

# Addressing Polypharmacy Among Older Patients in an HIV Primary Care Clinic

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## **BACKGROUND**

- Over half of HIV+ Americans are age 50 or older.
- HIV+ patients face multimorbidity and high medication burden at relatively younger ages compared to the general population, posing unique challenges in primary care.
- Aim: pre-post analysis of an intervention to address polypharmacy and prescribing issues in older HIV+ adults.

### **METHODS**

#### **Intervention: Golden Compass Pharmacy Visit**

- Pre-post evaluation of a quality improvement prescribing intervention, part of the Golden Compass HIV & Aging Clinic at an urban safety net hospital.
- HIV+ patients who were referred to the clinic were seen by a clinical pharmacist and geriatrician.
- Recommendations were made to the PCP and patient about medication changes based on geriatrics best practices.

#### **Measures Assessed During Visits**

- Total number and classes of medications
- Potentially inappropriate medications using Beers Criteria
- Potential drug-drug interactions using Lexicomp<sup>TM</sup>: Categories D (consider therapy modification) and X (contraindicated)

## RESULTS

#### **Golden Compass Pharmacy Visits**

| Patient Characteristics (n=60), n (%) |              |                   |                 |  |  |  |
|---------------------------------------|--------------|-------------------|-----------------|--|--|--|
| Age*                                  | 63.5 (49-81) | Race +            |                 |  |  |  |
| Gender                                |              | Black             | 10 (17%)        |  |  |  |
| Male                                  | 54 (90%)     | White             | 25 (42%)        |  |  |  |
| Ethnicity                             |              | Other /Declined   | 20 (34%)        |  |  |  |
| Hispanic /Latino                      | 9 (15%)      | CD4*              | 705 (95 -2,365) |  |  |  |
| Not Hispanic/Latino                   | 4 (78%)      | HIV RNA <200 c/ml | 58 (97%)        |  |  |  |

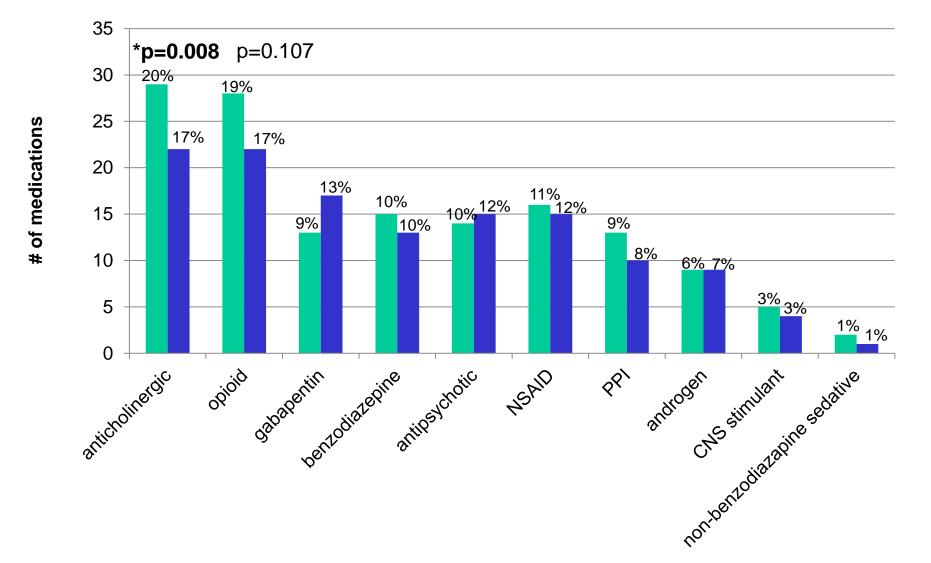
\*median (range)

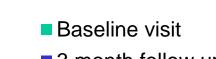
#### Chronic Medications Among Golden Compass HIV+ Patients Ages 50+, Median (IQR)

|                   | Chronic<br>Medications | ART Medications* | PRN<br>Medications | Medication doses / day | Drug-Drug<br>Interactions |
|-------------------|------------------------|------------------|--------------------|------------------------|---------------------------|
| Baseline visit    | <b>11</b> (8-16)       | <b>2</b> (1-3)   | 1 (0-2)            | <b>14</b> (9-24)       | <b>2</b> (1-5)            |
| 3 month follow up | <b>11</b> (8-15)       | <b>2</b> (1-3)   | <b>0</b> (0-2)     | <b>14</b> (10-25)      | <b>2</b> (1-6)            |
| p-value           | 0.80                   | 0.93             | 0.72               | 0.68                   | 0.94                      |

\*fixed dose combination pills were counted as one medication

#### Frequency of Prescribed Medications Meeting Beers Criteria by Medication Class







## CONCLUSIONS

- Comprehensive medication review for older HIV+ adults identified a high burden of polypharmacy in an urban safety net HIV primary care clinic.
- HIV+ older adults had a high frequency of potentially inappropriate medication use, particularly with anticholinergic and opioid medications.
- No change in total medications or DDI's was noted at 3 month follow up, although there was a trend towards reduction in anticholinergic and opioid medications.
- Lack of changes may be partly due to short follow up interval; not all patients had an interim follow up visit with their PCP.

## **IMPLICATIONS**

- Conducting comprehensive medication review for older HIV+ patients and communication with primary providers about safety is feasible.
- More evidence about how to safely address polypharmacy in this population is needed, such as direct medication changes by a geriatrician or pharmacy specialist.

## **ACKNOWLEDGMENTS**

We thank AIDS Walk San Francisco; Tideswell at UCSF; the UCSF Division of HIV, ID, and Global Medicine; and the UCSF Division of Geriatrics for their support.

Funding: AIDS Walk San Francisco, DIFFA.

