Evaluation of National Academic Detailing Service on Naloxone Kit Prescription Rates in the Veterans Health Administration

Melissa LD Christopher, PharmD
National Director
Academic Detailing Program Office
Disclosures / Disclaimers

The authors have no relevant financial or nonfinancial relationships to disclose. During the development, analysis, and preparation of this presentation, the authors were employees of the US Veterans Health Administration, Department of Veterans Affairs.

The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of any agency of the US government. Assumptions made within the analysis are not reflective of the position of any US government entity.
Outline

- Introduction
- Aims
- Approach

Preliminary results

Questions
Introduction

“Today, we are seeing more people killed because of opioid overdose than traffic accidents.”

President Barack Obama
Opioid overdose mortality is a rising epidemic in the US, increasing by 400% from 1999 and surpassing motor vehicle mortality by 150% in 2014.

“[W]e want to make sure that naloxone is in the hands of first responders and anyone else who responds to an opioid overdose.”

Secretary Sylvia M. Burwell
“Academic Detailing is a proven method in changing clinicians’ behavior when addressing a difficult medical problem in a population.”

Interim Under Secretary of Health, Dr. Carolyn Clancy
VA’s Response

2010
VA launches a pilot Academic Detailing Initiative in California and Nevada (does not include naloxone)

2011
IOM report on chronic pain

2012
VA report found that from 2004-2012, RX for opioids at VA increased by 77%

2013
Opioid Safety Initiative (OSI) implementation

2014
Pilot now becomes National program, VA OEND Program implemented, Naloxone added to the VANF

2015
Interim USH mandated national implementation of Academic Detailing in every VISN
Elements of a successful Academic Detailing Program

- Identify program needs
- Developing and producing materials
- Hiring and management of academic detailers
- Training of detailers
- Measuring Program effectiveness
**ADS Interventions**

**Standardization:** Standardized training to ADs to assist them in conducting their outreach visits to target the prescribing habits of providers.

**Data Tools:** Created a OEND-centric suite of data tools to assist in identifying high risk patients.

**Educational Materials:** Created OEND educational materials for both providers and patients.

**Workload Recording:** Utilized software to ensure workload was tracked to document topics covered, time, # of providers/visits, etc.

**Evaluation:** ADS is providing evaluation on naloxone kit distribution at facility, VISN, and National level.
Evaluation

Aim: To evaluate the impact of academic detailing on naloxone prescribing
Measurement Model

Risk of opioid overdose $\rightarrow$ (+) $\rightarrow$ Opioid overdose mortality

Academic detailing $\rightarrow$ Providers $\rightarrow$ (+) $\rightarrow$ Naloxone prescription

Naloxone prescription $\rightarrow$ (-)

VETERANS HEALTH ADMINISTRATION
**Aim:** Evaluate the impact of ADS on Naloxone prescribing to Veterans from October 2014 to September 2016.
Methods

Objective
• To evaluate the impact of VA National Academic Detailing Service alongside the Opioid Overdose Education and Naloxone Distribution (OEND) program on naloxone prescriptions prescribed from October 2014 to September 2016

Hypothesis
• Naloxone prescribing will be greater for prescribers who received AD intervention compared to those who did not

Design
• A retrospective, repeated measures cohort study

Dependent Variable (Outcome)
• Average naloxone prescriptions prescribed per provider per month

Intervention (time-dependent)
• >1 AD OEND-specific visit by AD to a provider
Methods

Data
• VA Corporate Data Warehouse
• Salesforce.com

Sample
• Providers were included if they were actively treating patients in primary care (PCP) or substance-use disorder (SUD) clinics during the study period
• Providers were categorized as academic detailing (AD)-exposed when they had an OEND-specific academic detailing session; otherwise, they were categorized as AD-unexposed

Analysis
• Longitudinal data analysis using generalized estimating equations was used to estimate the association between provider exposure to academic detailing and monthly naloxone prescriptions prescribed
Difference-in-Differences estimator

\[ \hat{\delta}_{DD} = \bar{Y}_1^T - \bar{Y}_0^T - (\bar{Y}_1^C - \bar{Y}_0^C) \]
Results—Number of naloxone prescriptions prescribed from Oct 2013 to Sept 2016

Closed cohort of PCP and SUD providers

Primary aim
Results—Baseline comparisons

- A total of 750 (22.6%) out of 3,313 providers received at least one OEND-specific academic detailing visit.

<table>
<thead>
<tr>
<th>Variable</th>
<th>AD-exposed (N=750)</th>
<th>AD-unexposed (N=2,563)</th>
<th>Total (N=3,637)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years), mean (SD)</td>
<td>54.5 (8.7)</td>
<td>54.7 (8.8)</td>
<td>54.7 (8.8)</td>
<td>0.672</td>
</tr>
<tr>
<td>Male, n (%)</td>
<td>381 (50.8%)</td>
<td>1,205 (47.0%)</td>
<td>1,586 (47.9%)</td>
<td>0.068</td>
</tr>
<tr>
<td>Primary care provider (PCP)</td>
<td>704 (93.9%)</td>
<td>2,308 (90.1%)</td>
<td>3,012 (90.9%)</td>
<td>0.002</td>
</tr>
<tr>
<td>Substance use disorder (SUD)</td>
<td>42 (5.6%)</td>
<td>246 (9.6%)</td>
<td>288 (8.7%)</td>
<td></td>
</tr>
<tr>
<td>Both (PCP and SUD)</td>
<td>4 (0.5%)</td>
<td>9 (0.4%)</td>
<td>18 (0.5%)</td>
<td></td>
</tr>
<tr>
<td>Months worked at the VA, mean (SD)</td>
<td>143.2 (99.1)</td>
<td>147.3 (104.9)</td>
<td>146.4 (103.6)</td>
<td>0.316</td>
</tr>
</tbody>
</table>

AD, academic detailing
SD, standard deviation
Results—Longitudinal data analysis

Provider-level comparison of naloxone prescriptions prescribed between AD-exposed providers and AD-unexposed providers.

The average difference in naloxone prescribing rate from baseline to 2 years was 7.1% greater in the AD-exposed providers (95% CI: 2.0%, 12.5%) compared to the AD-unexposed providers (difference in differences).
Discussion / Conclusions

• Providers exposed to academic detailing had more naloxone prescribed at 1 and 2 years
• Differences in the rate of naloxone prescribed from baseline to two years between the two groups were significantly greater in the AD-exposed providers
• Study did not take into account selection bias; therefore, future studies will need to mitigate this
• Lacked facility level and patient level characteristics, which may confound the results
• Future studies will evaluate the reach of ADS in high-risk patients
• Although these results are preliminary, they provide valuable information for policy makers in making future decisions regarding innovative strategies to address the opioid overdose epidemic
Acknowledgements

• Academic Detailing Service is a PBM program under the direction of Dr. Virginia Torrise, Deputy Chief Consultant, Professional Practice. Support is provided by Mr. Michael Valentino, Chief Consultant, PBM. We could not have implemented Academic Detailing without the support of these very important leaders in VHA.

• PBM ADS Staff and all the academic detailers throughout the VA, VA Academic Detailing Advisory Board, VISN pharmacist executives leading AD programs throughout Veteran Healthcare system, and the providers who care for our veterans every day with dedication and honor.

• OEND National Coordinator, Dr. Elizabeth Oliva, a tremendous partner in all OEND programming.

• OEND National Workgroup Members, supported programming efforts and provided additional guidance and direction on academic detailing resource development.
Questions

Question everything
CONTACT

VACO PBM Academic Detailing Service

Email Us
PharmacyAcademicDetailingProgram@va.gov

VA PBM Academic Detailing Website
http://www.pbm.va.gov/PBM/academicdetailingservicehome.asp

Melissa Christopher
VA Cell 858-337-8473
melissa.christopher@va.gov