Fact or Fiction?
What Healthcare Professionals Need to Know about Pharmaceutical Marketing

CPT Minor Medicines, VU medical center

6 December 2016

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Health Action International

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Outline:

- Acronyms and Definitions
- Identifying Conflicts of Interest
- The Promotion Imperative
- Promotional Strategies Used by the Pharmaceutical Industry
- The Way Forward & Levels of Action
- Independent Sources of Information

A Few Acronyms & Definitions:

HAI =	Health Action International
WHO =	World Health Organization
EML =	Essential Medicines List
RUM =	Rational Use of Medicines
OTC =	Over the Counter
DTCA =	Direct to Consumer Advertising
KOL =	Key Opinion Leader
CGR=	Stichting Code Geneesmiddelenreclame
TLA =	Three Letter Acronym

Trying it all together:

Essential Medicines

Essential medicines are those that satisfy the priority health care needs of the population … selected with due regard to disease prevalence, evidence on efficacy and safety, and comparative cost-effectiveness

Rational Use of Medicines

Patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community." (WHO, 1985).

Irrational Use of Medicines

Patients receive the wrong medications inappropriate to their clinical needs, in doses that do not meet their own individual requirements, for an inadequate period of time, and at an often unaffordable cost to them and their community.

Identifying Conflicts of Interest

Identifying Conflicts of Interest

"A conflict of interest is a set of circumstances that create a risk that professional judgment or actions regarding a primary interest will be unduly influenced by a secondary interest."

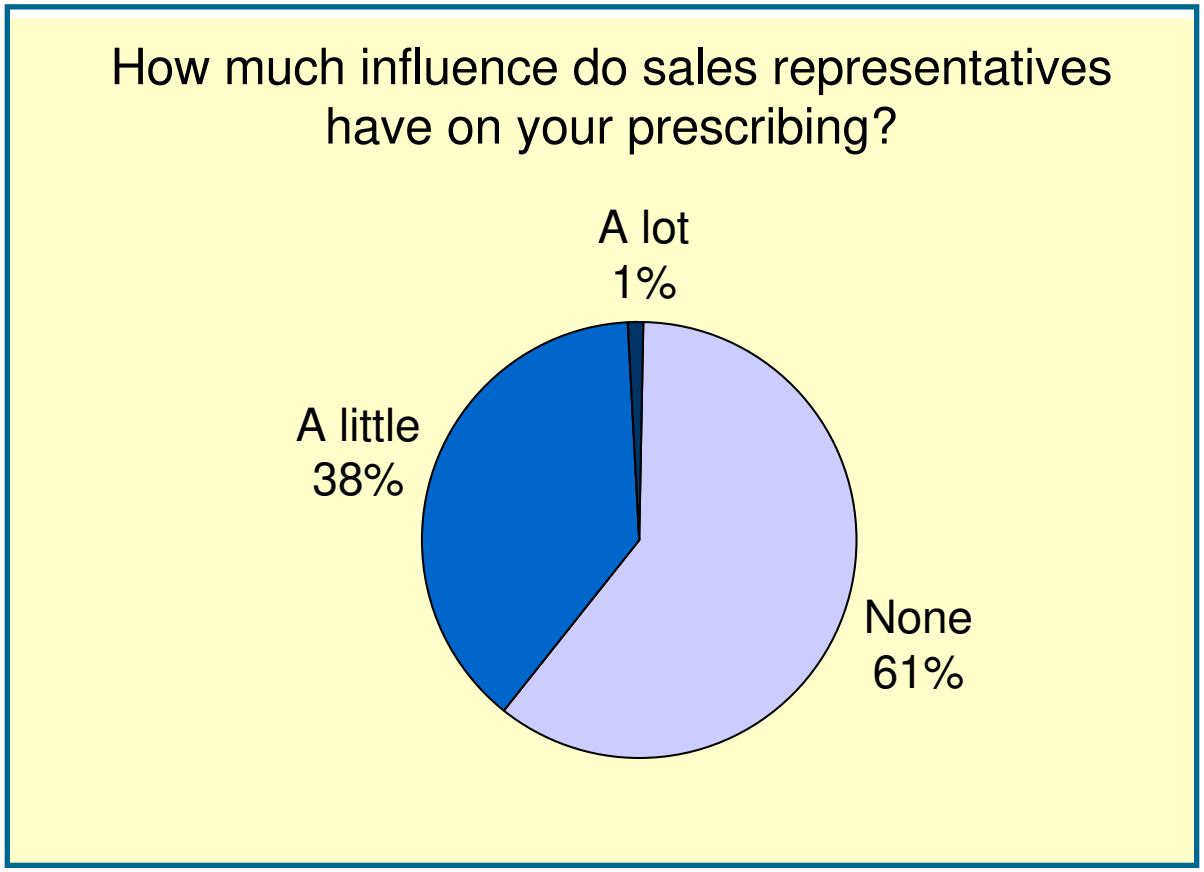
United States Institute of Medicine, 2009

I Can't Be Bought…

"….few doctors accept that they themselves have been corrupted. Most doctors believe that they are quite untouched by the seductive ways of industry marketing men [and women]; that they are uninfluenced by the promotional propaganda they receive; that they can enjoy a company's 'generosity' in the form of gifts and hospitality without prescribing its products. The degree to which the profession, mainly composed of honourable and decent people, can practice such self-deceit is quite extraordinary. No drug company gives away its shareholders' money in an act of disinterested generosity."

Mike Rawlins,
National Institute for Health and Care Excellence

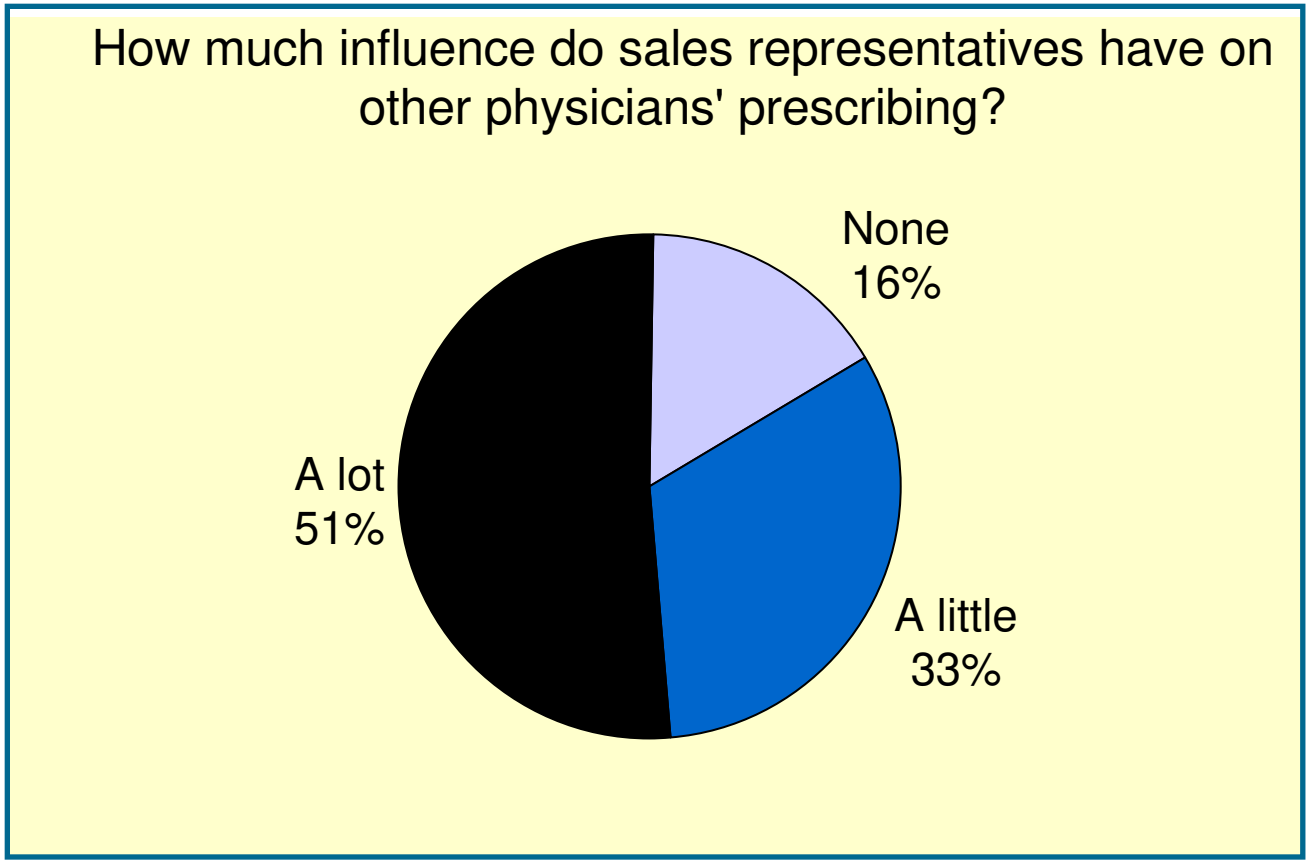
Does promotion affect prescribing?



n=102 internal medicine residents

Steinman et al (2001)

Does promotion affect prescribing?



n=102 internal medicine residents

Steinman et al (2001)

Impact of pharmaceutical promotion on clinical practice

- No evidence of net improvements in prescribing
- Negative outcomes associated with the interactions between physicians and the pharmaceutical industry:

  - Inability to identify wrong claims about a medication;
  - Rapid prescription of a new drug;
  - Increased prescription rate;
  - Prescribing fewer generics, but more expensive medicines with no added therapeutic value.

(Spurling et al., 2010; Wazana, 2000; Norris et al., 2005)

Early Influence

- Pharmaceutical promotion surrounds health professionals from early in their career
- Exposure starts during the academic period…
- …however most students do not obtain adequate education on how to critically appraise pharmaceutical promotion

85.2% of medical students recently surveyed in France (n=2,101) reported feeling inadequately educated about conflicts of interest arising from interactions with the pharmaceutical industry.

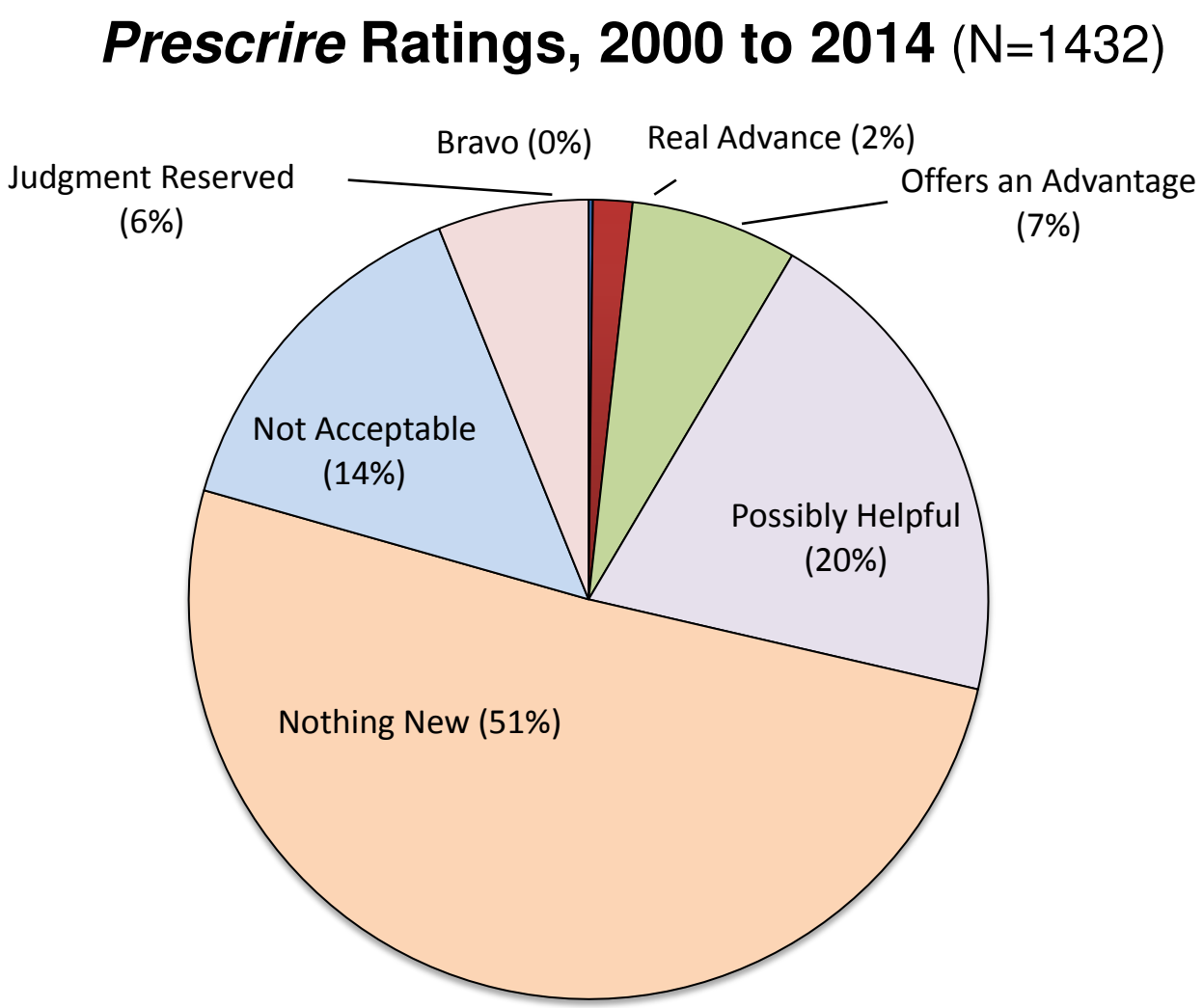
(Etain et al., 2014)

The Promotion Imperative

The Promotion Imperative

- **Accountability to Share Holders** = to make money
- **Poor Innovation** = not much therapeutic advantage
- **Me-Too Medicines** = more of the same
- **Disease Mongering** = 'new' non-diseases
- **Incentivised R&D Modelling** = markets not needs

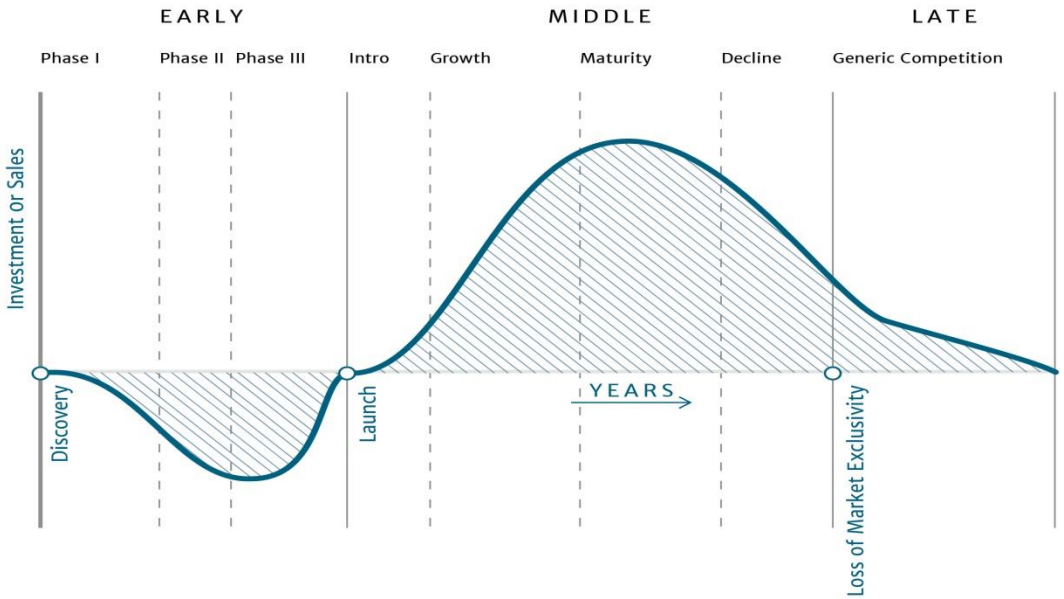
True innovation or just marketing?



(Prescrire, 2015)

Promotion Across the Pharmaceutical Product Lifecycle

Industry approach: Drug Life Optimisation Model (DOL)



(Bernard, 2013)

Unlike conventional marketing strategies , the DOL model incorporates early-stage development and the late generic period.

Pharmaceutical Promotion Expenditure

A 2009 inquiry by DG Competition, European Commission, shows that between 2000 and 2007, originator pharmaceutical companies spent only **17% of their turnover on R&D worldwid**e, but **23% on marketing** and promotional activities during the same period.

(European Commission, 2009)

Promotional Strategies used by the Pharmaceutical Industry

Promotional Strategies Used by Pharmaceutical Industry

- Free samples
- Gift Giving
- Clinical Guidelines
- Medical Literature
- Key Opinion Leaders
- Sales Representatives
- Digital Marketing

Relationship-based Selling

Sales Representatives (I)

- One of the most effective techniques for developing personal relationships and influence prescribing behaviour
- Sales reps are highly trained in influencing skills

"It's my job to figure out what a physician's price is. For some, it's dinner at the finest restaurants. For others, it's enough convincing data to let them prescribe confidently and, for others, it's my attention and friendship...but at the most basic level, everything is for sale and everything is an exchange".

Shahram Ahari,
Former pharmaceutical sales rep
(Fugh-Berman & Ahari, 2007)

Sales Representatives (II)

Common Techniques used by Sales Representatives

Unconscious influences on a person's judgement	Use of this unconscious influence for marketing purposes
Experts know best	"Professor Z recommends medicine B."
Peers know best	"Medicine B is the most frequently prescribed medicine for indication X."
People we like can be trusted	Use of attractive, friendly representatives.
We should help others who have helped us	Use of gifts, including free samples of expensive new medicines.
People should be consistent with their past statements	Sales representative: "Do you treat many people with indication X?" Doctor: "Yes." Sales representative: "So you need to know about the treatments for indication X?" Doctor: "Yes." Sales representative: "Would you like me to tell you about our medicine B for indication X?" Doctor: "Yes." Note: this is an example of the commitment consistency technique - getting the physician to agree to successive statements that are consistent with one another, ending up at the conclusion the marketer wants, although if the final question had been asked first, the physician would probably not have agreed. Often the final statement is, "So doctor, will you try medicine B for your patients with indication X?"

Adapted from Cialdini, 2000; Roughead, 1998 in HAI& WHO, 2009

Sales Representatives (III)

- Many healthcare professionals report relying on sales reps for medicines information
- However, information provided by sales reps is often incomplete and biased towards the benefits of the product
- Evidence suggests that healthcare professionals would be better off avoiding such interactions
- When confronted with sales reps, claims about medicines' therapeutic profile should always be contrasted with regulatory & independent sources of information

HEALTH POLICY

Pharmaceutical Sales Representatives and Patient Safety: A Comparative Prospective Study of Information Quality in Canada, France and the United States

Barbara Mintzes, PhD[1], Joel Lexchin, MD[2], Jason M. Sutherland, PhD[1], Marie-Dominique Beaulieu, MD[3], Michael S. Wilkes, MD[4], Geneviève Durrieu, PharmD, PhD[5], and Ellen Reynolds, BA[6]

[1]School of Population and Public Health, University of British Columbia, Vancouver, British Columbia, Canada; [2]School of Health Policy and Management, York University, Toronto, Ontario, Canada; [3]Department of Family Medicine, University of Montreal, Montreal, Quebec, Canada; [4]Department of Internal Medicine, University of California at Davis, Davis, California, USA; [5]Department of Medical and Clinical Pharmacology, Faculty of Medicine, University of Toulouse, Toulouse, France; [6]Department of Anesthesiology, Pharmacology and Therapeutics, University of British Columbia, Vancouver, British Columbia, Canada.

INTRODUCTION: The information provided by pharmaceutical sales representatives has been shown to influence prescribing. To enable safe prescribing, medicines information must include harm as well as benefits. Regulation supports this aim, but relative effectiveness of different approaches is not known. The United States (US) and France directly regulate drug promotion; Canada relies on industry self-regulation. France has the strictest information standards.

METHODS: This is a prospective cohort study in Montreal, Vancouver, Sacramento and Toulouse. We recruited random samples of primary care physicians from May 2009 to June 2010 to report on consecutive sales visits. The primary outcome measure was "minimally adequate safety information" (mention of at least one indication, serious adverse event, common adverse event, and contraindication, and no unqualified safety claims or unapproved indications).

RESULTS: Two hundred and fifty-five physicians

DISCUSSION: "Minimally adequate safety information" did not differ in the US and Canadian sites, despite regulatory differences. In Toulouse, consistent with stricter standards, more harm information was provided. However, in all sites, physicians were rarely informed about serious adverse events, raising questions about whether current approaches to regulation of sales representatives adequately protect patient health.

KEY WORDS: health policy; patient safety; primary care; health services research.
J Gen Intern Med 28(10):1368–75
DOI: 10.1007/s11606-013-2411-7

INTRODUCTION

Pharmaceutical sales representatives (PSRs), and the free

Study Mintzes et al (2013)

- Findings: Less than 2% of the reported 1,692 drug-specific promotions included minimally adequate safety information

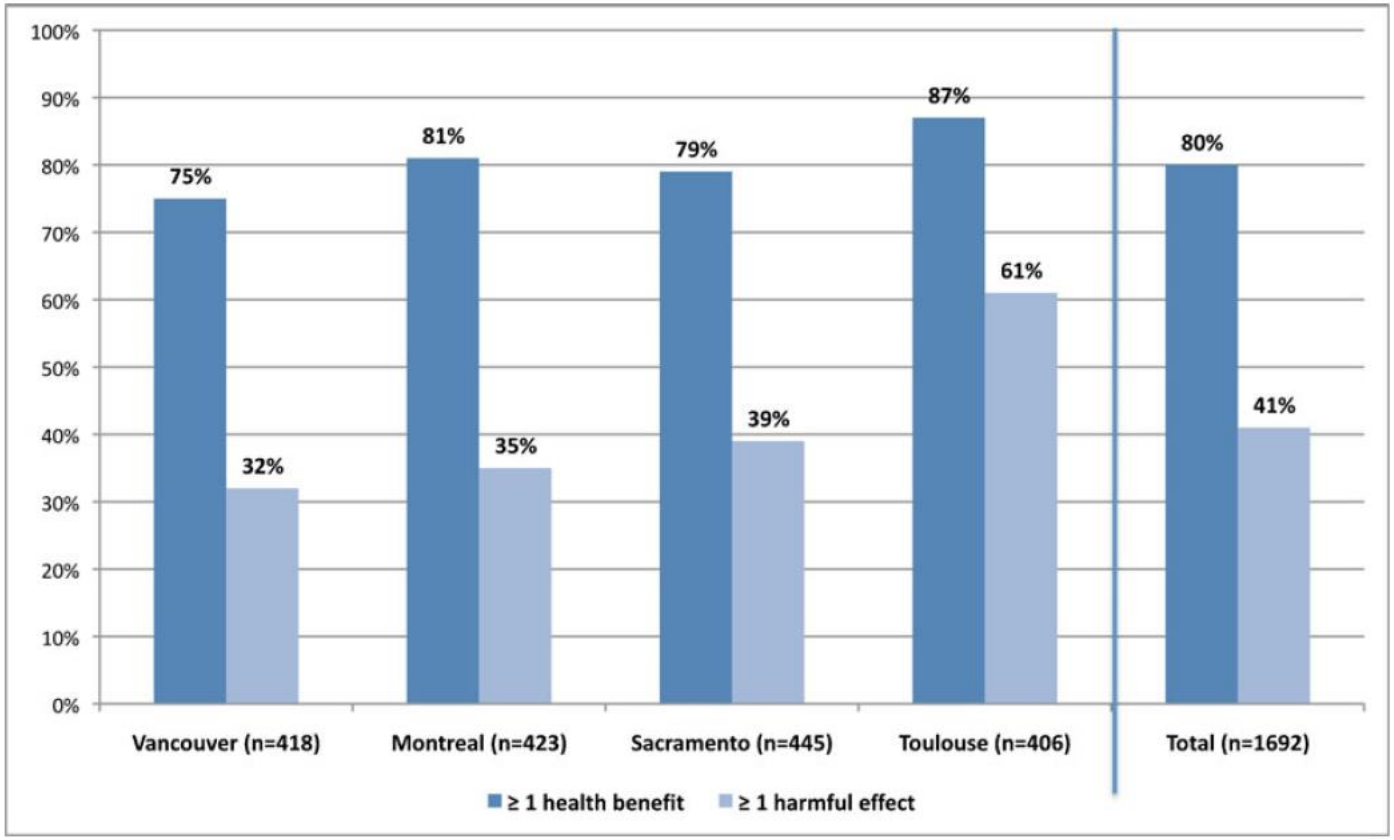
- ‘’Minimally adequate safety information’’:

  At least one:
  - indication
  - common adverse event
  - serious adverse event
  - contra-indication

  And no:
  - unqualified safety claim
  - unapproved indications

Study Mintzes et al (2013)

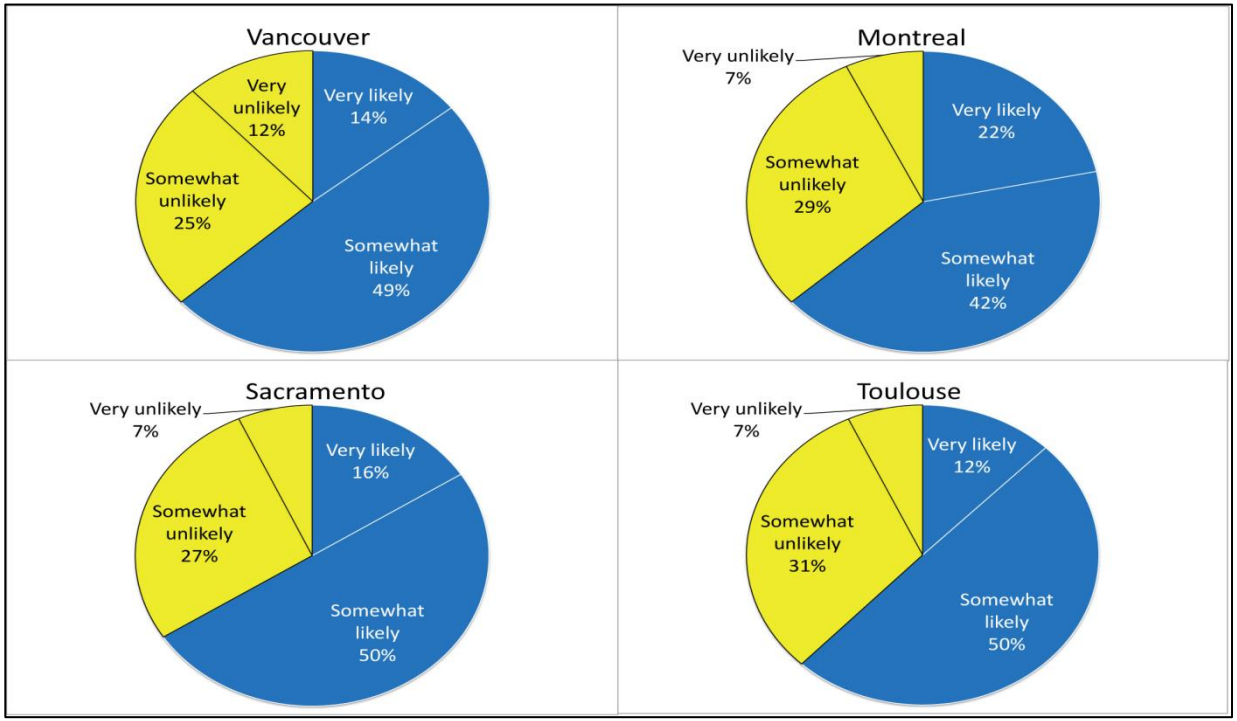
Drug specific promotion with any mention of health benefits versus any mention of harm



Study Mintzes et al (2013)

- Findings: in many cases, physicians considered the information to be of good quality and expressed their intent to prescribe the medicine

Physicians' stated likelihood to begin or increase prescribing as compared with before the sales visit



(n=1660; 98% of promotions)

Gift Giving

- Inducements are aimed at influencing medical education, treatment decisions and research habits
- Gifts (large and small) create sense of obligation, often unconscious, to “return the favour”

Studies show that industry inducements are associated with:

- Prescribing patterns inconsistent with evidence-based guidelines
- reduced generic prescribing
- increased drug costs
- biased requests for additions to hospital formularies

(Smith et al., 2013)

⇒ Should not be perceived as a socially acceptable norm

Product Information & Awareness

Clinical Guidelines (I)

List of red flags that should raise substantial skepticism amongst guideline readers:

- Sponsor is a professional society that receives substantial industry funding.
- Sponsor is a proprietary company, or is undeclared or hidden.
- Committee chair(s) have COI
- Multiple panel members have financial COI
- Any suggestion of committee stacking that would pre-ordain a recommendation regarding a controversial topic.
- No or limited involvement of an expert in methodology in the evaluation of evidence.
- No external review.
- Non inclusion of non-physician experts/patient representatives.

(Lenzer et al., 2013)

Clinical Guidelines (II)

- Dutch health inspectorate announced 40 health professionals involved in 6 guidelines had financial links to companies affected (2009)
- Cross-sectional survey of 192 authors of 44 chronic disease clinical practice guidelines found:
- 59% of authors had financial relationship with manufacturers of drugs in guideline
- 42/44 guidelines – no declarations of conflicts of interest

(Choudry et al. JAMA 2002)

Clinical Guidelines (III)

A comparison of the German S3 guidelines on the treatment of psoriasis vulgaris with Raptiva (efalizumab) with a NICE guideline developed by independent authors reveals more positive judgement by the S3 guideline

(Schott et al., 2013)

- Safeguards to avoid conflicting situations in guideline development must be in place

- When confronted with clinical guidelines with conflicts of interest, independent sources of information can help inform optimal treatment decisions.

Free Samples

- Company strategy to increase brand awareness and sales of new (and often more expensive) medicines
- Healthcare professionals might suggest they accept samples to reduce patients' cost barriers to access…
- …however, evidence shows that the provision of samples can lead to higher out-of-pocket prescription costs (Alexander et al., 2009)
- The provision of samples can also lead to poorer compliance with clinical guidelines

Use of Media

Journals & Medical Literature (I)

- Sponsored content can appear as clear product advertisements, conference updates or as information that may appear of educational/public health importance
- Low quality of journal advertising as a global issue. Misleading claims and missing essential information, including contraindications, interactions, side effects, warnings and precautions (Othman et al., 2009)

A study of German CME journals identified an increased occurrence of positive editorial commentary regarding specific medication when the journal ran ads for the same product.

(Becker et al., 2011)

Journals & medical Literature (II)

- Ghostwriting and guest authorship: common practices
- Research or opinion papers published under the name of a key opinion leader (KOL)/qualified clinician – in spite no significant contribution
- Company's contribution downplayed
- Academic authorship enhances the credibility of industry publications and masks their commercial function to promote and position a product (Matheson, 2011).

Case Study: Misleading Advertising

Advertisement for Amylin and Eli Lilly's Byetta® (exenatide injection) for type 2 diabetes appeared in the August 20, 2008, issue of the *Journal of the American Medical Association* and elsewhere.

(Healthy Skepticism, 2009)

Journals & medical Literature (IV)

Recommended information in journal advertisements by WHO's Ethical Criteria for Medicinal Drug Promotion (1988)

- Name(s) of the active ingredient(s) using either international nonproprietary names;
- (INN) or the approved generic name of the drug;
- Brand name;
- Content of active ingredient(s) per dosage form or regimen;
- Name of other ingredients known to cause problems;
- Approved therapeutic uses;
- Dosage form or regimen;
- Side-effects and major adverse drug reactions;
- Precautions, contra-indications and warnings;
- Major interactions;
- Name and address of manufacturer or distributor;
- and Reference to scientific literature, as appropriate.

Digital marketing (I)

- 25% of pharmaceutical marketing budget spent on digital technologies (Manz et al., 2014)
- Digital marketing changing how companies communicate with health professionals and consumers
- Increasing use of product websites, social media campaigns, mobile phone apps
- Pharmaceutical industry calls this the move towards ***patient-centric*** care …

  ….from the perspective of promotions, this flags a shift away from health professionals and towards the patient as the customer

Digital Marketing (II)

(*The Guardian*, 'Kim Kardashian forced to delete selfie endorsing morning sickness drug', 12 August, 2015)

Digital Marketing (III)

- Allergan manufacturer of Lo Loestrin Fe®, birth control pill
- Launched #actuallyshecan campaign, which focuses on female empowerment using celebrity spokespeople
- Campaign leads healthcare professionals and consumers to branded and unbranded information on birth control

(Source: www.actuallyshecan.com; www.instagram.com/mirandakerr)

Market Expansion

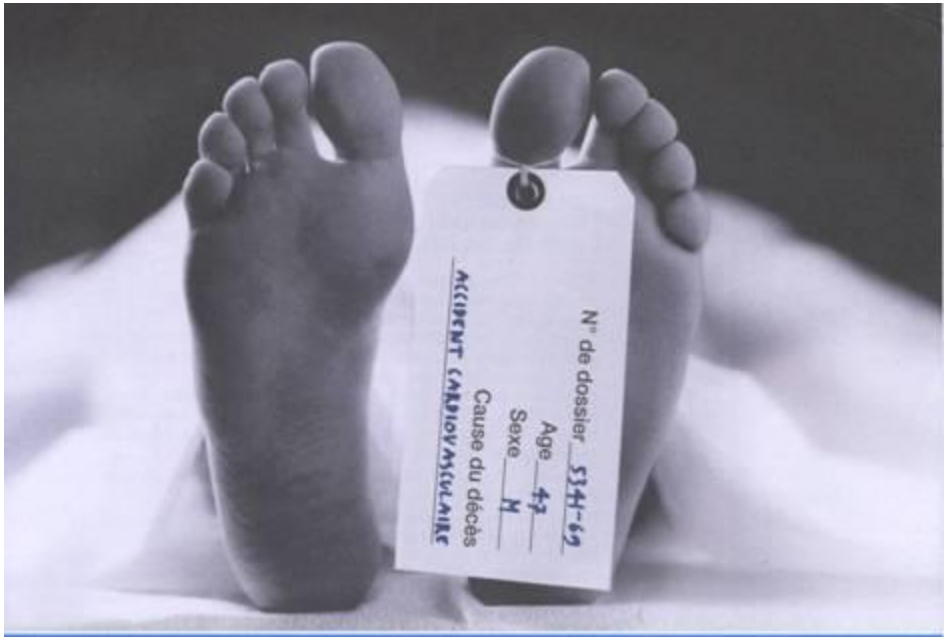
Disease mongering (I)

- ‘Disease mongering' used to describe this process of medicalisation of natural processes

- Construction of disease and risk: natural physiological processes, such as a gradual decrease in bone density as people age, are misrepresented as diseases

- Manufactured chronic diseases mean the potential for market expansion for pharmaceutical companies promoting treatments for non-diseases

https://www.youtube.com/watch?v=RoppJOtRLe4



Dire qu'un simple dosage de son cholestérol aurait pu lui éviter ça

Une crise cardiaque peut intervenir alors que l'on ne se croyait pas malade. On peut alors découvrir que l'on a, peut-être depuis des années, un excès de cholestérol dans le sang !

Saviez-vous qu'un excès de cholestérol peut provoquer des maladies cardiovasculaires ? Et qu'elles sont la première cause de mortalité en France ?

Faire doser régulièrement son taux de cholestérol est important, d'autant qu'il est relativement facile, aujourd'hui, de le faire baisser.

Si un seul de ces points* vous concerne, il est temps de faire doser votre taux de cholestérol.

- **Homme de plus de 45 ans**
- **Femme de plus de 55 ans ou ménopausée**
- **Antécédent familial de maladie cardiaque**
- **Tabagisme**
- **Diabète**
- **Hypertension**
- **Obésité**

* Agence Nationale d'Accréditation et d'Évaluation en Santé (ANAES) Rapport d'octobre 2000 : **Modalités de dépistage et diagnostics biologiques des dyslipidémies en prévention primaire.**

Des solutions existent, demandez conseil à votre médecin.

POUR PLUS D'INFORMATIONS, CONTACTEZ LE :
N° Azur 0 810 741 741

arcol

Pfizer

LA VIE, NOUS Y CONSACRONS NOTRE VIE

(Quick et al., The Lancet, August 30, 2003)

prevention-**cardio**.com

Key Opinion Leaders

Key Opinion Leaders (I)

- Common practice used to affect purchasing behaviour by associating a product with a respected person

"Key opinion leaders were salespeople for us and we would routinely measure the return on our investment by tracking prescriptions before and after their presentations. If that speaker didn't make the impact the company was looking for, then you wouldn't invite them back"

Kimberly Elliott, former US-based pharmaceutical sales representative
(Moynihan, 2008)

- Merck study shows that KOLs provide a better return on investment to companies than the use of sales representatives (Scott & Martinez, 2005)

Key Opinion Leaders (II)

- Pharmaceutical companies engage KOLs under formal commercial agreements as product spokespeople
- Level of transparency of product endorsement may range from obvious promotion to subtle inclusion in presentations, discussions with peers/social media followers
- Experts in field also engaged in industry-sponsored conferences/CME through hospitality.
- Speakers might underestimate how financial incentives can bias their judgement

Key Opinion Leaders (III)

(Garcinia Cambogia, Where to Buy, 2015)

Source: Standford School of Medicine, 2015

The Way Forward

The Way Forward

Different levels of action:

- Regulation
- Education
- Behavioural change
- Organisation/institutional change

Better Regulation

- Sound regulation in place aimed at banning, rather than framing, practices that are likely to negatively impact prescribing practices

- Pre-vetting, active monitoring of promotional activities and enforcement measures (e.g., corrective measures, naming and shaming, dissuasive fines)

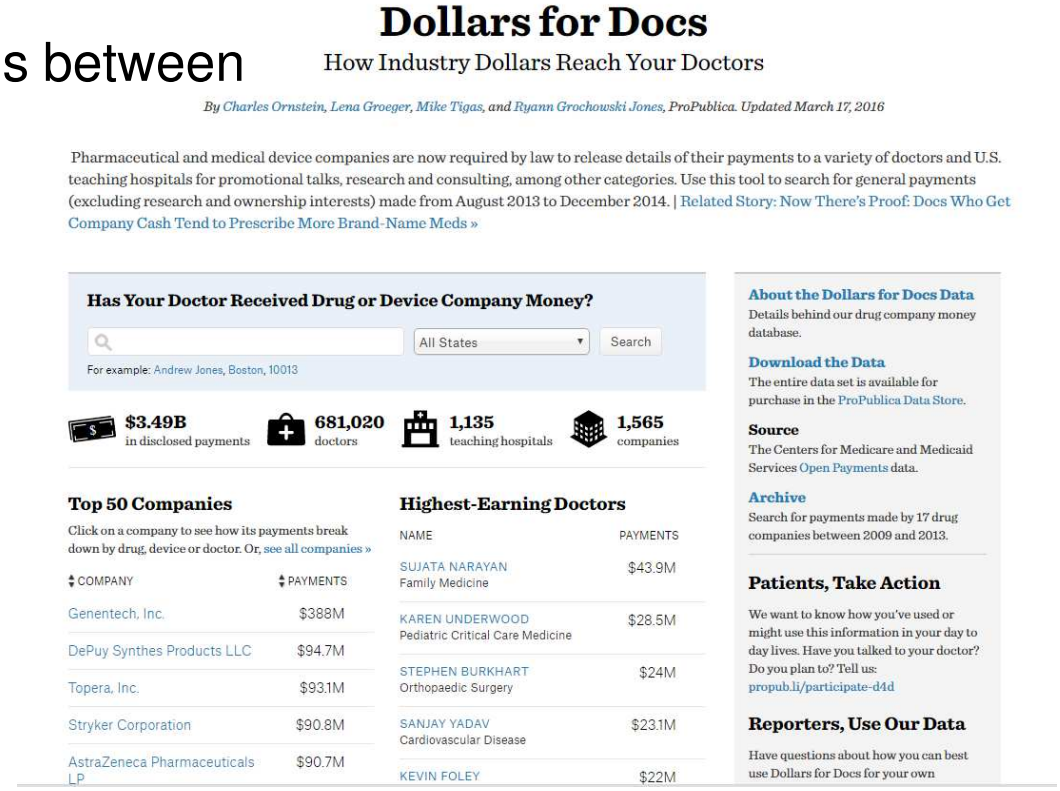
In 2004, the Institute for Evidence-based Medicine analysed 175 medicine advertisements received by 43 doctors in Germany. Of these, 94% were not supported by scientific evidence.

Unsupported claims included benefits not mentioned in scientific papers, false descriptions of trial designs, wrongly cited figures and omitted adverse effects.

(Tuffs, 2004)

Sunshine legislation

- Helps to uncover transfers of value between industry and healthcare professionals
- Helps to reveal connections between industry payments and doctors' prescribing habits (Pro Publica, 2016)
- Can deter healthcare professionals from entering into conflicting situations



Dollars for Docs

How Industry Dollars Reach Your Doctors

By Charles Ornstein, Lena Groeger, Mike Tigas, and Ryann Grochowski Jones, ProPublica. Updated March 17, 2016

Pharmaceutical and medical device companies are now required by law to release details of their payments to a variety of doctors and U.S. teaching hospitals for promotional talks, research and consulting, among other categories. Use this tool to search for general payments (excluding research and ownership interests) made from August 2013 to December 2014. | Related Story: Now There's Proof: Docs Who Get Company Cash Tend to Prescribe More Brand-Name Meds »

Has Your Doctor Received Drug or Device Company Money?

All States | Search

For example: Andrew Jones, Boston, 10013

$3.49B in disclosed payments | **681,020** doctors | **1,135** teaching hospitals | **1,565** companies

Top 50 Companies

Click on a company to see how its payments break down by drug, device or doctor. Or, see all companies »

COMPANY	PAYMENTS
Genentech, Inc.	$388M
DePuy Synthes Products LLC	$94.7M
Topera, Inc.	$93.1M
Stryker Corporation	$90.8M
AstraZeneca Pharmaceuticals LP	$90.7M

Highest-Earning Doctors

NAME	PAYMENTS
SUJATA NARAYAN, Family Medicine	$43.9M
KAREN UNDERWOOD, Pediatric Critical Care Medicine	$28.5M
STEPHEN BURKHART, Orthopaedic Surgery	$24M
SANJAY YADAV, Cardiovascular Disease	$23.1M
KEVIN FOLEY	$22M

About the Dollars for Docs Data

Details behind our drug company money database.

Download the Data

The entire data set is available for purchase in the ProPublica Data Store.

Source

The Centers for Medicare and Medicaid Services Open Payments data.

Archive

Search for payments made by 17 drug companies between 2009 and 2013.

Patients, Take Action

We want to know how you've used or might use this information in your day to day lives. Have you talked to your doctor? Do you plan to? Tell us: propub.li/participate-d4d

Reporters, Use Our Data

Have questions about how you can best use Dollars for Docs for your own

Transparentieregister- CGR

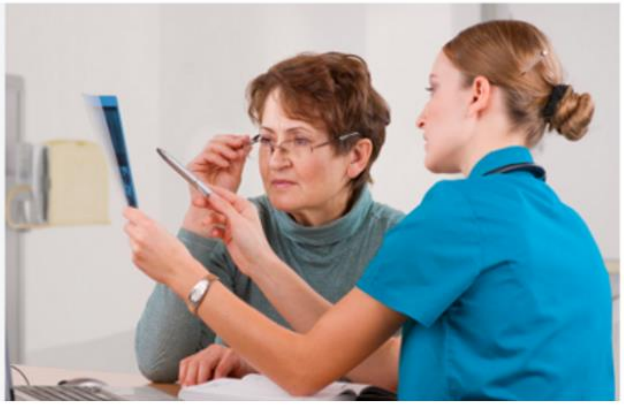
Stichting Transparantieregister Zorg

Transparantieregister zorg

Home | Over het Transparantieregister | Raadpleeg het Transparantieregister | Contact | zoek op website

Via deze website kunt u het Transparantieregister Zorg raadplegen. Het Transparantieregister Zorg biedt inzicht in bepaalde financiële relaties tussen zorgverleners, zorginstellingen en bedrijven.

Van een financiële relatie is sprake als een bedrijf betalingen doet aan bijvoorbeeld een zorgverlener of -instelling. Via het Transparantieregister Zorg kunt u deze relaties inzien. Het Transparantieregister Zorg is opgezet door koepelorganisaties van zorgverleners, zorginstellingen en industrie met het doel de consument of patiënt inzicht te geven in de relaties die zijn zorgverlener heeft met bedrijven.



Links

CGR
GMH
CAVP
Nefarma
Bogin
FIDIN
Neprofarm

Raadpleeg het register

Via deze link bereikt u de zoekpagina, waarmee u het register kunt doorzoeken op naam of BIG-nummer (www.bigregister.nl) van de zorgverlener of op naam of KvK-nummer van de zorginstelling, in combinatie met de vestigingsplaats.

Voor bedrijven

Nieuwsberichten

Melden financiële relaties 2016
8 november 2016
Vanaf maandag 9 januari 2017 is het mogelijk de financiële relaties die in 2016 ten uitvoer zijn gelegd en in totaal de

Problems with self-regulation

- National regulatory authorities often ‘’delegate’’ some of their responsibilities regarding the control of promotional activities to pharmaceutical industry associations

- Industry’s process of self- regulation is inherently flawed

- Conclusions from a study comparing self-regulation in the UK and Sweden:

  ‘’ The prevalence and severity of breaches testifies to a discrepancy between the ethical standard codified in industry Codes of Conduct and the actual conduct of the industry.”

(Zetterqvist et al, 2015)

Case study: Self-Regulation in Sweden and the UK (2004-2012)

	Sweden	UK
Percent of violations	58% misleading claims 23% failure to comply with undertakings 23% pre-licensing and off-label promotion 15% promotion of prescription drugs to the public	
No. companies in breach	27	36
	46 were in breach across both countries	
	7 companies were in breach more than 10 times	
Average charges collected per year*	€447,000	€765,000
% of annual sales revenue paid in sanctions*	0.014%	0.0051%
Particularly serious breaches	17%	16%

* 2009-2012

Source: Zetterqvist et al (2015)

Better Education

- Quality education about pharmaceutical promotion as part of the medical curriculum & CME

> In the Netherlands, pharmaceutical promotion is rarely and not structurally addressed in the formal curriculum of medical schools, and large differences were observed between medical faculties as to which aspects were addressed.
>
> Tielrooij B, 2016

- Support & recognition of independent initiatives on education of pharmaceutical promotion

- Support & and recognition about independent sources of information on medicines

Behavioural change from HCPs

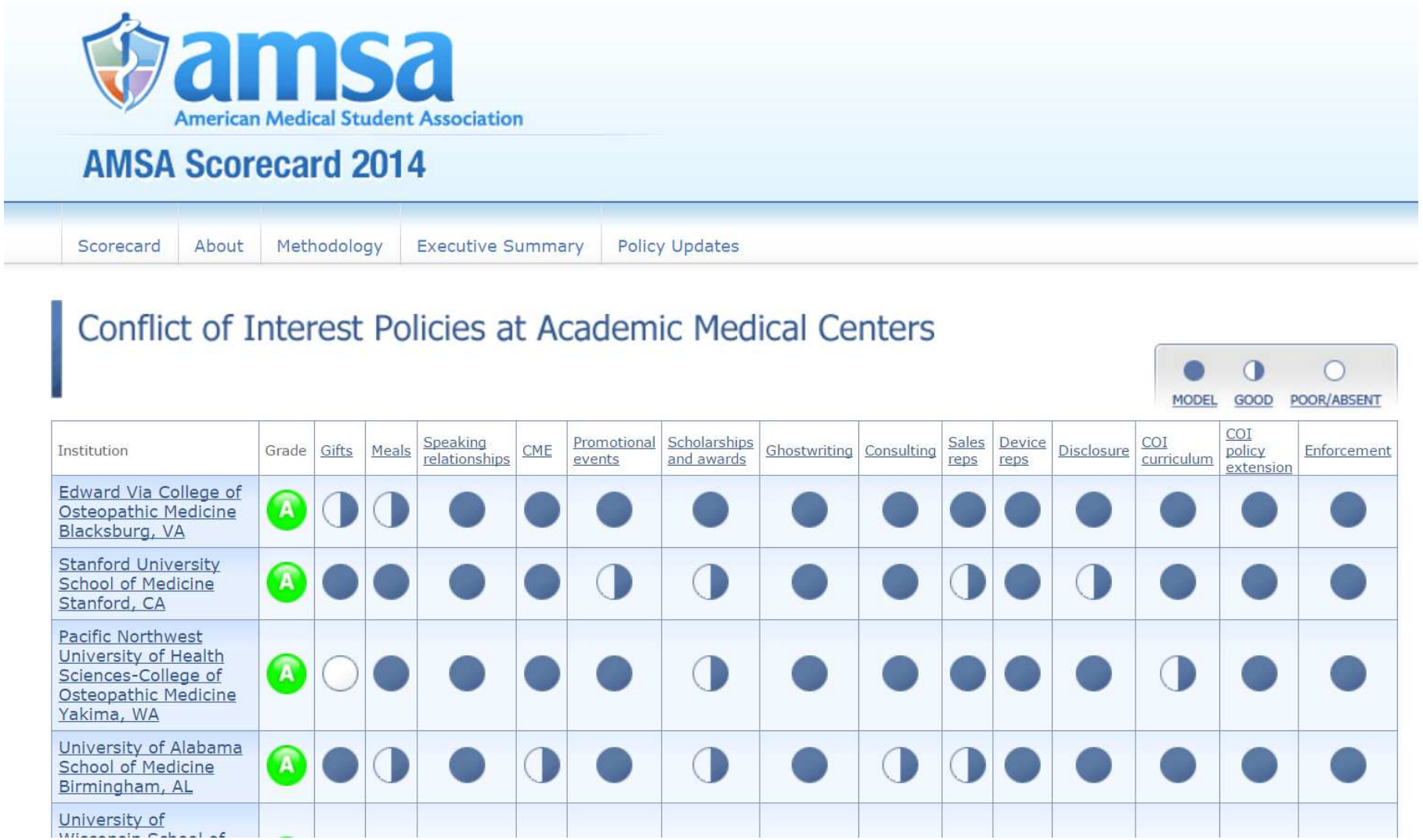
- Problem: Industry influence has become a social norm in healthcare
- Healthcare professionals must abide by high level of ethical conduct
- Importance of disassociating from situations where private interests can affect clinical judgements

Rational use of medicines requires:

- Understanding of commercial biases
- Ability to recognise and take account of the effects of misleading promotional material and activities
- Seek independent, high-quality clinical information

No Thank You pledge

Institutional/organisational change



Institution	Grade	Gifts	Meals	Speaking relationships	CME	Promotional events	Scholarships and awards	Ghostwriting	Consulting	Sales reps	Device reps	Disclosure	COI curriculum	COI policy extension	Enforcement
Edward Via College of Osteopathic Medicine Blacksburg, VA	A	◑	◑	●	●	●	●	●	●	●	●	●	●	●	●
Stanford University School of Medicine Stanford, CA	A	●	●	●	●	◑	◑	●	●	◑	●	◑	●	●	●
Pacific Northwest University of Health Sciences-College of Osteopathic Medicine Yakima, WA	A	○	●	●	●	●	◑	●	●	●	●	●	◑	●	●
University of Alabama School of Medicine Birmingham, AL	A	●	◑	●	◑	●	◑	●	◑	◑	●	●	●	●	●
University of															

Outlook

Excerpts from *Rev Prescrire* January 2016; 36 (387): 58-64

Student action reduces industry influence in US medical schools

Abstract

- Relationships with drug companies influence the practices of medical students and healthcare professionals.
- To ensure that medical education remains patient-focused, the American Medical Student Association (AMSA) is calling for medical schools to establish stringent rules governing their relationships with industry.
- Since 2007, AMSA has been rating medical schools according to the rules they have established to minimise conflicts of interest.
- The score is based on a list of 14 criteria designed to prevent conflicts of interest, and it is used each year to rate American medical schools.
- The 2014 AMSA scorecard showed that more than two-thirds of US medical schools had established excellent or robust rules governing students' relationships with industry. Their number is growing from year to year, as reflected by the steady increase in the number of schools that ban pharmaceutical reps from visiting students.
- In 2014, AMSA also began to score teaching hospitals, and found that two-thirds of them had implemented robust rules for avoiding conflicts of interest among their students.
- The AMSA scorecard is backed up by actions intended to promote student awareness of conflicts of interest and presentations, and education on conflicts of interest.

Criteria used by the American Medical Student Association to rate medical schools and teaching hospitals in 2014

AMSA uses various criteria to judge exposure to industry influence. In 2014, the criteria were scored from 1 to 3. A score of 3 corresponds to a "model policy" based on rules that are effective for avoiding or limiting industry influence. A score of 2 ("good progress toward model policy") corresponds to more limited rules with inadequate enforcement. A score of 1 indicates the total absence of rules.

Criteria applying to medical schools

Further Information

www.haiweb.org
www.politicsofmedicines.org

@HAIMedicines

HAIMedicines

Health Action International

Independent Sources of Information

Cochrane: www.cochrane.org

Community Catalyst: www.communitycatalyst.org/initiatives-and-issues/initiatives/prescription-reform/conflict-of-interest-policy-guide

Drug and Therapeutics Bulletin (DTB): dtb.bmj.com

Geneesmiddelenbulletin: geneesmiddelenbulletin.com

International Society of Drug Bulletins (ISDB): www.isdbweb.org

Healthy Skepticism: www.healthyskepticism.org/global

No Free Lunch: www.nofreelunch.org

No Gracias: www.nogracias.eu

Independent Sources of Information

PharmAware: www.pharmaware.co.uk

PharmedOut: www.pharmedout.org

Prescribers' Letter: prescribersletter.therapeuticresearch.com

Prescrire: www.english.prescrire.org

RxIsk: www.rxisk.org

Therapeutics Letter: www.ti.ubc.ca/TherapeuticsLetter

The Medical Letter: secure.medicalletter.org/

Universities Allied for Essential Medicines: uaem.org

Worst Pills, Best Pills: www.worstpills.org

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