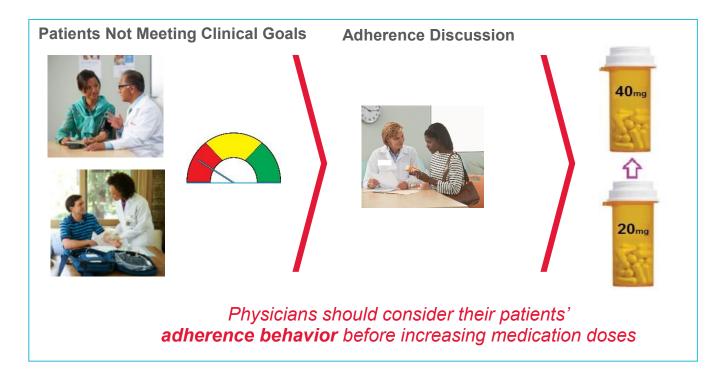


Dose Escalation in the Presence of Medication Non-Adherence among Medicare Part D Patients

Presented at the Academy Health Annual Research Meeting, Seattle WA, June 24-26, 2018.



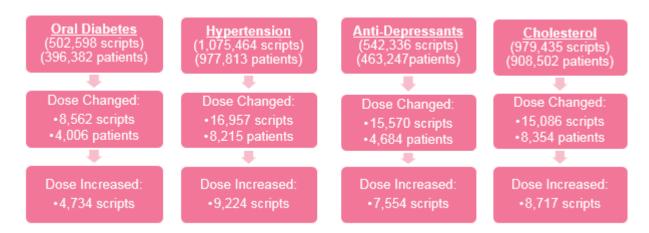
BACKGROUND

- Physicians routinely adjust medication therapy when patients are not achieving their clinical goals. These
 adjustments include changing or adding medications, and increasing or decreasing the dose strength of current
 medications.
- For a variety of reasons, patients are often not adherent to their maintenance medications, which can prevent them from achieving their clinical goals.
- Physicians rarely have objective information about their patients' medication adherence.
- Very little is known about how patients' medication adherence affects physicians' dosing decisions.

OBJECTIVES

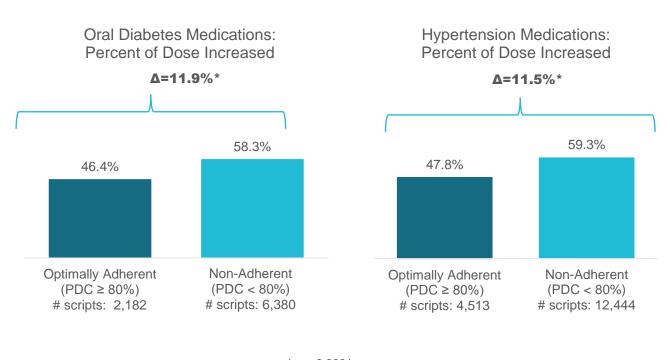
• To explore potentially inappropriate dosing that may occur when Medicare Part D (Med D) patients are non-adherent in their diabetes, hypertension, depression, and/or cholesterol medications.

METHODS



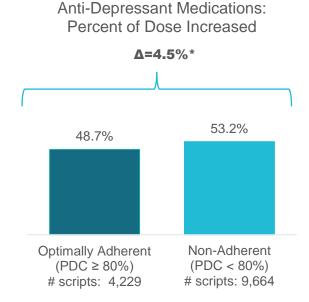
- Med D patients, over 65 years old, with one or more fills for oral diabetes, hypertension, depression, and/or cholesterol medications in January 2015 at Walgreens pharmacies.
- Medication adherence was measured in terms of the Proportion Days Covered (PDC) over the last 181 days prior to
 the dose change and the share of patient medications that were adherent (with PDC ≥ 80%) and non-adherent
 (PDC < 80%).
- Student's t-tests (two-tailed) were used to determine statistically significant differences.

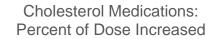
RESULTS

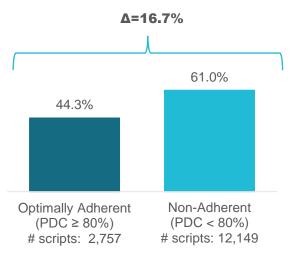


* p < 0.0001









* p < 0.0001

CONCLUSIONS

- When physicians changed medication doses, non-adherent Med D patients were significantly more likely to experience potentially inappropriate dose increases.
- Notably, we observed this pattern in all four medication classes measured: diabetes, hypertension, depression, and cholesterol.

POLICY IMPLICATIONS

- To assure quality care and patient safety, physicians should understand their patients' adherence behavior before
 increasing medication doses.
- Adherence history can be self-reported by patients. However, it is subjective and often inaccurate
- Recent advances in data connectivity between pharmacies and health systems may allow physicians to view
 objective measures of medication adherence at the point of care to help them make better prescribing decisions.

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