

Pharmalyzer: Are you prescribing under the influence?

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Continuing Medical Education

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Target Audience: This educational activity is intended for Primary Care Physicians and Specialists.
Purpose & Content: This program will provide an overview of how pharmaceutical marketing practices affect prescribers and influence medical decision-making.

Educational Objectives: Upon completion of this activity, participants should be able to:
1. Identify at least three methods used by drug reps to influence prescriptions
2. Recognize three techniques, besides advertising, that are used to market pharmaceuticals
3. Recognize the ways in which industry supported CME programs may potentially work as advertising
4. Discuss the purpose of samples from industry's point of view.

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FINANCIAL RELATIONSHIP DISCLOSURE

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Program Objectives

This program will provide an overview of how pharmaceutical marketing practices affect prescribers and influence medical decision-making.

- After you finish the program, you will be able to:
- Identify at least three methods used by drug reps to influence prescriptions.
- Recognize three techniques, besides advertising, that are used to market pharmaceuticals.
- Recognize the ways in which industry-supported CME programs may potentially work as advertising.
- Discuss the purpose of samples from industry's point of view.

Introduction

Pharmaceutical companies attempt to influence our knowledge of drugs and our prescribing behavior through many channels, including personal relationships, publications, meetings, and events. This course is designed to assess how marketing affects your own beliefs about drugs and to increase your awareness of pharmaceutical promotional techniques.

Instructions

In order to receive CME credit, you must view the whole slideshow and choose (or write in) an answer to every question. Part 1 (Advertising and Promotion) is self-assessed. Parts 2-5 contain 32 questions. For most questions, any answer is acceptable (if you don't know the answer to a free response question, it is fine to write "I don't know.") You must provide correct answers to the nine questions marked "CME" interspersed through Parts 2-5. You will be provided multiple tries.

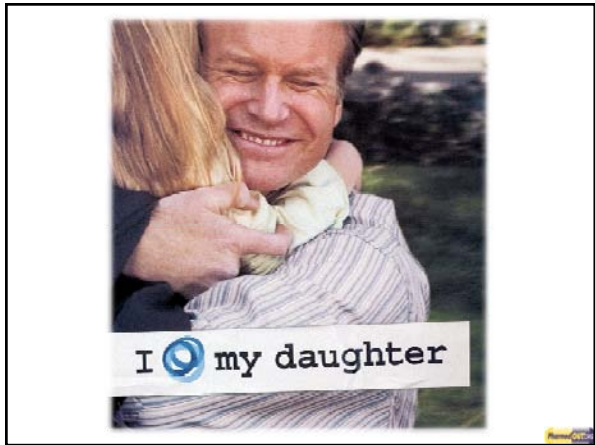
Part 1: Advertising and Promotion

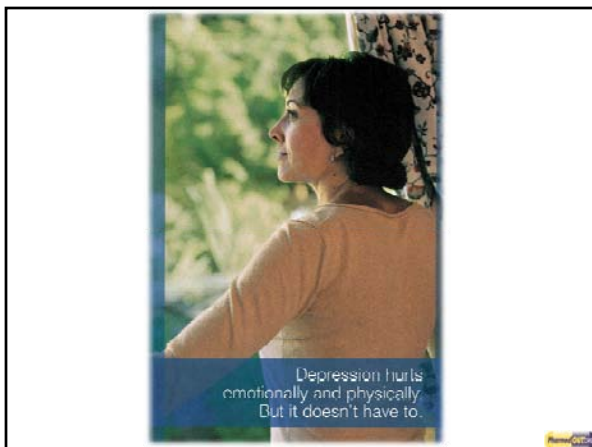
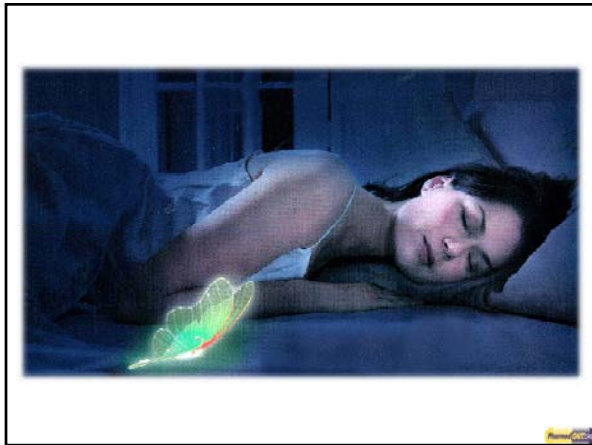
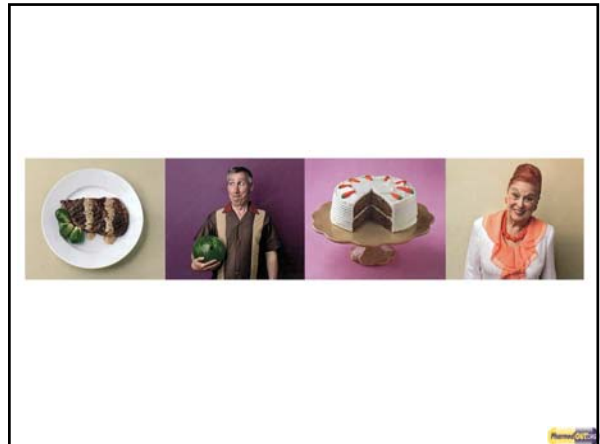
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1. How much is your prescribing behavior influenced by pharmaceutical marketing?
- A. A lot
 - B. Moderately
 - C. A little
 - D. Not at all
 - E. I'm not sure

2. Do you know which drugs the following 8 images refer to?
(You will not be required to type in a response for this section.)

Nielsen IAG, 2007





Did you get more names right than you thought you would?

We all think that we are not affected by advertising, but most of us can correctly associate images, logos, and taglines with the products advertised. The fact that we can name the products means that the ads have served their purpose.

Ads in consumer and medical literature are meant to keep specific drug names uppermost in our minds when we reach for our pens and prescription pads.

3. What is the first drug therapy that comes to mind in the following categories?

- A. GERD
- B. Erectile Dysfunction
- C. Excessive Sleepiness
- D. Restless Legs Syndrome
- E. Overactive Bladder Syndrome
- F. Social Anxiety Disorder
- G. Osteopenia

We associate these conditions with a specific drug because the companies that make each of these drugs invented or renamed the condition. In marketing, this is called disease branding. GERD, for example, used to be called heartburn, and Social Anxiety Disorder used to be called shyness. Neither was deserving of prescription drug treatment until a company branded the condition after developing a drug to treat it.

Part 2: Drugs

4. Provide the generic names of the following top-selling drugs:

- A. Lipitor
- B. Nexium
- C. Advair
- D. Plavix
- E. Seroquel
- F. Singulair
- G. Enbrel
- H. Prevacid
- I. Aranesp
- J. Epogen

IMS Health, 2008

If you can remember only the brand, not the generic name, of drugs, then you are being affected by promotion. Sure, brand names are easier to remember. That's not a coincidence. Much money is spent on creating memorable brand names; some firms specialize in naming drugs.

Generic names are negotiated between drug companies and the United States Adopted Names Council, which must approve the generic names. Pharmaceutical companies prefer generic names that are difficult to remember, pronounce, and spell to encourage the use of the brand name.

5. List two generically available alternatives to the following drugs:

- A. Lipitor (atorvastatin)
- B. Bystolic (nebivolol)
- C. Lexapro (escitalopram)

Originator or first-in-class drugs are novel drugs. "Me-too" drugs are similar, related drugs, usually made by a competing company. For example, fluoxetine (Prozac), lovastatin (Mevacor) and sildenafil (Viagra) were first-in-class drugs.

6. In terms of safety, me-too drugs may be:
- A. Improvements on first-in-class drugs
 - B. Worse than first-in-class drugs
 - C. Similar to first-in-class drugs
 - D. All of the above

- Marketing may exaggerate differences within classes of drugs. Occasionally, a me-too drug does have an advantage over an originator drug. For example, fexofenadine (Allegra) had fewer cardiac side effects than the originator drug, terfenadine (Seldane).
- Claimed advantages for many me-too drugs, however, do not translate to clinical benefits. Beware of claims that a drug improves a clinically trivial endpoint.

A me-too drug could amplify risks rather than benefits. Baycol (cerivastatin), for example, a very potent statin that had no patient-oriented outcome data, was withdrawn from the market because of a disproportionate number of cases of rhabdomyolysis. Mibefradil (Posicor), a calcium channel blocker, was withdrawn from the market because of increased risk of drug interactions.

Carpenter D, 2008

7. Provide an example of a misleading marketing message used to distinguish a me-too drug from a first-in-class drug.

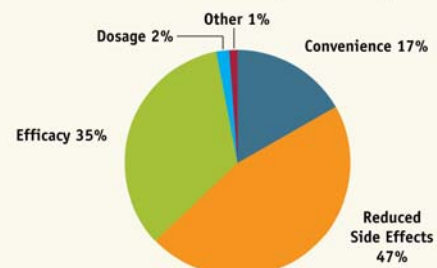
Typical marketing messages for a me-too drug include:

- Increased potency
- Faster onset of action
- Longer duration of effect
- Fewer unwanted effects
- Decreased risk for drug interactions
- Improved receptor selectivity

A marketing message for a first-in-class drug might stress its longer history and larger body of research.

FIG. 2
WHAT MESSAGES INFLUENCE NEW THERAPY STARTS?

% Increase in New Patients Due to Specific Messages Delivered



Gascoigne D, 2007

- Increased potency or longer duration of effect may be unnecessary, and may increase the risk of adverse events. Less potent drugs provide more flexibility in dosing options.
- A faster onset of action in a chronically used drug would only affect the first dose.
- Don't trust claims of increased safety with new drugs. It takes time for unwanted effects to be discovered and reported. Pre-market studies can't pick up long-term adverse effects, drug interactions, or effects that occur only in elders, diabetics or other subpopulations.

- A small difference in side effect incidence does not mean your patient will get side effects on an older drug or escape side effects on a newer drug. Comparing lists of side effects is less predictive of tolerance than looking at pooled dropout rates from trials.
- Don't believe a good molecular story; improved receptor selectivity or a new mechanism may or may not make a clinically relevant difference.
- Require adequate controlled studies with patient-oriented endpoints in populations similar to those that you will be treating. Does the treatment result in the patient living longer or better?

CME

8. Which of the following statements about endpoints in clinical trials is correct?
- Primary endpoints include heart attacks, strokes, fractures or deaths. Surrogate (or intermediate) endpoints include decreased blood pressure, decreased glucose, increased bone density or tumor shrinkage.
 - Primary endpoints include decreased blood pressure, decreased glucose, increased bone density or tumor shrinkage. Surrogate (or intermediate) endpoints include heart attacks, strokes, fractures or deaths.

A drug may effectively decrease a secondary (or surrogate) endpoint such as cholesterol, blood pressure, or glucose without affecting a primary endpoint of heart attack, stroke, or renal failure.

The Generation Game

- Designating groups of drugs a new "generation" — for example, atypical antipsychotics, non-sedating antihistamines, or new oral contraceptives — makes prescribers feel out of date for using older drugs.
- There is little basis in terms of improved therapeutic response or side effects for most "next-generation" products.

9. Name two generic monophasic birth control pills.

Aetna Pharmacy Clin.
Policy Bulletins, 2006

10. Which of the following can be used to extend the patent life of a drug?

- A. Delayed-release preparations
- B. Changes in dose
- C. Testing a drug in children
- D. A and B
- E. All of the above

- Drug manufacturers often extend patent life by reformulating drugs into delayed-release preparations. Before an immediate-release drug becomes available generically, the brand-name manufacturer may release (sometimes sequentially) Controlled-release (CR), Sustained-release (SR), Extended-release (XL), Long-acting (LA), or Weekly forms. Delayed-release forms may be more convenient; however, you should discuss with the patient whether the increased cost is worth it.
- New patents may be granted for minor changes in dosing. For example, Yaz (ethinyl estradiol 20 mcg /drospirenone 3 mg) is a minor dosage variation of Yasmin (ethinyl estradiol 30 mcg /drospirenone 3 mg).
- Testing a drug in children results in a six-month patent extension, whether or not the drug is even useful for children in the first place.

LCM = lifecycle management

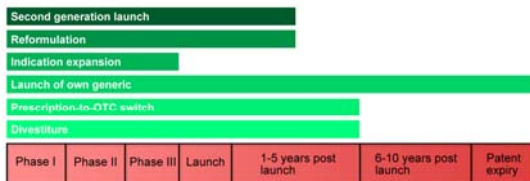


Figure 1: Timing consideration for LCM strategies

Kvesic DZ, 2008

11. New patents are also granted for fixed-dose combinations.

What are the two generically available drugs in these patent-extending combinations?

- A. Lotrel
- B. Bidil
- C. Fosamax Plus D

- Fixed-dose combinations are often far more expensive than their components, and provide less flexibility in dosing options.
- Fosamax plus D is patent-protected and costs about six times as much as generic alendronate. Bisphosphonates must be taken with calcium (all clinical trials tested the combination). Calcium supplements are often formulated with vitamin D, but calcium cannot be formulated with bisphosphonates. Because patients still need to take additional calcium with Fosamax plus D, the total tablet burden remains the same.

“Next Generation” Products: Enantiomers

- Many drugs are a racemic mixture, containing equal parts of two enantiomers that are mirror images of each other—‘left-handed’ (‘levo’ or ‘-s-’) and ‘right-handed’ (‘dextro’ or ‘-r-’) forms.
- Receptors may only accept one enantiomer, in the same way that a left-handed glove will only fit the left hand. So, within a racemic mixture, half of the drug molecules are active and half are inactive.
- Some drugs, including paroxetine (Paxil), and sertraline (Zoloft) entered the market as single enantiomers. However, it has become common practice for a company to first introduce a racemic mixture and then, when the patent is close to running out, release the active enantiomer as a ‘new, improved’ product. Ask yourself why the racemic mixture was marketed first when it was technically possible to market the active enantiomer.

12. Can you name a drug released first as a racemic mixture and then as a single isomer?

There is no strong scientific support for the superiority of these isolated enantiomers. For example, both S- and R-omeprazole are pro-drugs, which are converted in parietal cells to the active drug. Although equally well absorbed, S-omeprazole is less susceptible to intestinal and hepatic metabolism than omeprazole, so equal doses will result in 70-90% higher serum concentrations with esomeprazole. However, increasing the dose of omeprazole has an identical clinical effect. No trials have demonstrated a therapeutic advantage of esomeprazole over omeprazole — or any other PPI — when used at equivalent therapeutic doses.

- For escitalopram (Lexapro), the S-isomer is responsible for almost all serotonin reuptake inhibition. However, there is no compelling evidence to support claims that escitalopram is more effective or has a faster onset of action than citalopram, and side effects are similar.
- Adderall combines the α -isomer dextroamphetamine (Dexedrine) with the β -isomer, which is less potent. The half-life of α -amphetamine is 10-11 hours, so there is no need for the XR formulation, which delivers half of the dose initially, and the remainder 4 hours post-ingestion. A full day's effectiveness can be ensured by delivering an adequate morning dose of generic dextroamphetamine or Adderall.

Other “Next Generation” Products

Another tactic used when a drug is going off-patent is to release a metabolite, prodrug, or an analog (structurally similar molecule) of the originator drug.

13. Can you name a drug that is a metabolite or an analog of an originator drug?

- Although there are exceptions, many metabolites, analogs, and prodrugs have no advantage over the originator drug. For example, no studies have compared loratadine (Claritin) with its main metabolite, desloratidine (Clarinex), and there is no evidence that desloratidine is superior.
- Pregabalin (Lyrica) is structurally and pharmacologically related to gabapentin; both are marketed by Pfizer. No published trials have compared pregabalin with gabapentin (Neurontin). No evidence supports the use of pregabalin instead of generic gabapentin.

Lisdexamphetamine (Vyvanse), dextroamphetamine linked to a lysine molecule, is almost immediately cleaved to its components upon ingestion. Peak levels of dextroamphetamine may be reached earlier than other formulations, but there is no advantage to this. Earlier peak levels could theoretically increase rates of adverse effects.

The Rename Game

14. A new indication can extend the patent life of a drug. Some drugs are renamed when they are approved for new indications.

Provide the two brand names for:

- A. Sildenafil
- B. Fluoxetine
- C. Zoledronic acid
- D. Finasteride
- E. Bupropion

Brand F's Counter-Generics Strategy

Counter-Generics Strategy and Investment Investment: \$32.4 million



Combating Generics 2008, Cutting Edge Information, 2007

Strategy Outcome



Generics delayed: 24 months
Delay worth: \$150 million

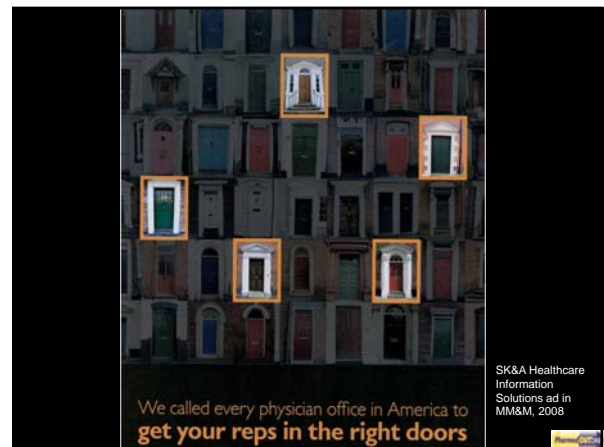
CME

15. Can a pharmacist fill a prescription written for Sarafem (fluoxetine 20 mg) with generic fluoxetine 20 mg?

- A. Yes
- B. No

- Fluoxetine 20 mg can be substituted for Prozac but not Sarafem because the indications for which the drugs were approved are different.
- Although they are the same drug in the same dose, Prozac 20 mg cannot be substituted for Sarafem. Yet another reason to write generic names on prescriptions!

Detailing



16. How do you feel about seeing drug reps?

- A. I don't really have time to see drug reps, but it would be rude to refuse.
- B. I don't mind seeing reps. It's part of the job and I need to learn about new drugs.
- C. I need to see reps to get samples for my patients.
- D. I like seeing drug reps. They're such nice people!
- E. I see drug reps as a way of breaking up the day.
- F. I don't let drug reps into the office.

A. I don't really have time to see drug reps, but it would be rude to refuse.

Physicians, advanced practice nurses, and physician assistants are busy. Really busy. It is a constant struggle to see patients, keep up with charting, return phone calls, and manage the practice. On top of that, we hope to keep up with our continuing education and to have time for family, friends, and for ourselves. So why do we feel guilty about turning down another demand on our time? Courtesy does not require us to see salespeople.

B. I don't mind seeing reps. It's part of the job.

Our job is taking care of patients. How is seeing drug reps part of the job of taking care of patients? Drug reps are charged with increasing the number of prescriptions written for their company's products. Reps are often given biased information to distribute that will make you think favorably about their drugs. If you would write a prescription for a drug because it is in a patient's best interest to do so, you would write it whether or not the rep came to see you, wouldn't you? If you wouldn't otherwise find writing the drug to be in a patient's best interest, why would the drug rep visit suddenly make it in the patient's best interest?

C. I need to see reps to get samples for my patients.

In the long run, sampling increases medication costs for everyone. A patient who is started on samples is likely to be continued on that medication long after the sampling program stops.

It makes more sense to avoid sampling and to prescribe inexpensive generic medications. Sampling is not only bad for patients, it is bad for doctors. The FDA requires that samples be inventoried. If you sample, you or your staff must log medications in and out, and must keep a record of lot numbers, expiration dates, and to whom the medication was dispensed.

C. (continued)

Finally, samples are given out for the newest drugs, which may have serious but unexpected side effects. If a patient needs an expensive brand-name drug and cannot afford it, he or she can apply to the pharmaceutical company for assistance. Sampling is just a loser for everyone—except the drug companies that gain the benefits of extra prescriptions when the samples run out.

D. I like seeing drug reps. They're such nice people!

Drug reps are paid to be nice to doctors. They are selected for their good looks and warm personalities. They want you to feel warm and fuzzy about them, because that warm and fuzzy feeling will extend to their products.

Here's an experiment you can do: think of a colleague who is unpleasant. Then ask that colleague how he or she is treated by any given drug rep. Chances are, your colleague will rave about what a nice, friendly person the drug rep is. That's because drug reps are friendly to everyone who is important. It's their job!

E. *I see drug reps as a way of breaking up the day.*

Seeing patients all day is hard. They have problems, sometimes difficult ones, and you have to try and come up with answers. Some patients have very difficult personalities. Drug reps provide a welcome break in the day.

Trained to be nice to doctors, reps don't tell you their problems, and all you have to do is sit back and listen.

But teachers and other professionals have demanding jobs and don't have the benefit of breaking up their day with visits from pleasant attractive people. Why should doctors be privileged?

F. *I don't let drug reps into the office.*

Congratulations! Barring drug reps from your office is the best way to avoid being influenced.

Receiving drug reps may benefit one's ego and the sales rep's bottom line, but it won't benefit the welfare of patients.

17. Drug reps

A. Provide an important service by delivering educational messages about new drugs.

B. Are salespeople who deliver specific marketing messages about their products.

- Reps do not usually provide objective information because they don't have objective information to provide. Reps are trained to tout the benefits of the most expensive, newest drugs, and to minimize side effect profiles.
- All materials they give you are company-approved, including medical journal articles favorable to the product they are promoting. Companies may provide reps with other material—for example, studies of competing drugs that make the rep's drug look bad—that they are forbidden to share with prescribers.
- Reps may sincerely believe that their products are superior, but what they know is carefully selected by their employers.

Elliott C, 2006
Fugh-Berman A, 2007

- Now that pharmaceutical companies have initiated a voluntary ban on branded pens, pads, and mugs, prescribers can expect to receive more textbooks, patient models, and other 'educational' presents as well as invitations for paid speaking, consulting, and research opportunities. All of these efforts are designed to reinforce specific marketing messages.
- Drug reps are friendly, but they are not necessarily your friends. Reps are trained to collect personal information about prescribers they visit, including the names of family members, your hobbies, and how you like your coffee. This information may be shared with others or stored on a computer, and it's all used to enhance the relationship with you in order to increase sales of targeted drugs.

18. You can avoid being affected by marketing messages from drug reps by:

- A. Listening critically and arguing when you disagree.
- B. Instructing the reps to provide only studies, not the marketing pitches.
- C. Listening to the reps but not changing what you prescribe.
- D. Not meeting with reps but allowing your staff to interact with them.
- E. Not allowing drug reps into the office.
- F. Being as rude as possible to the reps.

A. Listening critically and arguing when you disagree

Salespeople love objections; they keep you talking. Reps are trained to use psychological techniques to get you to talk yourself into a more favorable impression of a drug. An article in *Pharmaceutical Representative* notes:

"...Objections are really opportunities to move the sales call beyond what the physician sees as a barrier. They are the foundation upon which you build a sale, because they give you insight into the needs and concerns of others."

A. (continued)

Here's how reps are taught to handle objections:

- Reduce tension by acknowledging the objection
- Clarify the question
- Respond with a reference
- Commit to an agreement

OBJECTION: EFFICACY CONCERNS

Physician: "Your product doesn't work."

Rep: (Acknowledge) "Doctor, I appreciate you sharing your view on the efficacy of Drug X."

Rep: (Clarify) "To better understand your question, does the lack of efficacy pertain to something you've read about Drug X or something you've experienced in your practice?"

Physician: "It was an article I read in *The Journal of the American Medical Association*. My personal experience has been pretty good."

Rep: (Respond with a reference) "Thank you for clarifying. That article pertained to a different patient profile than the patients you are treating and also used lower doses."

Rep: (Commit to an agreement) "Doctor, based on your personal success in prescribing Drug X, would you commit to continue prescribing Drug X at dose YY?"

Kuchna J, 2006

B. Instructing the reps to provide only studies, not the marketing pitches.

All studies distributed by reps are pre-approved by their companies. Industry-approved reprints may be ghostwritten or commissioned for pay, and do not provide an objective, head-to-head comparison of therapies.

Relying on reps for information about drugs ensures that the information you receive is favorable, but not necessarily reliable.

Fugh-Berman A, 2008

C. Listening to the reps but not changing what you prescribe

Reps concentrate their efforts on prescribers who control market share, either through prescribing or through influence. You may be prescribing more of a targeted drug than you think.

The reps know exactly how much you are prescribing of their drug and competing drugs because they have access to prescription tracking data. If they are really having no influence on you, they will stop coming.

C. (continued)

Even if you never prescribe a targeted drug, industry representatives will court you if you're a teacher, researcher, or affect drug purchasing decisions. Have you ever said — or thought — "I never prescribe their drug, but they listen to what I have to say?"

A relationship — even if antagonistic — provides regular opportunities to mitigate your concerns. As an industry article notes: "Nothing is more flattering than attention...Opinion leaders who do not embrace a therapy's clinical premise present an opportunity for more ongoing communication to minimize objections and to bring them closer to adoption..."; "Leaders outside of the circle need more attention and information to bring them to a clearer understanding of the product."

Anderson A, 2002
Kuchna J, 2006

D. Not meeting with reps but allowing your staff to interact with them

Detailing staff is as good as or better than detailing you. Reps provide food or gifts to nurses and receptionists of 'no-see' or 'hard-to-see' prescribers in order to learn more about your personality and habits.

Reps try to make the staff their agents, either to get in to see the prescriber, or (even better) to convey marketing messages through the staff. Reps may also leave 'patient information' material in the waiting room.

E. Not allowing drug reps into the office

Correct.

F. Being as rude as possible to the reps

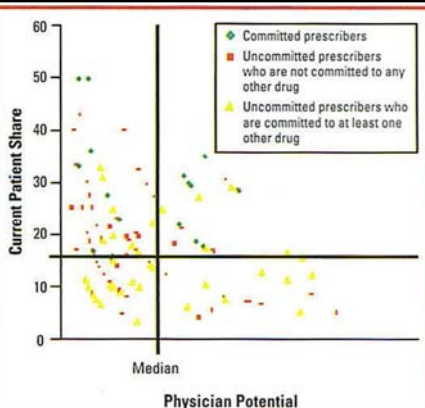
Being mean to the rep is not the best way to alleviate anger toward the industry. Reps are just doing their jobs. It is appropriate to explain a policy—for example, that you don't see reps—and just leave it at that. If a rep gets pushy, then say something. But if you are using the reps to get samples and ask for info then you shouldn't be rude. If you choose to see reps, you should also choose to be decent.

How Drug Reps See Us

Pharmaceutical companies group prescribers into categories based on our personalities, prescribing behavior and our willingness to prescribe new drugs.

Reps may classify us by whether we are most motivated by intellect, social harmony, ego/importance, or friendship. Your choice of drugs for a specific condition may mark you as "...the spreader' who uses a little bit of everybody's product..." "a 'loyalist', who's very loyal to one particular product and uses it for most patient types." Or "a 'niche' physician, who reserves our product only for a very narrowly defined patient type."

Hradecky G, 2004



Kay J, 2006

Figure 1. Patient share, physician potential and strength of commitment.

Type Yourself

19. Which category would a drug rep put you into?

- A. "Innovators" are physicians with a "high tolerance for risk", who are the first to prescribe the newest drugs
- B. "Early adopters" or "opinion leaders" are the next wave; physicians who adopt new drugs quickly
- C. "Early majority" physicians are "risk averse"; these physicians will "...look for support among opinion leaders before they make adoption decisions"
- D. "Late majority" physicians wait to adopt a therapy "only after the early majority has integrated new products into normal practice"
- E. "Resistors" are relatively immune to promotion; they "will stalwartly resist any change to their practice"

Type Yourself

19. Which category would a drug rep put you into?

- 3% of physicians are considered “Innovators”
- 14% are “Early adopters” or “opinion leaders”
- 34% are “Early majority” physicians
- 4% are “Late majority”
- 15% are “Resistors”

Anderson A, 2002

How well do you track spending on Healthcare Professionals?



Concur ad in Pharmaceutical Executive, 2007

Understanding where you stand when it comes to reps is an important part of assessing your relationship with the pharmaceutical industry. Always recognize that you are a customer and that the number of prescriptions you write is directly related to the amount of money a rep stands to make.

Companies track prescriptions and rank prescribers from 1 to 10 based on the percentile of prescribing that you do for a specific disease state and for each drug within that disease state. So you could be, for example, a 10 for ED drugs, a 4 for Viagra, and a 10 for Cialis. The decile is based on prescribing volume and is assigned to each prescriber, not each practice.

Fugh-Berman A, 2008 Greene JA, 2007 Steinbrook R, 2006

20. What's Your Decile?

For a rough idea of your decile, choose the statement below that most closely applies to you.

- A. Drug reps never (or rarely) visit me.
- B. My drug reps visit me every month or two and drop off samples. Reps never (or only occasionally) bring lunch to my office. I regularly get invitations to sponsored CME programs and lectures.
- C. My drug reps visit me regularly, and often bring lunch to my office. Reps sometimes (or often) take me out to dinner.
- D. My drug reps visit me regularly, often provide lunch to my office, and often invite me out to dinner. I am invited to speak to colleagues, and am invited to consult for the company, and/or to sit on an advisory board or join a speaker's bureau.

Fugh-Berman A, 2008 Greene JA, 2007 Steinbrook R, 2006

A. Either you refuse to see drug reps
or

you are in **Decile 0-2**

You are a low-volume prescriber. More than 80% of other prescribers write more prescriptions for the targeted drug than you do.

You are insignificant to a rep's business. Managers don't like reps to spend much time with you because a win isn't that important.

B. Decile 3-5

You prescribe enough of the targeted drug that reps know your face — but you may not know theirs. More than half of other prescribers write more prescriptions of the targeted drug than you do.

Reps may deliver samples and gifts to your office, but will not make a concerted effort to have long conversations with you. Maybe they'll provide lunches, especially if there are many high-volume prescription writers in your area.

You will receive regular invitations to sponsored CME programs and lectures. Dinners will be a rarity. (However, if you write a lot of prescriptions in a specific category but few for any specific drug within that category, then you can expect to get a lot of attention, including dinner invitations, from competing product representatives trying to change your mind).

C. Decile 6-8

You prescribe more of the targeted drug than 60-80% of other prescribers, so you will get significant attention.

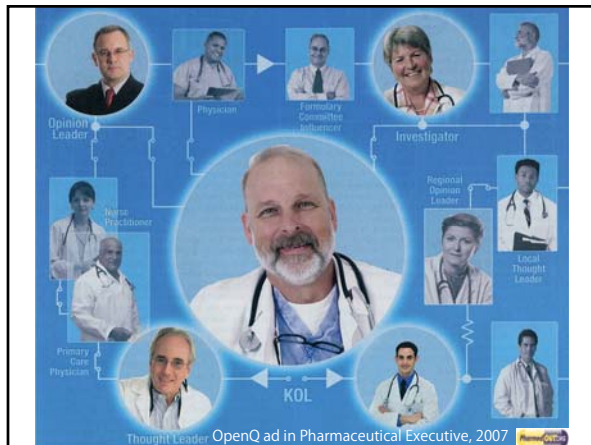
Rep visits will be routine, and likely scheduled. Lunch and breakfast options will be open to you and your staff. Dinners are probable. The relationship will be familiar. You will probably know the rep by name and will know which product the rep sells.

D. Either you are a specialist, teacher, or researcher or you are in Decile 9-10

You are a "high-decile" prescriber, prescribing more than 90% of your colleagues. The relationship between you and the rep is very close. Visits are routine. The rep can spot you down a crowded hospital hallway at 50 paces, recognizes your car, and knows where you typically park.

Reps will definitely approach you to be a "thought leader," asking you to speak about the product to other doctors. This is very flattering and increases access to your time and office.

Getting paid to speak to a small group of colleagues enhances your loyalty and encourages you to increase the number of prescriptions you write for a broader category of patients. Dinners are a must ("tell me when you're free, and I'll book the reservations.") Lectures at exotic locations, consultancies, and other paid opportunities are offered to you first.



21. The intensity of rep-prescriber interactions varies according to your ability to impact sales. Other factors besides prescribing have an effect. A few influential prescribers can have a large impact on whether a new product fails or succeeds.

Indicate any of the following that apply to you:

- A. I am a specialist.
- B. I am a teacher.
- C. I am a researcher.
- D. I prefer new drugs.
- E. I avoid new drugs.
- F. I prescribe mainly generic drugs.
- G. I don't see drug reps.

A. I am a specialist.

You're considered a key influencer on colleagues in the area. Drug reps will test your loyalty to their product and then consider your ability to put forth a convincing argument. If you pass muster, they will invite you to speak about their drugs to primary care providers in your community.

If your opinion changes, they are under no obligation to maintain your services. You're only useful as long as your opinion matches their marketing message and you remain persuasive to your fellow doctors.

A rep may also drop a specialist's name with other prescribers. For example, "Dr. Big Shot at Renowned University is using Panacebo...Didn't you guys go to school together? You should call him and see if he can answer any questions that you have."

B. I am a teacher.

If you teach at an academic institution, your voice carries extra weight and a greater sense of objectivity. Drug reps will take the opportunity to relay your opinions, specifically selecting those that favor their medication.

Also, a common tactic that drug reps employ is to come in with a journal article they are trained in and feign ignorance in order to ask you to 'educate' them. This provides reps an opportunity for face time with you, while you analyze a paper that frames their drug in a favorable light. They will never ask you to do this with a journal article that favors a competing drug.

If a rep can get you to talk to students or colleagues about a product, then they are able to put their message into fresh minds. A rep might offer to sponsor Grand Rounds or a luncheon for all of the hungry, tired, poor, grateful students.

C. I am a researcher.

Your status is similar to teachers and specialists with the added bonus that research funding can be used to leverage you to a more favorable view of the funder's drug.

Also, reps will use this tactic with researchers— "Doc, I have been getting questions about XYZ study but I'm not really sure how to explain it. Can you talk to me about what the outcomes were and how to get other docs to understand why that is so important?"

D. I prefer new drugs.

Prescribers who prefer new drugs are good for reps with a new product, but these prescribers may get bored easily, and are at risk for switching products. Reps will have to continually give them information about new studies and make them believe that they are getting the newest—or special—information.

As an 'early adopter', your prescriptions may help catalyze change in your colleagues' prescribing patterns. If you share a positive experience with a drug rep involving their new drug (regardless of how you feel overall about this drug), the rep will use your story to encourage other colleagues to prescribe. Any negative experiences you've had with their drug won't be shared. Drug reps visit, on average, nine prescribers a day, so anecdotal positive experiences will metastasize through your medical community, transforming an unusual positive outcome into the expected response, and expediting the drug's acceptance for common use.

E. I avoid new drugs.

Reps don't love these prescribers, but if you have been a good customer for a long time, you will be well taken care of with lunches and other perks.

While you may not be a favorite, some reps may approach you with an eye towards making you comfortable with their new drug. It may be by providing you with journal articles or the latest in-house data; or through dinner with colleagues who are already "on-board" with the drug; or through lectures and CME programs. Whatever the method, the rep sees your caution as an obstacle to be overcome and will seek out your specific objections so as to select the right marketing tool to sway you.

F. I prescribe mainly generic drugs.

Your drug rep will not be happy if you prescribe mostly generics and won't spend much time with you.

They may attempt to sway your judgment by showing you questionable data that suggest their products are more effective than generics in the same therapeutic class; however, you'll rarely see any genuine head-to-head comparisons. Be careful of those inaccurate comparisons—they are intentional.

The rep may also suggest that brand name drugs are more economical long-term, because of purportedly better effectiveness. An industry-sponsored article may be used to "prove" this argument. Such claims are controversial at best.

G. I don't see drug reps.

Reps don't love these prescribers. However, if you are on a rep call list as a high-volume prescription writer, reps might leave samples.

Reps might also try to see you socially or find out who you are friends with—but only if you prescribe enough to make it worthwhile.

22. The average income for a fully trained primary care drug rep is

- A. \$36,700
- B. \$56,700
- C. \$76,700
- D. \$96,700

- The median income (including bonuses) for a drug rep in 2008 was \$96,700. (Most reps do not have a healthcare background. Almost all have at least a bachelor's degree, but it is more likely to be in business than in biochemistry.)
- Including training and expense accounts, pharmaceutical companies spend an average of \$150,000 per annum for a primary care rep and \$330,000 for a specialty rep.

Fisher C, 2009
Niles S, 2005

Sales Strategies

Here are some strategies used by drug reps—and industry-paid health care providers—to persuade you that a new drug is superior to a less expensive older drug. How would you counter the following arguments?

23. *"The alternatives are inferior."*

23. *"The alternatives are inferior."*

Show me data from non-industry-sponsored trials comparing the expensive medication head-to-head with the alternative.

Make sure the endpoints are clinically meaningful and not just a subtle difference in lab values and that the dosing use was appropriate (so as not to compare a brand name drug at full dose with a generic at half dose.)

24. *"The improved outcome will justify the cost."*

24. *"The improved outcome will justify the cost."*

Show me outcome data from non-industry-sponsored trials. Outcome means clinically important primary end points such as death, heart attack, renal failure, or disease complications.

Don't accept differences in intermediate (surrogate) variables such as serum cholesterol or bone mineral density. Make sure outcome studies used a reasonable dose of a reasonable treatment (a better comparison than placebo.)

Fed Up? Opt Out!

The American Medical Association's Prescription Data Restriction Program (PDRP) allows docs to limit prescribing data that reps have access to. Opt out at:

<http://www.ama-assn.org/ama/pub/category/12054.html>

Meetings and Events

25. How do you feel about industry-sponsored dinner programs?

- A. I never go.
- B. I like to get together with colleagues in a non-work setting.
- C. I like the chance to advance my education in pleasant surroundings.
- D. A free meal? Are you kidding, I would jump at the chance!

A. I never go.

Good for you! You are better off having dinner with your family or friends.

B. I like to get together with colleagues in a non-work setting.

You are better off having dinner with your family or friends. Dinner programs may be an opportunity to spend time with colleagues and to hear a speaker from out of town, but you would have a better time getting together socially with people you really like. The speaker from out of town may be peddling a pseudo-educational message that will not make you any smarter after dessert than you were over cocktails.

C. I like the chance to advance my education in pleasant surroundings.

The programs presented at industry-funded dinners are commercials disguised as education. You are not going to hear a speaker who recommends against prescribing his sponsor's products—and make no mistake, the speaker has not traveled to spend an evening with you out of dedication. He or she has been well-paid by the drug company that is sponsoring the program.

A speaker who seems neutral about the pharmaceutical company's product is worth gold to a sponsor, because this speaker will seem more credible to audiences than a speaker who openly promotes a product. The neutral speaker emphasizes the disease or condition, not the targeted drug.

D. *A free meal? Are you kidding, I would jump at the chance!*

Getting something for nothing seems like a neat deal, but the meal is not free. Someone pays. And that someone is your patient.

Here are the economics: a drug company has costs such as labor, raw materials, overhead, insurance, and taxes. All the money to pay for those costs comes from the product line.

Your patients pay for their medications directly or indirectly, through their insurance premiums. There is no other source of income for drug companies. All promotional activities, such as taking prescribers to dinner, must be paid for by the purchasers of the medication.

26. Which of the following are acceptable industry-funded activities for prescribers?

- A. Accepting an \$80 textbook
- B. Accepting a steak and lobster dinner at a fine restaurant (\$80 with wine and tip)
- C. Being handed four \$20 bills in appreciation for your prescribing habits
- D. All of the above
- E. None of the above

To us, A, B, and C are the same.
You do the math.

CME

27. Which of the following are NOT FDA-regulated promotional activities?

- A. Drug rep visits
- B. Dinner talks
- C. CME talks
- D. B and C

Drug reps and any reprints or gifts they provide are regulated by the FDA. Dinner talks and "lunch and learns" are also regulated as promotion by the FDA.

CME talks and grand rounds, although often funded by industry, are not regulated by the FDA. Presentations at industry-funded CME are often laced with marketing messages.

BEHAVIOR CHANGING



Now that we have your attention, whose behavior do you want us to change?

Group DCA ad in Medical Marketing & Media, 2008

28. Pharma-sponsored CME programs

- A. Cannot be organized by doctors who receive pharma funding.
- B. Account for a minority of CME programs.
- C. Do not take place at universities.
- D. Often include discussions of less expensive alternatives to the sponsor's products.
- E. None of the above.

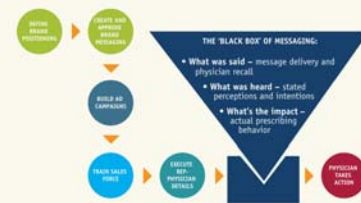
- Many CME programs are controlled by the pharmaceutical industry. In 2007, about half of the \$2.5 billion spent on CME came from pharmaceutical manufacturers. Seventy-two percent of the income from events sponsored by medical education companies is from firms that manufacture FDA-regulated products.*
- Academic medical centers are only a little better; 57% of CME income to medical schools comes from industry.*
- The new PhRMA Code of Ethics does not allow sponsors (companies that fund the event) to suggest speakers, but sponsors may indicate which topics they are interested in funding.
- The organizing board of the CME program may include speakers selected and paid by the sponsor. The desired messages about particular products or diseases may be made clear to the organizers. Organizers understand that sponsors or exhibitors may withdraw if they don't like the content.

*ACCME Annual Report Data, 2008

- Not all presentations are "message talks"; sponsored CME programs usually include camouflage talks that are not connected with the sponsor's product. Although independent speakers may give camouflage talks, organizers avoid inviting speakers who might criticize a sponsor's products or who would be expected to oppose a sponsor's marketing messages.
- Marketing messages may not be about drugs. Many sponsored talks focus on disease awareness and do not mention products at all. You won't hear about how a targeted disease may be overdiagnosed or overtreated at a sponsored talk. And rarely will you hear positive recommendations for a competitor's product, a generic product, or a non-pharmacologic therapy at a sponsored program. If sponsoring CME events did not increase product sales, drug companies wouldn't do it.

Fugh-Berman A, 2008

FIG. 1
COMPANIES NEED TO BRIDGE THE GAP BETWEEN MESSAGE DELIVERY AND PRESCRIBING BEHAVIOR
 UNDERSTANDING WHAT WAS COMMUNICATED, WHAT WAS HEARD, AND WHAT TRANSPIRED AS A RESULT ARE CRITICAL TO ACHIEVING TRUE SALES AND MARKETING EFFECTIVENESS.



Gascoigne D, 2007

29. What is your opinion of industry-funded speakers at CME programs?

- A. As long as conflicts are disclosed, they are not a problem.
- B. All speakers have conflicts. They aren't significant.
- C. If the speaker lists a conflict, what he or she says is unreliable.

A. *As long as conflicts are disclosed, they are not a problem.*

The idea that disclosure neutralizes conflicts is the basis of the policy of the Accreditation Council for Continuing Medical Education. In fact, there is no evidence that disclosure of conflicts prevents distortion of information by speakers or that audiences are critical of information they receive from conflicted speakers.

It is a paradox that audiences may regard speakers with conflicts as being more credible than speakers without conflicts. After all, an audience might reason, this speaker must be a real authority if the pharmaceutical company wants to fly him or her around the country to give talks.

Cain DM, 2005

A. (continued)

A speaker who lists multiple conflicts may be regarded as particularly qualified because multiple drug companies endorse the speaker's expertise. Or the audience may feel that since the speaker has been paid by multiple companies marketing competing products that the influence of the different companies is balanced out. It is likely, though, that the speaker is one of those particularly talented sales people who can increase the sales of drugs by promoting over-recognition of a disease, rather than by pushing one particular drug.

For example, the speaker who can move physician audiences to order bone density studies on healthy 50-year-olds will increase the diagnosis of osteopenia and increase the sales of all medications used for osteoporosis prevention—without any demonstrated benefit to patients. It's no wonder that the multiple manufacturers of bone drugs will rush to put this speaker on their payroll.

B. All speakers have conflicts. They aren't significant.

Pharmaceutical companies will only support physician-speakers whose opinions support marketing goals for the company. Some speakers are unaware of the marketing messages they are responsible for disseminating.

Persuading colleagues that a certain disease is underdiagnosed, undertreated, or more serious than commonly believed bolsters a company's marketing goals—even if drugs are never mentioned. As one marketing expert put it, "Vocalizing drug features and benefits is the role of the sales presentation, not the role of the expert presenter."

C. If the speaker lists a conflict, what he or she says is unreliable.

This attitude will keep you from being misled more often than not. There is a trap here, though. First, a good promotional speaker will mix a lot of truth into the delivery of his or her message. Second, a speaker who doesn't list conflicts may be omitting them.

Last, many truly unconflicted speakers were taught by conflicted professors in training, and have read review articles authored by conflicted researchers (or ghostwritten by industry-paid professional writers), so they still may be presenting promotional information.

Be skeptical of all pharmaceutical claims, insist on non-industry sponsored randomized clinical trials before believing that a drug works, and stay away from heavily-promoted products unless you know there are reliable scientific data supporting their use.

Samples

30. Which of the following statements is true?

- A. Overall, drug samples are good for patient care.
- B. Overall, drug samples are bad for patient care.

- Samples change our choices; when we give a sample, we always provide a prescription for the same drug. This is a powerful endorsement of the drug. The patients think we are choosing the best drug for them, but are we?
- Studies show that physicians favor the drugs in their sample closet, even when a drug is not their preferred choice for a condition.

Tsang J, 2006

- Samples are convenient, but they are always for expensive drugs, usually taken chronically, with high long-term prescription costs. Samples are also usually for new, relatively untested drugs. More than half of withdrawals and black box warnings occur within the first two years that a drug is on the market.*
- Here's another safety issue. Sampled drugs aren't usually screened against concurrent medications, increasing the risk of drug interactions that could have serious consequences for the patient (and serious liability consequences for you). All pharmacy claims systems screen for adverse drug interactions and alert the pharmacist to risks.

*Lasser KE, 2002

31. Samples are good for patient care because they provide free medication to those who can't afford it.

A. True
B. False

- While many physicians say that they give samples primarily to poor patients, the patients say differently. A study of 32,681 US residents from the 2003 Medical Expenditure Panel Survey (MEPS) found that poor and uninsured Americans were less likely than wealthy or insured Americans to receive samples.†
- Older, generically available drugs can improve adherence; patients are more likely to stick to drugs they can afford. In three-tiered plans, patients who received generics filled 12.6% more prescriptions in a year than those who received non-preferred branded drugs.‡
- Samples are one of the most important marketing tools that pharmaceutical companies have.

† Cutrona SL, 2008
‡ Shrank WH, 2006

As an industry article states:

"The basic economic premise here is you keep investing until your marginal return is zero. You keep sampling until a point of saturation, where additional samples are not going to make a physician write any more prescriptions."

Burns P, 2005

- If you do give full monthly regimens in samples, you're undermining industry's purposes. Trying to sustain patients on samples will only get you cut off from the free drugs. (However, if you control a lot of market share, your supply may continue as a favor to you.)
- Providing free samples, coupons, and instruction on how to receive free "hardship" drugs from the company are all ways that drug reps will attempt to curry favor with you. All three of these methods are dubiously effective in sustaining your patients on their medications but they are great ways to convince you that the rep is on your side.

CME

32. What percentage of insured Americans pay more for branded drugs than generic drugs?

A. One-quarter
B. Half
C. Two-thirds
D. Three-quarters

- Three-quarters of insured Americans (86% of seniors in Medicare Part D) pay more for branded drugs than generic drugs because of tiered pharmacy benefits.[†]
- In a 2005 survey, 25% of insured patients and 51% of uninsured patients said that they or a family member had cut pills, not filled a prescription, or skipped medical treatment because of cost.[‡]

[†]Kohl H, 2007

[‡]Lundy L 200

Conclusion

- The target of marketing is you, the prescriber.
- Your job is to decide what is best for your patients.
- Don't let pharmaceutical companies tell you how to do your job.



Image accompanying article by Collins, M. New PhRMA code: the impact on medical meetings. Medical Meetings, 2008.

Suggestions

- Don't see reps. It is not rude to refuse to see sales reps.
- Your job is taking care of patients, not seeing reps.
- Drugs reps want you to give them your time. You need your time for your patients and for yourself.

Suggestions

- Don't allow drug reps to see your staff. The drug rep is keeping them from doing their jobs. Your patients may see the interaction as unprofessional. Gifts to your staff can come from patients and from you, not from sales reps.
- Consider buying lunch for your staff on a regular basis. Wouldn't you rather nurture their loyalty to you and your patients rather than to the drug reps and their marketing messages?

Suggestions

- Avoid industry-sponsored events
- Get promotional junk out of your office. Industry-sponsored pamphlets, television programs, and other "educational" materials are never objective and are meant to buy your loyalty to a company or get your patients to ask you to prescribe their drugs.
- More objective patient information materials may be available from NIH, FDA, and other government agencies.
- You can print your own patient information material. Write an information sheet for your patients (...or use ours) on why you are not writing prescriptions for direct-to-consumer-advertised (DTCA) products.

Use unbiased sources of drug information

- FDA: Medwatch listserv; Drug Safety Newsletter
- Agency for Health Care Research and Quality
- National Cancer Institute, NIH
- Therapeutics Letter (Univ. British Columbia)
- Australian Prescriber (National Prescribing Service)
- National Prescribing Centre (U.K. NHS); MeReC World Health Organization (WHO)
- Consumer Reports Best Buy Drugs (Consumers Union)
- RxFacts Independent Drug Information Service
- Worst Pills, Best Pills (Public Citizen Health Research Group)
- Subscriptions: Prescrire; Prescriber's Letter; Medical Letter

PharmedOut.org

PharmedOut is an independent project run by physicians for physicians and other prescribers to empower clinicians to identify and counter inappropriate pharmaceutical promotion practices.

We provide lectures and workshops, web-based educational modules, teaching tools, resources, links to pharma-free CME, and a No Drug Reps Certificate. Patient factsheets on Generic Drugs and Direct to Consumer Promotion are available.

Our publications document pharmaceutical marketing techniques and our videos provide behind-the-scenes information through interviews with former and current industry insiders.

Contact us at <http://www.pharmedout.org> or 202-687-1191.

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References