What role can policy play in implementing deprescribing initiatives?

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#deRx2018
Learning Objectives

1. To gain a more detailed understanding of the challenges and opportunities related to the use of policy to support the implementation of deprescribing guidelines

2. To generate new ideas that could be used to inform participant plans to connect with and influence policy makers

Session resources available at deprescribing.org/TBD
Why focus on policy?

Figure 1: Ecological model of health system change.

Pop quiz!

TASK: “If you were the health minister, what could you do to facilitate deprescribing of unnecessary and inappropriate medications?”

Time: 2 minutes
Potential Drug Policy Leavers

• Withdraw from market *
• Making prescribing more difficult
  • Limiting use / special authorisation *
  • Restrict to prescriber group
  • Re-scheduling *
  • Dose restriction
  • Quantity restriction
• De-listing / increase patient expense *
• Monitor use *
• Pay doctors to review medications *
• Public education programs *

* = examples in this presentation
Which policies can reduce benzodiazepines?

Which colour represents:
1. Prescriber monitoring
2. Prescriber payments
3. Public Awareness
4. Restricting coverage
5. Other
Evidence-Based Deprescribing Guidelines

• Where do Evidence-Based Deprescribing Guidelines fit in this list?

• more on that later, first let's see how well the suggested policy's works...
Withdraw from market

- In 2004, Rofecoxib was withdrawn from the market

Patients want alternatives
Limiting Use

Proton Pump Inhibitor Claims

No Policy restricting PPI prescribing

Policy restricting PPI prescribing

NB Female
NB Male
BC Female
BC Male
Interrupted Time Series Analysis of the Effect of Rescheduling Alprazolam in Australia: Taking Control of Prescription Drug Use
Rescheduling of Alprazolam

Schaffer AL et al JAMA Int Med 2016;176(8):1223
Alprazolam: Unintended consequences

- 22% ↓ in alprazolam prescribing
- 50% ↓ in poison center calls

BUT, at what cost?

- 216% ↑ other benzodiazepines;
- 142% ↑ antidepressants
- 129% ↑ antipsychotics
- Overdose deaths involving 1 or more benzodiazepines increased from 42.2% to 52.5% (2009 – 2015)

Schaffer AL et al JAMA Int Med 2016;176(8):1223
The Effect of Deinsuring Chlorpropamide on the Prescribing of Oral Antihyperglycemics for Nova Scotia Seniors’ Pharmacare Beneficiaries

Ingrid S. Sketris, Pharm.D., George C. Kephart, Ph.D., Dawn M. Frail, M.Sc., Chris Skedgel, M.D.E., and Michael J. Allen, M.D.
Glyburide was the most popular replacement medication despite also being inappropriate.
The Impact of Medicare Part D on Psychotropic Utilization and Financial Burden for Community-Based Seniors

Hua Chen, M.D., Ph.D.
Afar Nwangwu, Pharm.D., M.S.
Rajender Aparasu, M.Pharm., Ph.D.
Ekere Essien, M.D., Dr.P.H.
Shawn Sun, Ph.D.
Kwan Lee, Ph.D.
Delisting: Medicare Part D and benzodiazepines


Figure 3
Time series of the volume of benzodiazepine prescriptions dispensed to seniors in 2005–2006

Part D implemented

- Actual monthly utilization
- Estimated monthly utilization
- Estimated utilization trend

5%, briefly

5% increase

hip fractures doubled
Monitoring

• Triplicate Prescription Program implementation

Effects of state surveillance on new post-hospitalization benzodiazepine use

ANITA K. WAGNER¹, STEPHEN B. SOUMERAI¹, FANG ZHANG¹, CONNIE MAH¹, LINDA SIMONI-WASTILA², LEON COSLER³, THOMAS FANNING⁴, PETER GALLAGHER⁴ AND DENNIS ROSS-DEGNAN¹

¹Department of Ambulatory Care and Prevention, Harvard Medical School and Harvard Pilgrim Health Care, Boston, MA, ²Department of Pharmacy Practice and Science, University of Maryland School of Pharmacy, Baltimore, MD, ³Albany College of Pharmacy, Albany, NY, ⁴Management Reports and Research Unit, Office of Medicaid Management, New York State Department of Health, Albany, NY, USA

Monitoring

• Triplicate Prescription Program implementation

Proportion of patients with new benzodiazepine prescription on hospital discharge

- 53% ♀
- 58% ♂
Pay-for-Performance

Pay-for-Performance

• Quality improvement program

• 4 priorities: practice organization, chronic disease management, prevention, prescribing

• Total incentive payment of €5000 (€490 for prescribing component)
## Table 3 Short vs. long half-life benzodiazepines prescribed to patients older than 65 years (France, 2011-2012)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 9,894</td>
<td>N = 10,839</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n; %</td>
<td>n; %</td>
<td></td>
</tr>
<tr>
<td><strong>Short half-life BZD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clotiazepam</td>
<td>118; 1.19</td>
<td>137; 1.26</td>
<td>0.69</td>
</tr>
<tr>
<td>Oxazepam</td>
<td>723; 7.31</td>
<td>997; 9.20</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>Lorazepam</td>
<td>962; 9.72</td>
<td>1,043; 9.62</td>
<td>0.83</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>2,798; 28.28</td>
<td>3,373; 31.12</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td><strong>Long half-life BZD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bromazepam</td>
<td>4,120; 41.64</td>
<td>3,907; 36.05</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>Clobazam</td>
<td>115; 1.16</td>
<td>174; 1.61</td>
<td>0.008</td>
</tr>
<tr>
<td>Diazepam</td>
<td>64; 0.65</td>
<td>189; 1.74</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>Ethyl loflazepate</td>
<td>112; 1.13</td>
<td>113; 1.04</td>
<td>0.58</td>
</tr>
<tr>
<td>Prazepam</td>
<td>624; 6.31</td>
<td>664; 6.13</td>
<td>0.61</td>
</tr>
<tr>
<td>Nordazepam</td>
<td>101; 1.02</td>
<td>98; 0.90</td>
<td>0.43</td>
</tr>
<tr>
<td>Potassium clorazepate</td>
<td>157; 1.59</td>
<td>144; 1.33</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*Benzodiazepine.

- **1.4% new prescriptions**
- **3.6% treatment >12 weeks**
Public Education

Benzodiazepine dispensing

- Preproject (98/99)
- Project (99/00)
- Follow-up (00/01)

DDD/1000/day

Nov Dec Jan Feb Mar Apr

19.1%
Reducing Prescriptions of Long-Acting Benzodiazepine Drugs in Denmark: A Descriptive Analysis of Nationwide Prescriptions during a 10-Year Period

Sophie Isabel Eriksen¹ and Lars Bjerrum²

¹Research Unit of General Practice, University of Copenhagen, Copenhagen, Denmark and ²Research Unit of General Practice, University of Copenhagen, Copenhagen, Denmark
Danish Drivers Licence

• The policy: rules for renewal of drivers’ licences

- For long-term users of a BZD with a half-life >10 hr, renewal of, or to regain, ones driving license is not possible. Furthermore, driving licenses can be confiscated if the GP reports the patient to the Medical Officer of Health.
- For BZD with a half-life of exactly 10 hr, the patient’s driving license will have a 1-year time limit, resulting in a yearly test of the patient’s cognitive functions.
- If starting treatment with, or increasing the dose of BZD, the patient is recommended not to drive for 4 weeks.
- When using a single dose of BZD with a half-life <10 hr, it is recommended not to drive after consumption, considering the half-life of the drug.
Danish Drivers Licence

Benzodiazepines

Number of DDD sold/1000 inhabitants/day

- 66% long acting
- 37% short acting
Rapid Realist Review

“What works, for whom, under what circumstances?”

Global Deprescribing Policies

• Reducing benzodiazepines and Z-drugs?
  • What policies work and in whom?
  • What were the mechanisms?
  • What were the influences of context?
Possible Policy Mechanisms

Pay-for-Performance

• Why?

• Mechanism: Fiscal

• Contexts: highly paid physicians, prescribing patterns, other competing practice priorities
Medicare Part D

• Why?

• Mechanism: Legislation + Fiscal measures

• Contexts: Low income population versus multiple payment sources, prescribing practices, and patient expectations
Danish Drivers Licence

• Why?

• Mechanism: Regulation (not Legislation) + Guidelines, Communication (engaging both physicians and patients)

• Contexts: single payer health system, population driven toward independence (driving), political will
Which Policies Provided Positive Outcomes?

• Withdraw from market *??
• Making prescribing more difficult
  • Limiting use / special authorisation *
  • Restrict to prescriber group
  • Re-scheduling *?❌
  • Dose restriction
  • Quantity restriction
• De-listing / increase patient expense *?❌
• Monitor use *
• Pay doctors to review medications ❌
• Public education programs *
• Thinking outside the box: Danish Drivers License ✔️

deprescribing.org Bruyère Research Institute
Policies to reduce benzodiazepine use

- 66% less\(^a\)
- 37% less\(^a\)
- 54% less\(^b\)
- 34% less\(^c\)
- 22% less\(^d\)
- 19% fewer\(^e\)
- 14% fewer\(^f\)
- 12% fewer\(^g\)
- 11% fewer\(^h\)
- 5% less\(^i\)
- 1% more\(^j\)
- 4% more\(^k\)
Regulation and Evidence-Based Deprescribing Guidelines

TASK: “How can we facilitate implementation of evidence-based deprescribing guidelines using regulation?”

Time: 2 minutes
Education

• Include deprescribing as a mandatory component for all national guidelines

• Enforce deprescribing content in all undergraduate, postgraduate and continuing professional education

• Develop a deprescribing competency framework for professional certification programs (e.g. Gerontological Nursing Certification)
Workflow Enhancement

• Mandate Electronic Medical Record Software to include easy access to deprescribing algorithms
• Mandate Pharmacy Dispense software to include the steps of deprescribing algorithms as part of the workflow
Promote Clinical Review

- Professional body audit and feedback
- Fund collaboration between health care providers
  - Medication reviews in community pharmacies
  - Pharmaceutical opinions
  - Pharmacists in family medicine clinics
Influencing Decision Makers

TASK: “How can we influence decision makers to ensure there is implementation of deprescribing guidelines?”

Time: 2 minutes
Influencing Decision Makers

- This is up for discussion...
  I don’t have absolute answers!

- Improving patient outcomes
- Reducing adverse drug events
- Reducing medication cost
- Reducing hospitalisations and burden on health system
- Saving money
- Dependent on the political cycle
• Policy interventions seem to perform poorly when other contextual influences not considered (e.g. other payment sources, competing practice priorities, poor knowledge, availability of alternatives)

• Regulatory change with health care provider and patient education and engagement worked in Denmark (combined mechanisms)

• Policies that target valued privileges are more effective

• Strategies exist beyond de-listing
Actionable Steps

• What can you do?

• The patient must be at the centre of any policy change
• Ensure appropriate alternatives are available
• Regulation involving professional bodies may improve deprescribing guideline implementation

• Combined mechanisms may be required
  • Change in public opinion
  • Change in professional skills
  • Improved access to deprescribing guidelines