

## Problematic Jumps in Drug Prices and What You Can Do

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What do these movies have in common: *Coma*, *The Fugitive*, *Rise of the Planet of the Apes*, *The Constant Gardener*, *Mission: Impossible II*, and *Love & Other Drugs*? Answer: All feature a pharmaceutical company as the villain. Once again, the spotlight is on these companies because of questionable practices—specifically, the high price tag that some have been attaching to medications.

The rapid increase in drug costs, with the resultant shift in costs from insurance payers to patients, has provoked public outcry against drug manufacturers. In 2013, an average of \$858 was spent on medications by every man, woman, and child in the United States; costs increased an additional 12.6% the following year.<sup>1</sup> The average, of course, does not represent the experience of most individuals. Many persons take no prescription medication, whereas some with cancer, multiple sclerosis, or autoimmune disorders incur annual medication costs of \$100,000 to \$200,000 or more.

These rising costs have a direct impact on the public's pocketbook. The Affordable Care Act (ACA) mandates some degree of prescription drug coverage. However, drug formularies vary by state, and the last few years have seen increased shifting of prescription costs to individuals. Some patients, especially those with high-deductible insurance plans, pay 100% of prescription costs until they reach their yearly out-of-pocket limit, which is capped by the ACA at \$7,150 for an individual plan.<sup>2</sup>

### Supply, Demand, and Opportunism

The biggest driver of the cost hike is, simply put, that pharmaceutical companies can charge whatever they want. Drugs cost what the market will bear. Many medications

could be a lot less expensive, but because an insurance company, the government, or a patient is willing to pay the asking price, there is no push to lower the costs.<sup>3</sup>

This is not the case in other countries that have mechanisms in place to determine what the government will pay for medications. A patient with asthma can expect to pay \$310 for a single inhaler of fluticasone/salmeterol (Advair) in the United States, whereas the same product costs \$35 in France.<sup>1</sup>

There have been several recent examples of what can only be called price gouging. The miniscule amount of epinephrine with some bits of metal and plastic that constitute Epipen, an epinephrine autoinjector, has risen in cost from \$50 to \$300 per dose over the past six years (the price has since come down in response to public outcry).<sup>4</sup> Pyrimethamine (Daraprim), which is used to treat toxoplasmosis in persons with human immunodeficiency virus infection or AIDS, increased in price overnight from \$13.50 to \$750 per dose.<sup>5</sup> There are numerous other examples of products that have been around for years suddenly increasing in price several-fold (*Table 1*).<sup>4-12</sup>

It is not that production costs suddenly became higher; many of the drugs with huge price tags are actually quite cheap to produce. The production cost of penicillin is less than the cost of the bottle that contains it. Even biologics such as monoclonal antibodies are cheap to produce (with bacteria or yeasts doing all the work) compared with their knee-buckling price tags.<sup>13</sup>

Yes, pharmaceutical companies spend a lot of money to develop a new drug. But once those costs are recouped, the income is pure profit. The few milligrams of hormone in any of the available oral contraceptives, most of which have been marketed for years, cost only pennies relative to their yearly cost of \$240 to \$600.<sup>14</sup>

Pharmaceutical companies have ingenious ways of keeping prices high and income flowing. Evergreening is the tweaking of an existing product slated for generic availability

to create a new product without a generic equivalent. Pay for delay occurs when a brand-name producer pays a generic manufacturer not to produce a generic equivalent.

### Individual vs. Societal Value?

The pharmaceutical industry holds that it is trying to recoup value inherent in its products—that in a wider view beyond a single patient, medication keeps patients out of

hospitals and contributes to their living productive lives. At a societal level, the industry says, medications are a bargain.<sup>15</sup>

The industry also claims that revenue is plowed back into research and development, allowing manufacturers to produce new products. However, critics point out that the major pharmaceutical companies spend a greater proportion of their revenue on sales and marketing (\$5.2 billion in 2015)

**Table 1. Taxonomy of Causes of Medication Price Increases**

| <i>Category/example</i>   | <i>Effect on price*</i>  |
|---|--|
| <b>Limited or no alternatives</b>   |  |
| Calcium disodium versenate for lead poisoning                                       | Increased from \$950 to \$27,000 per course of treatment, over three years <sup>6</sup>  |
| Ponatinib (Iclusig) for chronic myeloid leukemia                                    | Increased from \$124,200 to \$199,000 for 12 months of treatment, over one year <sup>7</sup>                                     |
| Pyrimethamine (Daraprim) for toxoplasmosis  | Increased from \$13.50 to \$750 per tablet, overnight <sup>5</sup>   |
| <b>Older products with few producers</b>  |  |
| Colchicine  | \$0.10 to \$5.00 per dose after production was limited by the U.S. Food and Drug Administration to one manufacturer <sup>8</sup> |
| Epinephrine autoinjector (Epipen)   | Increased from \$50 to \$300 per dose over the past six years <sup>4</sup>   |
| Isoproterenol (Isuprel)   | Increased from \$180 to \$1,472 per dose, overnight <sup>5</sup>   |
| Nitroprusside (Nitropress)  | Increased from \$215 to \$1,346 per dose, overnight <sup>5</sup>   |
| Penicillamine (Cuprimine)   | Increased from \$9 to \$1,200 per pill, overnight, resulting in a treatment cost of \$3,600 to \$7,200 per day <sup>5,9</sup>    |
| <b>Same product, different use</b>  |  |
| Doxycycline, 40-mg sustained release for rosacea vs. 100-mg immediate release       | \$16 vs. \$0.76 per dose <sup>10</sup>   |
| Iodoquinol/aloe polysaccharide (Aloquin) gel for eczema                             | Increased from \$30 to \$3,600 for a 60-g tube <sup>11</sup>   |
| <b>Single producer, no generic available</b>  |  |
| Insulin lispro (Humalog)  | Increased from \$12 to \$105 per cartridge <sup>10,12</sup>  |
| Pregabalin (Lyrica)   | Increased from \$135 to \$388 per month <sup>10,12</sup>   |
| <b>Evergreening (minor changes to existing drugs to gain patent exclusivity)</b>    |  |
| Ortho Tri-Cyclen to Ortho Tri-Cyclen Lo   | Blocked generic substitution; dropped from some insurance plans  |
| Oxycontin reformulation   | Blocked generic substitution   |
| Venlafaxine (Effexor) to sustained release (Effexor XR) to desvenlafaxine (Pristiq) | Increased from \$25 to \$330 per month <sup>10</sup>   |
| <b>Pay for delay (paying generics manufacturers not to sell a generic version)</b>  |  |
| Esomeprazole (Nexium)   | Generic version delayed six years  |
| Lidocaine patch   | No generic version of Lidoderm   |
| Oxymorphone, extended release   | No generic version of Opana ER   |

\*—Out-of-pocket price or price before discounts to insurance companies/pharmacy benefits manager.  
Information from references 4 through 12.

than they do on research and development.<sup>16</sup> This rationale also does not justify the pricing of existing products (e.g., Epipen, pyrimethamine, colchicine) that suddenly have cornered the market.

### What Health Professionals Can Do

We can help patients lower their medication costs, whether they pay the whole charge or only part of it. Here are some ideas:

- *Start with low-cost generics.* These can cost as little as \$4 for a one-month supply of a long-term medication or a full course of an acute treatment.

- *Learn costs* for your commonly used brand-name products. Cholesterol can be lowered at a yearly cost of about \$3,000 using pitavastatin (Livalo; no generic available) or \$40 using generic lovastatin.<sup>10</sup>

- *Stop justifying.* “The patient has insurance” is not justification for prescribing expensive medications that do not offer significant benefit for the price.

- *Dispense with “dispense as written.”* Generic versions offer the same benefits at lower cost, and pharmacists will dispense therapeutically equivalent products. Tell patients that although the product may look a little different, it is the same.

- *Shun samples* or medications that are sampled. Given that samples are always for the newest, most expensive treatment options, with continued use these will always cost more.

- *Refer patients to assistance programs.* RxAssist (<http://rxassist.org>) and NeedyMeds (<http://www.needymeds.org/>) are two organizations that help patients find assistance with drug costs.

- *Do not be the first on the block.* Resist the lure of the fashionable and the new. The relative safety, tolerability, effectiveness, price, and simplicity of new drugs are presented in the STEPS department in *American Family Physician* (<http://www.aafp.org/afp/steps>).

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