Introduction

- Tricyclic antidepressants (TCAs) were the primary pharmacologic treatment for depression in the U.S. from the 1960’s to the late 1980’s.
- Other classes are now preferred as first-line agents due to their comparable efficacy and more favorable side effect profile.
- TCAs are included in the Beers Criteria because of their potentially harmful side effects in the elderly (e.g. cognitive impairment, sedation, and orthostatic hypotension).

Purpose

- To evaluate the prescribing changes of TCAs from 2013 to 2014 in Medicare beneficiaries

Methods

Data
- TCAs listed in both the 2012 and 2015 Beers Criteria
  - Amitriptyline
  - Clomipramine
  - Doxepin
  - Imipramine
  - Trimipramine
- 2013 and 2014 Medicare Provider Utilization and Payment Data: Part D Prescriber Public Use Files
  - Total number of beneficiaries, providers, prescriptions, and drug costs
- 2013 and 2014 US Census Bureau
  - Population age ≥ 65 by state

Analysis
- T-test to determine statistically significant differences in use and cost
- Calculated:
  - Number of prescriptions per 1000 persons
  - Cost per 1000 persons

Results

- Number of beneficiaries, prescriptions and prescribers decreased by approximately 25,000, 50,000 and 22,000 respectively.
- Costs increased by over $52 million
  - Amitriptyline by $24.3 million (p<0.001)
  - Clomipramine by $36.6 million (p<0.001)
  - Doxepin by $3.1 million (p<0.001)
- Trimipramine cost and number of prescribers decreased significantly.
- In both 2013 and 2014:
  - Most prescriptions – Kentucky
  - Most prescribers – Maine
  - Highest cost – Rhode Island
  - Lowest beneficiaries, prescribers, prescriptions, and cost per capita – Hawaii

Conclusions

- Decrease in utilization of the five TCAs suggests that Medicare beneficiaries may be switching to medications with fewer adverse effects.
- Significant increases in cost for most TCAs without an increase in utilization suggests that price increases are responsible.
- Although there was a decrease in utilization, there were still almost 70,000 prescriptions of these potentially inappropriate medications to almost 40,000 Medicare beneficiaries indicating that there may still be room for improvement.

Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

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