

# Ten-Year Trends in Potentially Inappropriate Sedative-Hypnotics and Pain Medication Use among Medicare Part D Beneficiaries

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## KEY POINTS

Over the past decade (2013–2022),

- The use of potentially inappropriate medications, such as antipsychotics, has shown a modest decline
- The utilization of NSAIDs and skeletal muscle relaxants for pain management has increased

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### CONFLICT OF INTEREST

- No funding was received from any external organization
- The authors report no other conflicts of interest in this work

## BACKGROUND

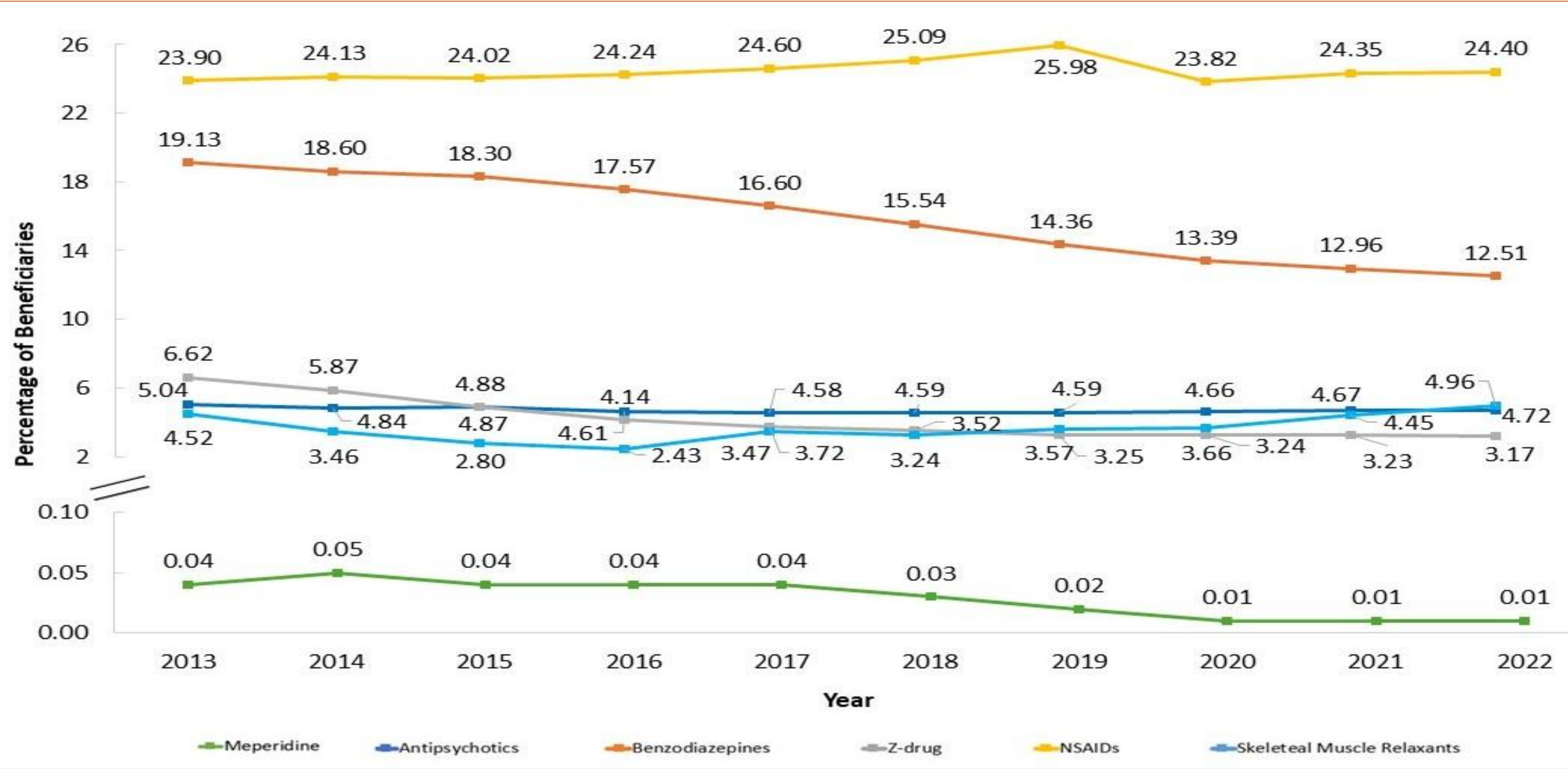
- **Potentially inappropriate medications (PIMs)** are defined as medicines that pose more risks than benefits<sup>1</sup>
- American Geriatric Society (AGS) Beer Criteria® 2023 lists PIMs that should be avoided by older adults with certain diseases or conditions<sup>2</sup>
- Despite growing evidence of poor outcomes with PIM use, these medications continue to be prescribed to older adults in the United States (US)<sup>3-5</sup>

## OBJECTIVES

- To describe the multi-year utilization trends of PIMs among Medicare Part D beneficiaries aged ≥ 65 in the US

## RESULTS

**Figure 1:** Percentage of beneficiaries with at least one claim for sedative-hypnotics and pain medications between 2013-2022



NSAIDs: Nonsteroidal Anti-Inflammatory Drugs

- The number of Medicare beneficiaries with Part D claims was 28.84 million in 2013 and 43.09 million in 2022
- During the ten-year study period, Part D claims for sedative-hypnotics and pain medications were 7.28 million and 10.18 million, respectively
- There was a slight decrease in the beneficiaries utilizing antipsychotics (1.45 million (5.04%) to 2.03 million (4.72%)), benzodiazepines (5.51 million (19.13%) to 5.39 million (12.51%)), Z-drugs (1.91 million (6.62%) to 1.36 million (3.17%)), meperidine (10,784 (0.04%) to 4,449 (0.01%) (*Refer to Figure 1*)

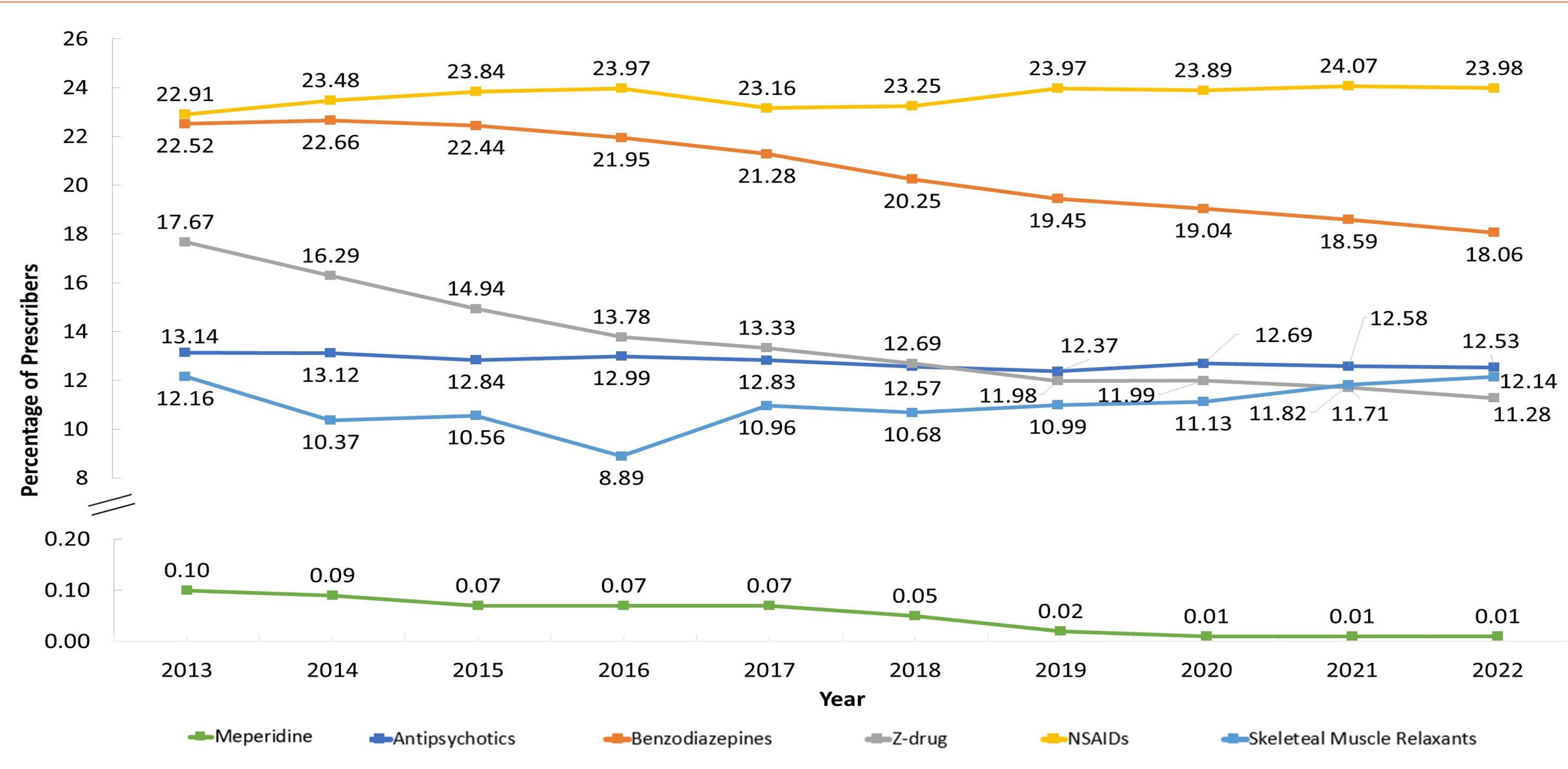
## CONCLUSIONS

- Utilization of selected PIMs, such as antipsychotics, slightly declined, while NSAIDs and skeletal muscle relaxants increased during study period

## METHODS

- **Study Design:** Retrospective, cross-sectional study
- **Data Source:** 2013-2022 Centers for Medicare and Medicaid Services Medicare Provider Utilization and Payment Data: Part D Prescriber public use files
- **Study Population:** Medicare Part D beneficiaries aged ≥ 65 in the US
- **Potentially Inappropriate Medications:** ***Sedative Hypnotics:*** Atypical antipsychotics (AAPs), Z-drugs, Benzodiazepines & ***Pain Medications:*** Oral Nonsteroidal Anti-Inflammatory Drugs (NSAIDs), Meperidine, Skeletal muscle relaxants
- **Statistical Analysis:** Descriptive statistics, i.e., number and percentage of beneficiaries and prescribers utilizing/prescribing PIMs, were reported

**Figure 2:** Percentage of prescribers who prescribed inappropriate sedative-hypnotics and pain medications between 2013-2022



NSAIDs: Nonsteroidal Anti-Inflammatory Drugs

- There was an increase in the beneficiaries using NSAIDs (6.90 million (23.90%) to 10.52 million (24.40%)) and skeletal muscle relaxants (1.30 million (4.52%) to 2.14 million (4.96%))
- Total number of prescribers was 1.05 million in 2013 and 1.33 million in 2022 - Antipsychotics prescribers increased - 137,868 (13.14%) in 2013 and 166,941 (12.53%) in 2022. Benzodiazepines prescribers increased - 236,339 (22.52%) in 2013 and 240,607 (18.06%) in 2022
- NSAID prescribers increased from 240,352 (22.91%) to 319,511 (23.98%), while skeletal muscle relaxant prescribers increased from 127,567 (12.16%) to 161,755 (12.14%) (*Refer to Figure 2*)

## LIMITATION

- The dataset captures only adjudicated prescription claims, excluding cash transactions and over-the-counter (OTC) purchases