DAY 2 FIELD PRESENTATIONS
Providers' perception after implementation of academic detailing on opioid overdose education and naloxone prescribing at the Veterans Health Administration

12 November 2018

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Disclosures and disclaimers

The author have no relevant financial or nonfinancial relationships to disclose. During the development, analysis, and preparation of this presentation, the author was an employee of the US Veterans Health Administration, Department of Veterans Affairs.

The views and opinions expressed in this presentation are those of the author 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

Objectives

Methods

Results

Questions
Background

Drugs Involved in U.S. Overdose Deaths, 1999 to 2017

Synthetic Opioids other than Methadone, 29,406
Heroin, 15,958
Natural and semi-synthetic opioids, 14,958
Cocaine, 14,556
Methamphetamine, 10,721
Methadone, 3,295

Prior to 2014, VA did not have a distribution program

Naloxone was only available as an injectable solution

Naloxone kits and autoinjector was added to the VA formulary in 2014; intranasal was added in 2016

The VA Opioid Education and Naloxone Distribution (OEND) was implemented nationwide in 2014

VA National Academic Detailing Service is the main instrument to carry out the OEND’s goals
Academic detailing was associated with an increase in naloxone prescribing

Figure 1. Naloxone kits monthly prescribing rates from October 2014 to September 2016.
Although academic detailing appears to improve naloxone distribution, it was unclear whether this was driven by improvements in providers knowledge, attitude, or perceived barriers.

Explore elements of academic detailing associated with naloxone prescribing:

- Evaluate providers’ perceptions about naloxone and academic detailing
- Identify facilitators and barriers to successful adoption of naloxone prescribing guidelines from the perspectives of the providers
Prospective, mixed methods design using a survey and semi-structured interviews

Part I: Cross-sectional Survey
- Capture perception about naloxone and academic detailing
- Identify constructs associated with self-stated changes in naloxone prescribing

Part II: Semi-structured interviews
- Identify facilitators and barriers to adopting academic detailing key messages regarding naloxone and prescribing changes
Figure 1. Conceptual framework of the effect of academic detailing on naloxone prescribing.

Conceptual framework

- **Problem**: Increased drug overdose mortality
- **Intervention**: Academic detailing
- **Social Marketing**
  - Initiatives
  - Exposure to “key messages”
  - Knowledge, attitudes, and beliefs
  - Behavior
- **TPB**
  - Attitude
  - Subjective norms
  - Perceived behavioral control
  - Intention: Adopt “key-messages”
- **Behavior**: Naloxone prescribing increases
- **Outcome**: Reduce drug overdose mortality

**Community**
- Provider
- Innovation
- Organizational capacity + Training & Teaching Assistance = Effective implementation

**Factors affecting implementation**
- Habits and automatic processes,
  - Behavioral skills
  - Salience of behavioral cues
  - Environmental obstacles
  - Ethics
  - Regulations
  - Decision-support
  - Liability

**Factors affecting mortality**
- Addiction, Depression, Lack of social network, Education, Illicit drug use

**Possible barriers to behavioral change**
5-MINUTE Q & A
Ontario’s Academic Detailing Service

Lindsay Bevan, Manager
Victoria Burton, Coordinator

Centre for Effective Practice
Toronto, Ontario, Canada
Disclosure

Lindsay Bevan
• No conflicts of interest to disclose
• Financial relationships: employee of the Centre for Effective Practice

Victoria Burton
• No conflicts of interest to disclose
• Financial relationships: employee of the Centre for Effective Practice
Building our service in Ontario

500 Family physicians visited in 8 months
# Service overview

## Visit topics

### Visit 1
- Mar – Jul 2018

### Visit 2
- Aug – Dec 2018

### Visit 3
- Jan – Apr 2019

### Visit 4+
- May 2019+

## Visits 1-3 – Supporting physicians care for their patients living with CNCP:
- currently on opioid therapy
- considering opioid therapy
- and problematic opioid use

## Visit 4+
- To be informed by primary care provider priorities
Local innovations and adaptations

Reflecting compassion for the current opioid context
Local innovations and adaptations

Helping physicians lead successful patient discussions

Why set goals?

- You and your doctor will be “on the same page” about what you hope to gain from the treatment.
- You’ll have a better idea of what’s realistic and when to expect changes to happen.
- You’ll make faster progress in improving your quality of life.\(^1\)\(^2\)
- You and your doctor will be able to see if your treatment is working and when it might be time to switch to another treatment.

Talking Points

Provide information about why a taper might be needed:

- “Chronic pain is a complex disease and opioids alone cannot adequately address all of your pain-related needs.”

Talking Points

Provide information about why a taper might be needed:

- “I think it is time to consider the opioid dose you are on and its risk of harm. The risk of overdose and the risk of dying from overdose go up as the dose goes up.”

Getting back on the road of life

It can be helpful to think of chronic pain as a car with four flat tires.\(^1\)

We may be looking for a single treatment, like medication, to manage pain, but this would be like putting air in only one tire.

You need to fill the other three tires to get where you want to go. There are lots of different ways to fill up the tires. Most of these involve taking an active role in your treatment. Keep your goals in mind so you know what you are working towards.
Local innovations and adaptations

Connecting physicians with local patient supports

Resources* for Chronic Non-Cancer Pain

LHIN 7 - Toronto Central

The inclusion of these resources does not entail endorsement by the Centre for Effective Practice, the Ontario College of Family Physicians, the Nurse Practitioners’ Association of Ontario or LHIN 7 - Toronto Central. This document is a list of all resources located in your LHIN and it is up to you as a provider to determine the most appropriate resource to refer your patient to.

Chronic pain management clinics

<table>
<thead>
<tr>
<th></th>
<th>Allevio Pain Management Clinic</th>
<th>Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This evidence-based multidisciplinary pain management clinic provides interventions (e.g., nerve blocks, epidurals), pharmacotherapy, psychological therapies (e.g., CBT, mindfulness, psychotherapy), naturopathic services, osteopathic services, chiropractic services, acupuncture, massage therapy, nutritional counseling, and occupational health assessments.</td>
<td>North York</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Altum Health Pain Management Program</th>
<th>Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Altum Health’s Pain Management Program provides an interdisciplinary approach to chronic pain management for those that have not returned to work within usual course of recovery (more than 6 months from time of injury or accident) or those struggling while at work. The program is time limited and goal directed, with a cognitive behavioural and functional restoration focus.</td>
<td>Toronto</td>
</tr>
</tbody>
</table>
Local innovations and adaptations

Connecting physicians with local provider supports

<table>
<thead>
<tr>
<th>Service</th>
<th># of Times Discussed with FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>360</td>
</tr>
<tr>
<td>Audit &amp; Feedback</td>
<td>211</td>
</tr>
<tr>
<td>EMR Support</td>
<td>73</td>
</tr>
<tr>
<td>Online CME</td>
<td>112</td>
</tr>
<tr>
<td>Case Base CME</td>
<td>305</td>
</tr>
</tbody>
</table>
Local innovations and adaptations

Imbedded care team detailers

• Lessons learned
  • Leveraging existing physician-pharmacist relationships makes it easier to get in the door
  • Provide financial means to increase capacity/scope of participating pharmacists
  • Provide connection to an experienced embedded detailer for additional support
  • Detailing increases referrals for clinical pharmacy services
Successes so far

Satisfaction with the service (n=454) (n=440)

Interest in future visits
Successes so far

Perception of academic detailers (n=457)

- **Was credible**
  - 16.1% strongly agree
  - 83.1% agree

- **Provided information relevant to my practice**
  - 19.0% agree
  - 80.2% agree

- **Enabled me to make changes to my clinical practice**
  - 39.7% agree
  - 54.5% agree
Successes so far

Behaviour change

Change in Average TRx/MD/Month (Government)

- Tapentadol: -17%
- Meperidine: -50%
- Pentazocine: 16%
- Oxycodone: 5%
- Hydromorphone: 16%
- Fentanyl: -7%
- Tramadol: -20%
- Morphine: 16%
- Codeine: 14%

- Change (no AD - baseline to post visit)
- Change (AD - baseline to post visit)
Successes so far

Behaviour change

Average Daily Dose/MD

- Change (no AD - baseline to post visit)
- Change (AD - baseline to post visit)
Successes so far

Behaviour change

Average Days Supply/MD

-35% -30% -25% -20% -15% -10% -5% 0% 5% 10%

-29%

-7% Tapentadol
-5% Oxycodone
-4% Morphine
-3% Codeine
-3% Hydromorphone
-1% Fentanyl
3% Tramadol
3% Meperidine
6% Pentazocine

Change (no AD - baseline to post visit)
Change (AD - baseline to post visit)
Future plans

Continuing to build off of participant feedback

I hope this will be available for nurse practitioners.

This was an excellent opportunity to engage, ask questions and learn.

It would be great if we could discuss a specific case anonymously.

What a great service. I am so impressed. Thank you.

Would also appreciate the opportunity for a group learning experience with the doctors in our family health organization.

Excellent! I hope this program continues and expands.

Case presentations might be useful

Excellent, looking forward to the next one.

I think a small group of same professionals would be equally effective and better use of time.

It is a shame not to target NPs.
Thank you
5-MINUTE
Q & A
Improving Pneumococcal Immunization Rates through Academic Detailing

Kimberly McKeirnan, PharmD, BCACP
Clinical Assistant Professor
Washington State University College of Pharmacy and Pharmaceutical Sciences

Karen Colorafi, PhD, MBA, RN
Assistant Professor
Washington State University College of Nursing
Financial Disclosure

• This research was funded by a generous grant from Pfizer’s Independent Grants for Learning and Change (2015–2018)
Need for change

• PPSV23 immunization rates were 6.9% and 2.2%, respectively (8/13–7/14).

• PCV13 rates were 0.4% and 4.7%, respectively (8/14–7/15)

• Herd immunity requires 93% of the population to be vaccinated

• WA generally has strong immunization rates but rural counties face challenges

• Pneumococcal Polysaccharide Vaccine (PPSV23)
• Pneumococcal Conjugate Vaccine (PCV13)
Barriers to completing the pneumococcal vaccination series

<table>
<thead>
<tr>
<th>Barrier</th>
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<tbody>
<tr>
<td>Lack of awareness of disease among vaccine candidates</td>
</tr>
<tr>
<td>Lack of awareness of disease among healthcare providers</td>
</tr>
<tr>
<td>Failure of providers to assume responsibility for vaccination</td>
</tr>
<tr>
<td>Competing priorities during office visit</td>
</tr>
<tr>
<td>Lack of documentation of previous vaccinations</td>
</tr>
<tr>
<td>Lack of coordination of adult immunization activities</td>
</tr>
<tr>
<td>Lack of patient knowledge</td>
</tr>
<tr>
<td>Lack of provider recommendations for immunization</td>
</tr>
<tr>
<td>Financial impediments to vaccinations</td>
</tr>
<tr>
<td>Lack of access to, and utilization of, health care services by adults</td>
</tr>
<tr>
<td>Lack of utilization of reminder or assessment systems</td>
</tr>
<tr>
<td>Racial/ethnic disparities</td>
</tr>
<tr>
<td>Health literacy</td>
</tr>
<tr>
<td>Concern about adverse events</td>
</tr>
</tbody>
</table>
Preparation

• Grant proposal submission and approval
• Recruitment of our interprofessional team
• Attend NaRCAD training
• Recruitment of medical clinic sites
• Regional needs assessment*
• Development of interprofessional academic detailing material
Interventions

- Physician champion interviews
- EHR workflow assessment
- Developed and presented tailored academic detailing:
  - In-services at all-staff meetings
  - Slide decks about pneumococcal vaccinations targeted to specific audiences
  - Exam room poster
  - Nurse station handouts
- On-going data collection
- Presentation of workflow results to leadership
<table>
<thead>
<tr>
<th>Visit Number</th>
<th>Month/Year</th>
<th>Audience</th>
<th>Purpose</th>
<th>AD Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailing Visit 1 (Clinic 1 and 2)</td>
<td>June 2016</td>
<td>Physician leaders at two separate medical clinics</td>
<td>Enrollment in project, determine what kinds of AD material would be helpful</td>
<td>McKeirnan, Panther, Colorafi</td>
</tr>
<tr>
<td>Workflow Assessment (Clinic 1 and 2)</td>
<td>July and August 2016</td>
<td>Shadowed clinicians (doctors, nurses, PAs, NPs)</td>
<td>Shadowed clinicians in two clinics to document immunization practices</td>
<td>Colorafi</td>
</tr>
<tr>
<td>Detailing Visit 2 (Clinic 1 and 2)</td>
<td>September (Clinic 1), November (Clinic 2) 2016</td>
<td>Medical clinic all-staff meetings</td>
<td>30-minute academic detailing presentation about pneumococcal immunization use</td>
<td>Interns, McKeirnan, Panther</td>
</tr>
<tr>
<td>Detailing Visit 3 (Clinic 1 and 2)</td>
<td>June 2017</td>
<td>Physicians and nurse managers</td>
<td>Follow up to see how implementation is working; ask what other resources would be helpful</td>
<td>McKeirnan, Panther, Colorafi</td>
</tr>
<tr>
<td>Detailing Visit 4 (Clinic 1 only)</td>
<td>July 2017</td>
<td>Physician leader</td>
<td>Discussed best practices for using EHR to identify needed immunizations at the request of physician leader</td>
<td>McKeirnan, Panther, Colorafi</td>
</tr>
<tr>
<td>Detailing Visit 4 (Clinic 2 only)</td>
<td>July 2017</td>
<td>Physician leader and nurse manager</td>
<td>Discussed best practices for using EHR to identify needed immunizations at the request of physician leader</td>
<td>McKeirnan, Colorafi</td>
</tr>
<tr>
<td>Detailing Visit 4.2</td>
<td>September 2017</td>
<td>Clinic medical assistants</td>
<td>Provided 30-minute academic detailing presentation to clinic medical assistants at the request of physician leader</td>
<td>McKeirnan, Panther</td>
</tr>
</tbody>
</table>
## Preliminary Results (Site 1)

<table>
<thead>
<tr>
<th>Year</th>
<th>Pneumovax</th>
<th>PCV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site 1</strong></td>
<td>Pneumovax</td>
<td>PCV</td>
</tr>
<tr>
<td><strong>Year 1 (2013-2014)</strong></td>
<td>121/1639=7.4%</td>
<td>not available</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2 (2014-2015)</strong></td>
<td>151/1559=9.7%</td>
<td>7/1677=0.4% (baseline)</td>
</tr>
<tr>
<td><strong>Year 3 (2015-2016)</strong></td>
<td>60/1448=4.1%</td>
<td>243/1712=14.2%</td>
</tr>
<tr>
<td><strong>Year 4 (2016-2017)</strong></td>
<td>161/1379=11.7%</td>
<td>399/1447=27.6%</td>
</tr>
<tr>
<td><strong>Year 5 (2017-2018)</strong></td>
<td>242/1335=18.1%</td>
<td>243/1172=20.7%</td>
</tr>
</tbody>
</table>
General impressions

• In–services were well received
• Site 2 asked us for a repeat presentation for all nursing staff
• Re–print needed for exam room posters
• “I have really enjoyed having those posters. It adds a bit of credibility to when I tell my patients about pneumococcal vaccination. What I have found is that if I advocate for imms, most of my patients just do them -- they say something like "do you think I should?"; I respond with "yep" and that is almost always the end of the conversation. Even with kids. I found this really works. Odd, huh? Who would guess that is all it takes?”
Limitations

• Previously vaccinated patients (prior to year 1) in denominator
  • % vaccinated could be artificially low

• Does not account for vaccinations given outside the clinic

• Observation does not equal correlation
  • Hawthorne effect (observation improves results)
  • Not all physicians attended in-services
  • Workflow vs. training vs. exam room poster – which intervention was impactful?
Successes and Challenges

**Successes:**
- Interprofessional team
  - Relationships and projects
  - Co-precepting and teaching students
- Exam room poster
- Physician champions
- Opportunity for student involvement
- Road trips

**Challenges:**
- Site recruitment
- Data availability
- Hubris
- Difficult personnel
- Road trips
Our Interprofessional Team

Karen Colorafi, PhD, MBA, RN
Assistant Professor
Washington State University College of Nursing

John McCarthy, MD
Assistant Dean for Rural Programs
Professor
University of Washington School of Medicine

Kimberly McKeirnan, PharmD, BCACP
Director, Center for Pharmacy Practice Research
Clinical Assistant Professor
Washington State University College of Pharmacy

Shannon Panther, PharmD, BCACP
Pharmacist
Kaiser Permanente

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Washington State University College of Nursing

Zuan Sun, Health Analytics PhD Candidate 2019
Washington State University College of Business
5-MINUTE
Q & A
Scaling up academic detailing in primary care with limited resources and broad geographic reach

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Kaiser Permanente Washington Health Research Institute
MacColl Center for Health Care Innovation
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Michael Parchman, MD MPH; Laura-Mae Baldwin, MD MPH; Jennifer Powell, MPH; Erika Holden; LJ Fagnan, MD; Jeff Hummel, MD MPH; James Ralston, MD MPH
Disclosure Statement

I have no conflicts of interest.

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Today’s presentation

• AHRQ’s EvidenceNOW Healthy Hearts Northwest pragmatic trial

• The design process for the virtual educational outreach intervention

• The adaptations to traditional academic detailing to accommodate challenges

• Next steps
The team

The research and implementation team included health services researchers and practice facilitators in WA, OR and ID, and consultants.

- Kaiser Permanente WA Health Research Institute, MacColl Center for Health Care Innovation
- University of Washington, ITHS
- Oregon Health Sciences University, ORPRN
- Qualis Health
- Quality improvement and clinical consultants
Healthy Hearts Northwest (H2N): an AHRQ EvidenceNOW Cooperative

4-arm pragmatic trial evaluating the addition of educational outreach and shared learning to practice facilitation aimed to improve the adoption of cardiovascular quality measures.

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### Shared Learning Opportunities (Site Visits)

<table>
<thead>
<tr>
<th>Educational Outreach (CV Risk Calculator)</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practice Facilitation (PF) alone</td>
<td>PF + Shared learning</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PF + Educational Outreach</td>
<td>PF + Educational Outreach + Shared Learning</td>
</tr>
</tbody>
</table>
Geographic spread across 3 states

We randomized 209 small-to medium-sized primary care practices in rural and urban WA, ID, and OR.
Characteristics of 104 practices randomized to an educational outreach visit (EOV)

<table>
<thead>
<tr>
<th>Practice Characteristics</th>
<th>No EOV Participation (N = 60)</th>
<th>EOV Participation (N = 44)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solo</td>
<td>10 (17%)</td>
<td>7 (16%)</td>
</tr>
<tr>
<td>Small (2-5 providers)</td>
<td>36 (60%)</td>
<td>19 (43%)</td>
</tr>
<tr>
<td>Medium (6+ providers)</td>
<td>14 (23%)</td>
<td>18 (41%)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>27 (45%)</td>
<td>17 (39%)</td>
</tr>
<tr>
<td>Urban</td>
<td>33 (55%)</td>
<td>27 (61%)</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federally Qualified Health Center</td>
<td>4 (7%)</td>
<td>5 (11%)</td>
</tr>
<tr>
<td>Hospital/Health System</td>
<td>28 (47%)</td>
<td>19 (43%)</td>
</tr>
<tr>
<td>IHS/Tribal Health Clinic</td>
<td>3 (5%)</td>
<td>3 (7%)</td>
</tr>
<tr>
<td>Independent</td>
<td>25 (42%)</td>
<td>17 (39%)</td>
</tr>
<tr>
<td><strong>Specialty</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Medicine</td>
<td>52 (87%)</td>
<td>37 (84%)</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>2 (3%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>Mixed</td>
<td>6 (10%)</td>
<td>5 (11%)</td>
</tr>
</tbody>
</table>
Known challenges to designing our intervention

Traditional, in-person academic detailing is effective. But, for our study we knew it required some adaptations if we wanted:

- To scale across 3 states in 4 months
- To work with the 5 study team physician educators rather than hire external consultants
- To deliver the intervention to a clinical care team, not only to a lead clinician
EOV design roadmap

**AIM**

Improve ABCS outcomes by offering interventions to increase patients’ accuracy of risk perception and increase their intent to start therapy

**PRIMARY DRIVERS**

- Implement CV Risk Calculator (CVRC) using national guidelines
  - Review evidence and guidelines regarding CVRC, including validated ASCVD risk calculator
  - Determine how CV Risk will be calculated for selected patient population with focus on point of service workflow
- Prepared and coordinated care team
  - Assign roles and responsibilities for CVRC and modify workflow as needed
  - Develop written protocols (who, when, how) for CVRC
- Communicate risk value to patient and provide support resources
  - Provide decision aid for patient that illustrates 10 year risk value
  - Discuss one or more strategies for reduction of risk value with focus on patient’s motivation and abilities
Traditional academic detailing program structure

- In-person visits
- Lead clinician-only audience
- One-to-one visits
- Extensively-trained detailer
- Multiple visits
Structural adaptations in H2N

- In-person visits

- Virtual 30-minute “visits” (conversations) facilitated by webinar technology
Structural adaptations in H2N

• One-to-one visits

• Fit “visit” into existing meeting to support team attendance.
• Developed short educational video on cardiovascular risk calculator in prep for the call and for care team members not attending visit.
Structural adaptations in H2N

- Lead clinician-only audience

- Invited a clinical care team (e.g., clinician, medical staff, quality coordinator), as appropriate for the practice’s context.
Structural adaptations in H2N

• Extensively-trained detailer

• Developed “detailing” training program and resources (NaRCAD-vetted). Key messages developed in collaboration with Affinity Group and content expert in cardiovascular risk reduction.
Structural adaptations in H2N

- Multiple visits

- Summary of call emailed to practice and copied their Practice Facilitator who followed up on practice change ideas.
### Traditional elements of academic detailing

<table>
<thead>
<tr>
<th>Elements</th>
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<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Needs assessment</td>
</tr>
<tr>
<td>Key messages, features, benefits</td>
</tr>
<tr>
<td>Handling objections and enablers</td>
</tr>
<tr>
<td>Summary</td>
</tr>
</tbody>
</table>
H2N adaptations: *Prior to the EOV*

**Introduction**

- Sent e-mail to clinical contacts with a copy to their Practice Facilitator to introduce the EOV and included a link to pre-visit video.
H2N adaptations: *During the visit*

- Needs assessment, key messages, handled objections
  - Did a roll call to engage all “visit” attendees.
  - Summarized and checked on barriers and enablers mentioned in H2N baseline practice survey.
  - Used a script, but educators tailored content and the tools they offered based on needs assessment and information shared during “visit.”
  - Discussed next steps and commitments team wanted to take after “visit.”
H2N adaptations: *After the EOV*

**Summary**

- Sent an e-mail to “visit” attendees and copied their Practice Facilitator. E-mail included a summary of the call, commitments the attendees expressed and electronic copies of materials discussed or requested.
Process evaluation

• Educators took field notes during calls on practices’:
  • Experience using a cardiovascular risk calculator
  • Barriers and facilitators to implementing a calculator
  • Commitments for next steps in implementing a calculator
• Interviews with the educators about which tools and elements of the call they thought worked well and what they would change.
• Interviews with affinity group members about the design process.
Identified 13 barriers to cardiovascular risk calculator implementation

- **Calculator-related**
  - Risk calculator: limited access/no EMR integration
  - *No or little calculator training*
  - *Different results for different calculators*

- **Practice-related**
  - Lack of documented workflow
  - No or little team communication (e.g., huddles)
  - *Time constraints*
  - *Lack of buy-in from providers/staff*
  - *Lack of staff for calculator work*

- **Clinician-related**
  - *Clinician lack of trust in calculator evidence/guidelines*
  - No clinical champion

- **Patient-related**
  - Perception of inadequate patient population for using calculator
  - *Patient resistance/fears*
  - Cost of medications for patients
Conclusions

• We developed a virtual educational outreach program for geographically dispersed practices that can help overcome the limitations posed by more traditional resource-intensive academic detailing programs.

• The process evaluation suggests additional adaptations for future virtual EOVs.
Next steps

- Understand why some practices participated and others did not.

- Analyze cardiovascular outcomes to understand effectiveness of virtual EOVs.

- Develop more tailored approaches to using educational outreach combined with other strategies to overcome the barriers to implementing cardiovascular risk calculators.
For more information:

Visit [www.healthyheartsnw.org](http://www.healthyheartsnw.org)

Contact Leah Tuzzio at [Leah.Tuzzio@kp.org](mailto:Leah.Tuzzio@kp.org)
5-MINUTE Q & A
ACADEMIC DETAILING TO REDUCE SEDATIVE HYPNOTIC PRESCRIBING IN OLDER VETERANS

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Veterans Health Care Administration (VHA)
Atlanta Network (VISN 7)
The author has no relevant financial or nonfinancial relationships to disclose. During the development, analysis, and preparation of this presentation, the author was an 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.
OBJECTIVES

Why avoid Sedative-Hypnotics in Older Veterans?

Campaign Implementation

Study Design

Impact of Academic Detailing Visits on Prescribing
VISN 7 ACADEMIC DETAILING (AD) PROGRAM

AD Program Director
5 Academic Detailers
0.25 Informatics Pharmacist
375,000 Patients Receiving Medications
WHY FOCUS ON OLDER VETERANS PRESCRIBED SEDATIVE-HYPNOTICS

- Sedative-hypnotics including benzodiazepines (BZDs) and benzodiazepine receptor agonist (BZD-RA) have been identified on the Beers Criteria for Potentially Inappropriate Medications (PIMs) in older adults
  - Cognitive Dysfunction
  - Falls
  - Sedation
- Sedative-hypnotics are intended for treatment of acute conditions, but are often times used chronically
  - Dementia

J Am Ger Soc. 2015;63(11):2227-2246
J Am Ger Soc. 2015;63(3):486-500

Benzodiazepine use in older patients is associated with at least 50% increase in risk of hip fracture
WHY FOCUS ON OLDER VETERANS PRESCRIBED SEDATIVE-HYPNOTICS

Sedative hypnotics for the treatment of insomnia have a small magnitude of effect and substantial risk in patients ≥60 years old.\textsuperscript{37}

- **MORE THAN TWO TIMES** more likely to be associated with adverse events than improved sleep\textsuperscript{37}
- **3-FOLD** increase in dizziness, loss of balance and falls\textsuperscript{37}
- **4-FOLD** increase in residual morning sedation\textsuperscript{37}
- **5-FOLD** increase in memory loss, confusion and disorientation\textsuperscript{37}

Meta-analysis of 24 studies with a total of 2,417 patients ≥60 years old who were prescribed a sedative hypnotic (benzodiazepines, non-benzodiazepine sedative-hypnotics, diphenhydramine) for sleep.

VA AD Provider Guide: Re-Evaluating the Use of Benzodiazepine; A Focus on High-risk Populations
BMJ, 2005. 331(7526): 1169
OPPORTUNITIES TO IMPROVE PRESCRIBING

Baseline Sedative Hypnotic Use in Older Adults Patients

<table>
<thead>
<tr>
<th>VISN 7 Medical Centers</th>
<th>Percent of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
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<td>5</td>
<td>6</td>
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<tr>
<td>6</td>
<td>5</td>
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<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

National VA Average 6.6%
VISN 7 Average 7.0%
AD CAMPAIGN INTERVENTIONS

Outreach Visits with PC and MH Providers (N=155)

- Empower Veterans Direct to Patient Mail-out
- Electronic Ordering Tools
- Patient and Provider Educational Materials

### Key Provider Messages for Re-Evaluating Sedative Hypnotic use in Older Veterans

<table>
<thead>
<tr>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedative Hypnotics are associated with significant risks in older Veterans (falls, sedation, hip fractures, and cognitive impairment)</td>
</tr>
<tr>
<td>Sedative Hypnotics for the treatment of insomnia have a small magnitude of effect and substantial risk in older Veterans</td>
</tr>
<tr>
<td>Lifestyle modifications and Cognitive Behavioral Therapy for Insomnia are effective and safe first line treatments</td>
</tr>
<tr>
<td>A slow benzodiazepine taper protocol (3 to 12 months) is preferred and has higher rates of benzodiazepine cessation.</td>
</tr>
<tr>
<td>First-line treatment alternatives for insomnia in the older veteran should be considered to include melatonin, trazadone, and mirtazapine.</td>
</tr>
</tbody>
</table>
STUDY METHODS

- **Design:** Retrospective with pre-post and interrupted time series analysis
- **Setting:** VISN 7 Medical Centers
- **Measures:**
  - **Index Date:** Time when provider received an Academic Detailing Outreach Visits
  - **Time Frame:** Monthly prescribing trends evaluated 18 month prior and after intervention
  - **Current Users:** Patients > 75 yo with active BZD or BZD-RA, or alternative prescriptions
  - **New Starts:** BZD, BZD-RA, or alternatives prescription fill without a fill in previous 180 days
  - **Discontinuations:** BZD or BZD-RA prescription fill without a subsequent fill in the following 180 days
  - **Prevalence:** Number of patients receiving treatment (BZD, BZD-RA or alternative prescription) per 1000 population aged 75 and older

BZD = Benzodiazepine
BZD-RA = Benzodiazepine Receptor Agonist (e.g. Zolpidem)
Alternatives = Melatonin, Mirtazapine, Trazadone
ANALYSIS PLAN

- Pre-post analysis by estimating the average number of prescription in the pre-intervention and post-intervention period
  - Student T test used to test the difference in the means
- Single-group interrupted time series analysis (ITSA) to compare trends of BZD, BZD-RA, and alternative prescription prescribing before and after the academic detailing intervention (difference in slopes) including the immediate impact of academic detailing (Intercept or level change)
- Alpha < 0.05 for statistical significance
# Results

<table>
<thead>
<tr>
<th>Outcome variable</th>
<th>Pre-period (18 months before the intervention)</th>
<th>Post-period (18 months after the intervention)</th>
<th>% change</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepines (BZD) Prescriptions</td>
<td>69.08 ± 2.48</td>
<td>53.33 ± 4.51</td>
<td>-23%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>BZD new starts</td>
<td>2.36 ± 0.62</td>
<td>1.09 ± 0.39</td>
<td>-54%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Discontinue BZD</td>
<td>2.68 ± 0.55</td>
<td>2.58 ± 0.87</td>
<td>-4%</td>
<td>0.685</td>
</tr>
<tr>
<td>BZD-RA Prescriptions</td>
<td>18.07 ± 0.63</td>
<td>15.38 ± 1.08</td>
<td>-15%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>BZD-RA new starts</td>
<td>1.02 ± 0.26</td>
<td>0.48 ± 0.22</td>
<td>-53%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Discontinue BZD-RA</td>
<td>1.08 ± 0.34</td>
<td>0.87 ± 0.27</td>
<td>-19%</td>
<td>0.053</td>
</tr>
<tr>
<td>Alternative Prescriptions</td>
<td>39.98 ± 2.42</td>
<td>49.27 ± 1.26</td>
<td>23%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

* Period prevalence, number per 1,000 population
**RESULTS**

*Figure 1.* Prevalence of patients with all fills (BZD only) per 1000 population before and after implementation of academic detailing.
RESULTS

Figure 2. Prevalence of patients with all BZD-RA fills per 1000 population before and after implementation of academic detailing.
Results

Figure 3. Prevalence of patients with Alternative fills per 1000 population before and after implementation of academic detailing.
DISCUSSION

Academic detailing visits reduced overall prevalence of BZD prescriptions 23% and BZD-RA 15% for Veterans > 75 years old. Large-level reductions were seen in both prevalence and new starts of BZDs, and BZD-RA and alternative prescriptions immediately following visits and continued 18 months after.

Academic detailing accelerated improvements in prescribing beyond normal trajectory.

A reduction in new starts accounted for most of change in prevalence. BZD were not replaced with BZD-RA.
STRENGTHS & LIMITATIONS

Strengths

- Fluctuations in the number of older Veterans enrolled in VA care at these sites over time was controlled for by using the proportion of Veterans prescribed the drug of interest per 1000 Veterans enrolled for care in the VISN

- The patient population studied averaged around eleven thousand Veterans aged 75 and older each month

- The intervention by the trained academic detailing pharmacists was structured to allow uniformity of the education and key messages provided to each provider

Limitations

- Aggregate data does not reflect individual provider practice change

- Direct to patient education was potential confounder
  - 6.5% to 8.9% relative reduction in BZD prevalence attributable to direct to patient intervention

Federal Practitioner. 2018 September;35(9):36-43
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5-MINUTE Q & A
Beyond Traditional Academic Detailing: Trials and Tribulations of Using Web Conferencing for Academic Detailing

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Disclosures

Relationships with commercial interests
• None

British Columbia Provincial Academic Detailing (PAD) service
• Funded by B.C. Ministry of Health
Disclosures

• Canadian Agency for Drugs and Technologies in Health (CADTH) is funded by federal, provincial, and territorial ministries of health.

• Application fees for three programs:
  • CADTH Common Drug Review (CDR)
  • CADTH pan-Canadian Oncology Drug Review (pCODR)
  • CADTH Scientific Advice
Learning Objectives

• Discuss the advantages in providing academic detailing via web conferencing

• Explore challenges faced with technology

• Explore barriers posed by providing academic detailing via web conferencing
A tale from the BC Provincial Academic Detailing Service

• Buprenorphine/naloxone for opioid use disorder
A tale from the BC Provincial Academic Detailing Service

- Buprenorphine/naloxone for opioid use disorder
- First topic available exclusively via web conferencing
- Rationale for using web conferencing
Advantages of web conferencing

• Able to disseminate information quickly

• More flexible timing (no commuting necessary)
Challenges with technology

• Participant has not joined the conference after 15 minutes: are they just late or are they not showing up?

• What do you do if the web conferencing program does not work for the participant?
Barriers posed by web conferencing

• The participant is not contributing to the conversation, how do you handle this?

• A small group is attending the web conference and one person is hijacking the conversation, how do you ensure the other participants’ learning needs are met?
Feedback

• Topic was well received

• Open to future topics via web conferencing
Moving Forward

• Web conferencing is an effective way to provide academic detailing when unable to provide in-person education

• Different challenges and barriers arise with web conferencing, anticipate and be prepared to manage these encounters
5-MINUTE Q & A
THANK YOU,
DAY 2 FIELD PRESENTERS