Our doctors sound a little callous there, don't they? Why wouldn't they think at all about price? It's not malicious – doctors are involved in their own principal–agent relationship. They are not experts on drug prices, product hopping, and shifts in the pharmaceutical market – they have exquisitely imperfect information themselves. Instead, much of their new information about new drugs comes from promotional visits and information from branded manufacturers. Thus, some of their own agency regarding prescribing decisions is restricted by the stream of information they receive from drug manufacturers.

Further, doctors are bombarded by requests from patients who are subject to direct-to-consumer (DTC) advertising for medication on television, on the Internet, and in print media. The United States and New Zealand are the only two countries in the world that permit direct-to-consumer advertising,[60] and this advertising has been shown to increase the number of patient requests or inquiries about specific drugs dramatically.[61] Thus, it could be argued that patients actually have more agency over their prescription decisions in the United States than in other countries. However, these advertisements are generally only for new brand-name drugs, and they present information to a populace that is ill equipped to make informed decisions about whether the product is actually well-suited for them.[62]

At the next step, pharmacists act as an agent, filling the medication for the patient, although their control is generally limited to what is permitted by generic substitution laws. Quite a bit of substitution takes place at this step, however, since doctors often write prescriptions with the more well-known brand name, assuming that a generic will be prescribed if available. (Of course, advertising may mean a doctor may be more likely to prescribe a new brand-name drug that does not have a generic substitute.)

Other players include insurance companies and their associated "pharmaceutical benefit managers" (PBMs), who manage drug purchases for hospitals and insurers. Insurers will often institute differential co-pays for their policyholders depending on the type of drug that is prescribed. In turn, drugs can move up and down the co-pay

[60] *Keeping Watch over Direct-to-Consumer Ads*, U.S. Food & Drug Admin., www.fda.gov/ForConsumers/ConsumerUpdates/ucm107170.htm (last updated June 14, 2016). One of the authors recently made a trip to New Zealand and spent an inordinate amount of time scouring for evidence of direct-to-consumer pharmaceutical advertising, flipping through magazines at gas stations and carefully viewing television commercials. Other than your everyday public health campaigns, he found nothing, and left the country sorely disappointed.

[61] Kathryn Aiken, John Swasy, & Amie Braman, *Patient and Physician Attitudes and Behaviors Associated With DTC Promotion of Prescription Drugs – Summary of FDA Survey Research Results*, U.S. Food & Drug Admin. 26 (2004), http://www.fda.gov/downloads/Drugs/ScienceResearch/ResearchAreas/DrugMarketingAdvertisingandCommunicationsResearch/UCM152860.pdf

[62] We will return to DTC advertising later in the context of "product hopping" strategies used to extend the life of a drug.