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How to Save \$200 Billion and Cure Hepatitis C

Peter Kolchinsky | 7/22/13

Wall Street is buzzing with anticipation about the first new all-oral drugs for hepatitis C approaching the market. The high rate of HCV infection and dissatisfaction with current treatments have created a potential multi-billion dollar bonanza for drug companies. It's estimated that Gilead, the frontrunner in this race, will charge as much as \$90,000 per patient. With roughly 3 million infected patients currently in the U.S., that's about \$270 billion to cure everyone.

Is this necessary? Or even advisable? Particularly in the case of hepatitis C, payers, physicians, and patients can collaborate to extract huge price concessions from pharmaceutical companies, netting more than \$200 billion in savings. All they have to do is acknowledge that sometimes "good enough" is better than "best." I'm wagering they will, and that's why my firm, RA Capital, has invested in Achillion Pharmaceuticals, which we believe will compete quite aggressively and effectively on price once they launch their HCV therapy in 2016.

Price competition is going to play a bigger and bigger role in containing healthcare cost, and HCV treatment is one area where such competition won't have to come at the expense of patient welfare.

An estimated 150 million people are infected with hepatitis C worldwide. All current treatment regimens require long-term, weekly interferon injections with significant side effects. Many patients can't tolerate those or just don't want to bother with them. Because the disease progresses slowly, patients can and do wait for years for better treatment choices. Hence the mounting anticipation for the all-oral treatments.

Clearly, being first to market will be a plus. Both Gilead and AbbVie are likely to get approvals around the same time towards the fall of 2014. Gilead's treatment also appears to deliver the highest cure rate (about 95 percent) and will comprise just a single pill daily for eight to twelve weeks. Abbvie's regimen has a similar cure rate but requires taking a number of pills twice a day. By 2016, several other all-oral treatments are expected to be approved, including one from Bristol-Myers Squibb and another from Achillion, a small biotech.

Analysts are buzzing about the various characteristics of the new drugs and trying to determine which company has the advantage. All of these combo drug regimens are expected to provide cure rates of 85 percent or better, but there are slight differences in their side-effect profiles, pills per day, treatment duration and cure rates. By most accounts, Gilead offers the "best" treatment and is therefore expected to both charge top dollar and win a majority market share. Its stock has more than doubled in the last year to a \$90 billion valuation on high expectations for hepatitis C drug sales.

In business-as-usual mode, U.S. payers would just throw open their wallets and pay whatever it costs to provide the "best" therapy to all the patients who could benefit. But once they start receiving the bills, payers and providers may begin singing a different tune.

Certainly, some patients with advanced disease will immediately require treatment with the "best" drug available. But many patients are still in the early stages of Hepatitis C and will feel no sense of urgency. With at least four competitive "good-enough" all-oral regimens on the market by 2016, payers could negotiate dramatically reduced prices, awarding the lowest bidder the privilege of selling the first line treatment. The small percent of patients who fail that regimen could then cycle onto the best and presumably most expensive one.

This approach is extremely simple and convenient for patients, compared to today's regimens that can take up to a year and require injections with many side effects. Indeed, this is similar to the way doctors usually prescribe antibiotics, moving to the more expensive options only after the cheaper ones have been exhausted.

After all, every one of these drugs represents a huge improvement over current therapy. They are all "good enough" to cure most patients. And, assuming that the first-line drug could be negotiated down to as low as \$10,000, each patient who responds to the cheapest drug (most will) would save the system as much as \$80,000 compared to using the best drug first. By our calculations, the cumulative savings nationwide would be as much as \$200 billion in

the U.S. alone over the next decade. Similar savings await other nations.

Certainly companies deserve to be rewarded for tremendous breakthroughs like the new hepatitis C drugs. And many on Wall Street are incredulous that drug companies will lower their prices. Indeed, large pharmaceuticals companies don't have a strong track record of offering deep discounts even in the face of significant competition. For example, there are many drugs approved for multiple sclerosis yet the prices for these only go up each year.

But hepatitis C is a big market and a certain type of company could still do quite well charging even \$10,000 per patient. The 3 million patients in the U.S. alone could net \$30 billion of sales, which might be modest for Gilead shareholders but would be a wind-fall for a company as small as Achillion, whose market capitalization is less than 1 percent of Gilead's valuation. So even if having Gilead, AbbVie, and Bristol-Myers on the market is not enough to spark a price war by 2015, payers will likely get a discounted offer they can't refuse from Achillion in early 2016.

To some, the idea of using merely "good enough" drugs will seem offensive. It's a point of pride for Americans that patients come first and doctors have the freedom to prescribe the best regardless of cost. Even if this American healthcare fantasy were true, when the most expensive route to a cure is merely more convenient than the least expensive drug regimen, are those extra billions of dollars worth it? My bet is that private and public insurers will both be taking a much closer look at scenarios like this one, cutting wherever they can reap huge savings without harming patients.

Besides, if \$90,000 were offered directly to patients, what would they chose? My guess is that most would buy the cheaper drugs, get cured for less, and put the massive savings towards countless other necessities.

If only reimbursement worked that way.

Hepatitis C has proven to be surprisingly easy to cure and we will soon see multiple "good enough" drugs on the market, which makes it easy for payers and providers to negotiate down prices on behalf of patients, employers, and taxpayers. Just as oncologists have started to push back against high drug prices, others will begin taking a stance against exorbitant spending, especially for mere convenience.

After all, our definition of "best" has left us with the priciest healthcare system in the world, but not always the best outcomes. HCV treatment is one textbook example of how mindlessly sticking to our old ways will have spectacularly expensive consequences.

—Peter Kolchinsky is RA Capital's founder, Managing Director, and Portfolio Manager.