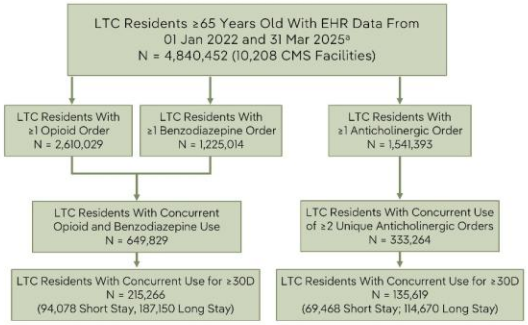
- Concurrent use of opioids and benzodiazepines
- Polypharmacy use of multiple anticholinergic medications in older adults

Objective

To use electronic health record (EHR) data to describe concurrent use of opioids and benzodiazepines (Op+Benz use) and use of ≥2 unique anticholinergic medications (ACH use) among long-term care (LTC) residents in the United States.

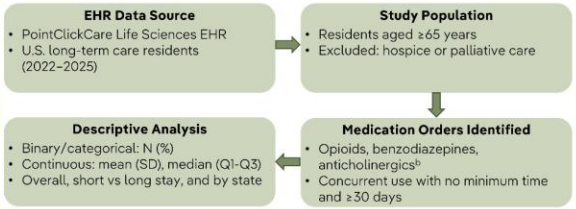
Methods

Setting & Population



[a] Data was sourced from EHR data from PointClickCare's Life Sciences database representing a comprehensive view of prescribing practices in the LTC setting.

Analysis



[b] Anticholinergics were identified based on the Anticholinergic Cognitive Burden Scale, Beers Criteria, and clinical judgement.

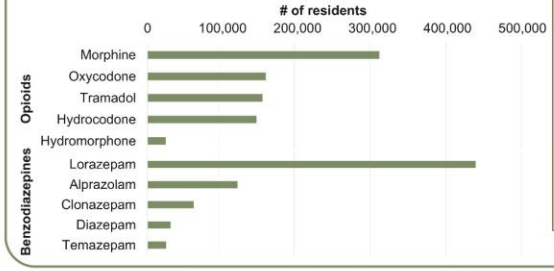
Results

Table 1A. Summary of Opioid and Benzodiazepine Orders

Op+Benz Use, N = 649,829		Op+Benz Use, N = 649,829	
Opioid Order Duration, Days		**Benzodiazepine Order Duration, Days**	
Mean (SD)	58.4 (116.5)	Mean (SD)	36.4 (91.8)
Median (Range)	17 (1, 1329)	Median (Range)	11 (1, 1664)
Unique Opioid Medication Count		**Unique Benzodiazepine Medication Count**	
Mean (SD)	1.5 (0.7)	Mean (SD)	1.1 (0.4)
Median (Range)	1 (0, 8)	Median (Range)	1 (0, 5)

Figure 1A. Proportion of Residents with ≥30D of Op+Benz Use By State

Figure 2A. Top Opioid and Benzodiazepine Orders



215,266 residents had Op+Benz use for **greater** than 30 days

CENTRAL states typically had higher prevalence of Op+Benz use

47% of residents with Op+Benz use had ≥1 medication order for **morphine**

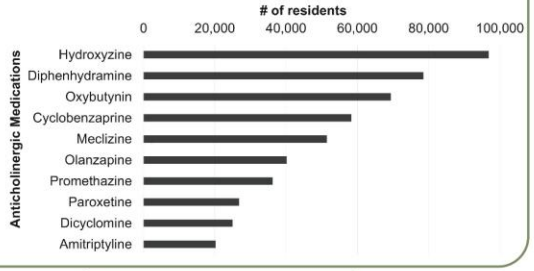
*Op+Benz use = concurrent opioid and benzodiazepine use

Table 1B. Summary of Anticholinergic Orders

ACH Use, N = 333,264	
Anticholinergic Order Duration, Days	
Mean (SD)	76.3 (124.6)
Median (Range)	28.6 (1, 1317)
Unique Anticholinergic Medication Count	
Mean (SD)	2.3 (0.7)
Median (Range)	2 (1, 10)

Figure 1B. Proportion of Residents with ≥30D of ACH Use By State

Figure 2B. Top Anticholinergic Orders



Implications

Medication reviews and deprescribing protocols for LTC residents to reduce harmful drug exposure may play a critical role.

Targeted quality improvement initiatives and resource allocation in regions with higher prevalence of high-risk medication use.

Proactive, data-driven strategies are essential for safer, smarter medication management and Star Ratings success.

Health plans with post-acute or skilled nursing facility members may be negatively impacted by these new Star Rating measures.

Acknowledgements

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Summary

The study reveals widespread and prolonged use of high-risk drug combinations among older adults in LTC.

Long-stay residents face high exposure to multiple medications, increasing their vulnerability to adverse effects.

Geographic variation in medication use patterns reveals specific states and regions where concurrent high-risk prescribing is most prevalent.

References

1. Xu KY et al. JAMA Netw Open, 2020;3(12):e2028557.
2. Chua KP et al. JAMA Netw Open, 2021;3(8):e2120353.
3. Taylor-Rowan M et al. Cochrane Rev, 2022;8(8):CD015196.
4. CMS quality and policy updates impacting Medicare Advantage and Part D. CMS.gov, 2025.

Link to medication lists