Academic detailing and the emerging crises of drug regulation, communication, and cost

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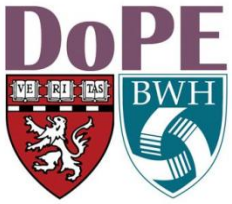


Conflicts of interest

- Most of the research in my Division is funded by NIH, FDA, AHRQ, and PCORI.
- Neither I nor anyone in my division accepts personal compensation of any kind from any pharmaceutical manufacturers.
- Our unit also receives research support for drug safety studies from drug companies through unrestricted grants to the Brigham and Women's Hospital.
- My external work on academic detailing is done through the non-profit Alosa Foundation; I receive no payment of any kind for it.

The times they are a-changin’

- …for the worse, in some ways, for the health care system
- …but creating greater need, demand, and opportunities for evidence-based, proactive educational outreach programs.

Loosening regulation

- of drug approval
- of drug promotion

"Who[m] do You Trust?"

"In my decades of practice as an internist, I have taken comfort that drugs on the market were there because their manufacturers had provided the FDA with at least some evidence that they worked and that their known risks were depicted in the product labeling. I did not need to review on my own all of the available evidence about efficacy and safety for each drug I prescribed. Even if I had the time and acumen to do so— and what busy practitioner has hundreds of hours to assess each new medication?—I knew that the FDA had additional thousands of details about these drugs I could never see, because they were the private property of the companies that had paid for the clinical trials."

Avorn J. "In opposition to liberty: We need a 'Sovereign' to govern drug claims." *Ann Intern Med, 2015.*

The growing pressure to approve drugs with lower standards (and faster)

- mis-identification of the problem
- The "21st Century Cures Act"
  - More surrogate outcomes, greater speed
    - Avorn, Sarpatwari, Kesselheim on 21st Century Cures Act, *NEJM* 2015
    - Darrow, Avorn, Kesselheim on new approval pathways, *NEJM* 2014
- Face validity of the appeal of many 'reforms'
    - even a Congressperson can relate to this
    - arcane nature of the scientific details
- Power considerations, industry vs. FDA
- Likely outcome: more drugs approved with questionable clinical usefulness
- → ***more need for academic detailing programs***

DoPE BWH

Rx promotion = "commercial free speech"

- ***Basic [bad] idea:*** Corporations have the same rights as people, and their promotional statements are protected by the U.S. Constitution.
  - *Citizens United* decision, 2010
  - *Sorrell vs. IMS*, 2011
    - pharma marketing 'speech' is protected as a form of 'expression'
- Libertarian rationale: "Big Government" shouldn't restrict the freedom of prescribers, companies, patients to do as they please.
- Caronia case: Kesselheim, Mello, Avorn, *JAMA* 2013

Worrisome developments of 2014-2015

- Government chose not to appeal Caronia decision
- FDA draft guidances issued last year:
  - Loosening rules for off-label promotion
  - Loosening rules for depicting risk
- The triumph of commercial free speech arguments
  - Amarin fish oil case of May-Oct 2015
  - Injunction against FDA, and the ghost of Frances Kelsey
    - Avorn, Sarpatwari, Kesselheim, *NEJM* 2015: "Forbidden and permitted statements…"

Why this should trouble us

- Prescribing is already shaped by promotion more than by evidence-based medicine
  - BP, DM, lipids, etc., etc.
- Conventional CME is already skewed by industry funding, influence.
- Worrisome precedents of off-label marketing
  - antipsychotics in elderly, antidepressants in children, etc., etc.
- Likely consequence: more aggressive promotion for sketchy indications, now protected.
- ***→ more need for academic detailing programs***

Costs:
The return of the vampire

New drug affordability problems

- Blockbusters → generics → "Pharmageddon"
  - Nexium, Lipitor, Plavix, Prozac, Fosamax, etc.
    - now all are generic
- But now: hep C drugs, PCS-K9 inhibitors, oncology drugs
    - and recent slimy scandals (e.g., Daraprim's 5,000% rise)
- 'Bending the cost curve' by shifting payments to patients
  - especially for drugs
  - growing numbers of patients can't afford the meds we prescribe
  - → reduced adherence, worse clinical outcomes

DoPE BWH

The drug marketplace will become more chaotic

- It will be even harder for prescribers to choose among treatments of varying efficacy and safety
  - ***"The center cannot hold…the best lack all conviction, while the worst are full of passionate intensity."***

-- W. B. Yeats, 1920

- Gresham's Law (16th Century English financier):
  - "Bad money drives out good money."
- Avorn's Third Law:
  - "Good information doesn't disseminate itself."
- What will this Hobbesian 'State of Nature' look like?
  - pre-1962 drug approvals & promotion
  - the supplements industry

Other developments relevant to AD

- Transformation of health care delivery systems to encompass all components of service more universally. More and more….
  - someone will be responsible for prescribing patterns
    - quality as well as cost
  - someone will be responsible for the quality of practice
  - someone will be responsible for clinical outcomes
- e.g., Medicare stars, HEDIS, penalties for readmission, other preventable bad outcomes
- We're all looking more like Kaiser/NHS/Australia

How our approach is broadening

- Focus is on ***optimal management*** of a ***clinical problem***
  - Dx, non-drug treatments, community resources
  - not just which drugs to use or avoid
- ***Learning about the practitioner's perspective and needs*** informs the discussion content
  - baseline data on practice sure helps
  - prior focus group research is key in developing modules
- Emphasis on ***behavioral change,*** not just transfer of knowledge

IDIS
Independent Drug Information Service

Balanced information for better care

Managing pain without overusing opioids

Implementing safe, effective, and less risky analgesic strategies

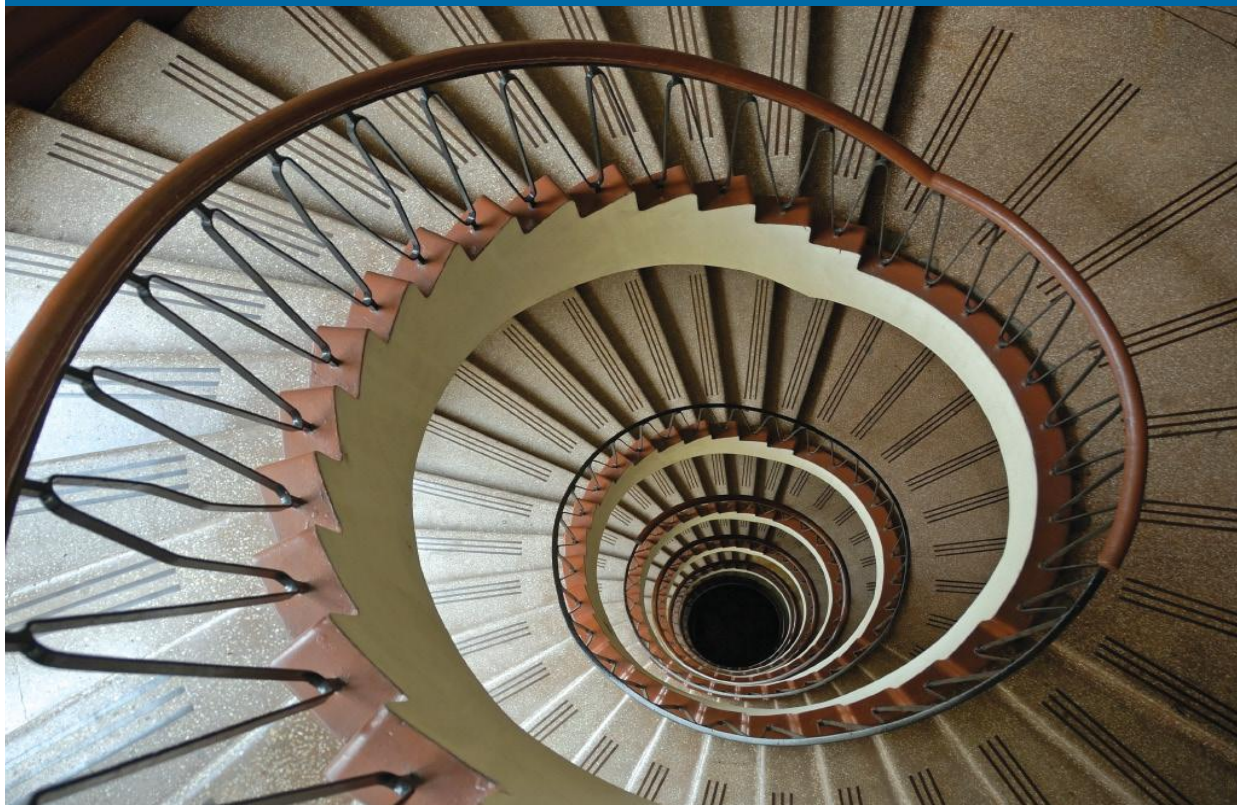
IDIS
Independent Drug Information Service

Balanced information for better care

Restrained use of antipsychotic medications:

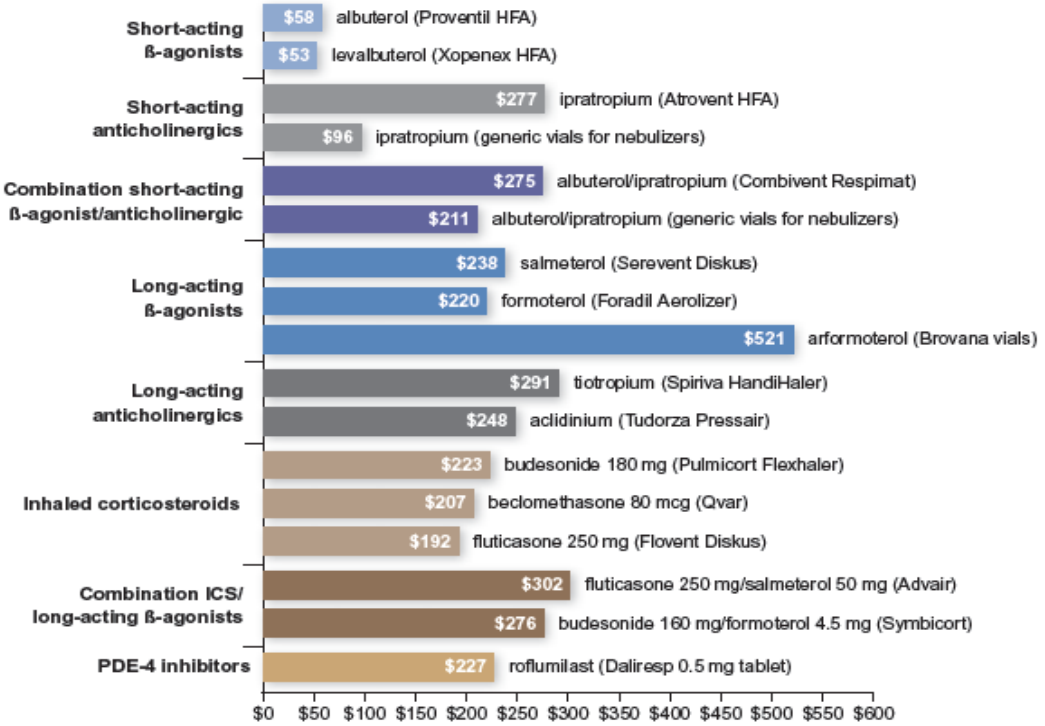
Rational management of irrationality

These drugs are commonly prescribed in conditions for which there is little evidence of benefit, but considerable risk of harm.



Costs vary widely, and can be significant

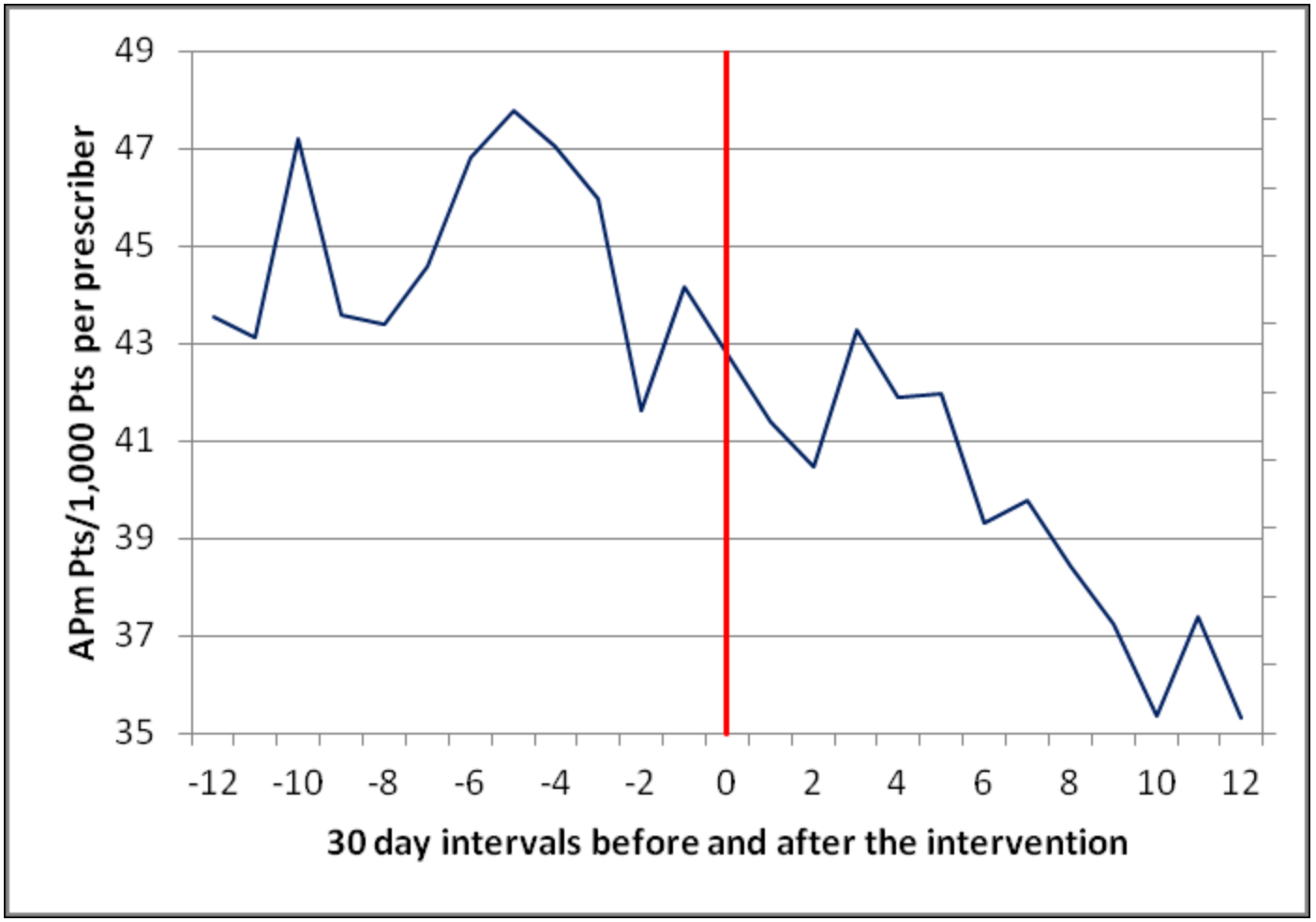
FIGURE 7. Average monthly price of commonly used medications for COPD*



*Prices from goodrx.com and epocrates.com. October 2013. Solutions for nebulizers are often significantly less expensive than the metered dose inhalers. Medicare Part B covers the cost of prescribed nebulizers. See medicare.com/health-conditions/sleep-apnea/nebulizers.html

References:

(1) American Lung Association. *Trends in COPD (Chronic Bronchitis and Emphysema): Morbidity and Mortality.* 2013. (2) Centers for Disease Control and Prevention. National Center for Health Statistics, CDC Wonder on-line database, compiled from compressed mortality file. 1979-2009. 2012;No. 20. (3) GOLD. *Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease.* 2013. (4) Stenton C. The MRC breathlessness scale. *Occupational Medicine.* 2008;58(3):226-227. (5) Godtfredsen NS, Lam TH, Hansel TT, et al. COPD-related morbidity and mortality after smoking cessation: status of the evidence. *The European respiratory journal.* 2008;32(4):844-853. (6) Fletcher C, Peto R. The natural history of chronic airflow obstruction. *BMJ.* 1977;(1(6077)):1645-1648. (7) Stead LF, Bergson G, Lancaster T. Physician advice for smoking cessation. *Cochrane Database Syst Rev.* 2008(2):CD000165. (8) Tonnesen P. Smoking cessation and COPD. *European respiratory review: an official journal of the European Respiratory Society.* 2013;22(127):37-43. (9) Routine nebulized ipratropium and albuterol together are better than either alone in COPD. The COMBIVENT Inhalation Solution Study Group. *Chest.* 1997;112(6):1514-1521. (10) Vogelmeier C, Hederer B, Glaab T, et al. Tiotropium versus salmeterol for the prevention of exacerbations of COPD. *NEJM.* 2011;364(12):1093-1103. (11) Wedzicha JA, Calverley PM, Seemungal TA, Hagan G, Ansari Z, Stockley RA. The prevention of chronic obstructive pulmonary disease exacerbations by salmeterol/fluticasone propionate or tiotropium bromide. *American journal of respiratory and critical care medicine.* 2008;177(1):19-26. (12) Chong J, Poole P, Leung B, Black PN. Phosphodiesterase 4 inhibitors for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2011(5):CD002309. (13) Puhan M, Gimeno-Santos E, Scharplatz M, Troosters T, Walters EH, Steurer J. Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2011(10):CD005305. (14) Schembri S, Morant S, Winter JH, MacDonald TM. Influenza but not pneumococcal vaccination protects against all-cause mortality in patients with COPD. *Thorax.* 2009;64(7):567-572. (15) Poole PJ, Chacko E, Wood-Baker RW, Cates CJ. Influenza vaccine for patients with chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2006(1):CD002733. (16) Nichol KL, Baken L, Wuorenma J, Nelson A. The health and economic benefits associated with pneumococcal vaccination of elderly persons with chronic lung disease. *Archives of internal medicine.* 1999;159(20):2437-2442. (17) Leuppi JD, Schuetz P, Bingisser R, et al. Short-term vs conventional glucocorticoid therapy in acute exacerbations of chronic obstructive pulmonary disease: the REDUCE randomized clinical trial. *JAMA.* 2013;309(21):2223-2231. (18) American Thoracic Society ERS. *Standards for the Diagnosis and Management of Patients with COPD.* 2004. (19) Nocturnal Oxygen Therapy Trial Group. Continuous or nocturnal oxygen therapy in hypoxemic chronic obstructive lung disease: a clinical trial. *Annals of internal medicine.* 1980;93(3):391-398. (20) Long term domiciliary oxygen therapy in chronic hypoxic cor pulmonale complicating chronic bronchitis and emphysema. Report of the Medical Research Council Working Party. *Lancet.* 1981;1(8222):681-686.


APm Pts/1,000 Pts per prescriber
49
47
45
43
41
39
37
35
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
30 day intervals before and after the intervention

Topics at **www.AlosaFoundation.org**

- G.I. acid Sx
- anti-platelet drugs
- hypertension
- cholesterol
- diabetes
- depression
- osteoporosis
- HIV for the PCP
- COPD
- cognitive impairment
- incontinence
- gait impairment, falls
- sleep meds
- atrial fibrillation
- chronic pain/opioids
- anti-psychotics

What we need more of

- Continuing evolution of the health care system to create **organizations with accountability**
- Mandated **access** to prescribers to present clinical evidence on optimal prescribing
  - [and perhaps also to feed back their Rx'ing data]
  - presented in a way that is user-friendly and engaging
- Encouragement of prescribers to **make time** for this, and to pay attention
- **Motivation** for prescribers to improve practice
  - financial incentives?

Words from two wise men

- *"The future cannot be predicted, but futures can be invented."*
  - Dennis Gabor, Nobel Laureate in Physics

- *"When you get to a fork in the road, take it."*
  - Yogi Berra, recently deceased baseball hero

DoPE BWH

Some useful links

Research on medications from the BWH Division of Pharmaco-epi and Pharmaco-eco ("DoPE"):

www. **DrugEpi.org**

Academic detailing resources:

www. **NaRCAD.org**

www. **AlosaFoundation.org**

"Powerful Medicines: the Benefits, Risks, and Costs of Prescription Drugs" (Knopf):

www. **PowerfulMedicines.org**