JUST THE FACTS

THINKSTOCK

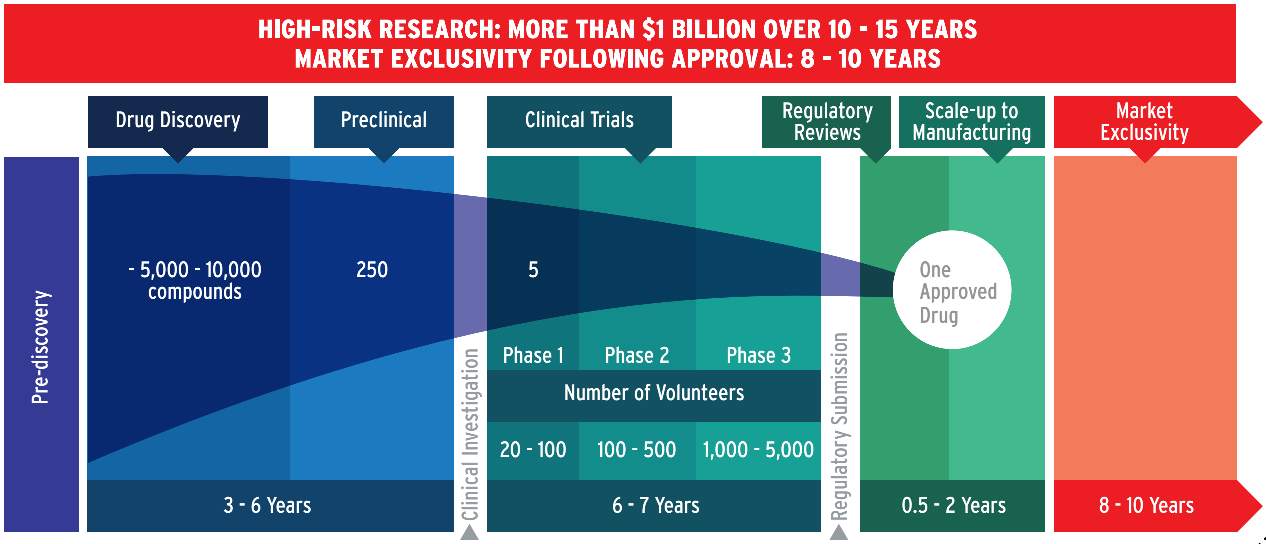
Understanding the cost and value of new medicines in Canada can help sponsors to better manage their drug plans

By **Dr. Brett J. Skinner**

Some stakeholders in the health benefits community believe that the cost of new (patented) medicines threatens the sustainability of prescription drug benefits in Canada. At the same time, cost concerns are encouraging drug plan sponsors to shift to plan designs that limit access to the most innovative treatments. Yet, at the national level, spending on patented medicines has been growing at a slow or negative rate for years; the prices of patented medicines have grown slower than inflation; and Canadian prices for new medicines are not excessive relative to prices in comparable countries. Moreover, forecasts predict low single-digit growth in the direct drug costs of private sector benefits plans for the foreseeable future.

Innovative new medicines can offer more effective treatment of illness—which in turn, results in improved health outcomes for plan members and their families, enabling greater workplace well-being and productivity. In today's important dialogue on drug costs, sponsors need to make the most informed decisions about their employee benefits, and evidence demonstrates that the cost of new medicines is not a threat to the sustainability of private drug plans in Canada in the near term.

NEW DRUG DISCOVERY AND DEVELOPMENT PROCESS



Source: Rx&D, adapted from *Drug Discovery and Development: Understanding the R&D Process*, www.innovation.org

Today's Spend

Evidence confirms that national spending on patented medicines makes up a small percentage of total national (public and private) health spending in Canada and has been growing at a slow or negative pace for a long time.

A 2013 study published by the Canadian Health Policy Institute (CHPI) analyzed total (public and private) spending on patented medicines in Canada using the most recent available data (current and comparable to 2012) from the Patented Medicine Prices Review Board (PMPRB) and the Canadian Institute for Health Information (CIHI). Total direct spending on patented medicines accounted for only 6.2% ($12.8 billion) of the $205.9 billion spent in total on all healthcare in 2012. From 2007 to 2012, total direct spending on patented medicines grew by only 4.1%, while total spending on all other healthcare (excluding patented medicines) grew by 30.5%.

Adjusting the data for population and income growth shows that spending on patented medicines is moderate and declining in Canada. Per capita spending on patented medicines was $366.97 in 2012, accounting for less than 1% (0.70%) of per capita GDP ($52,248.98). Per capita total spending on patented medicines actually declined by 1.8% from 2007 to 2012, while per capita total spending on all other healthcare grew by 23.2%. Importantly, per capita spending on patented medicines has steadily declined as a percentage of per capita GDP for the last eight years, falling to 0.70% in 2012 from 0.85% in 2004. Per capita spending on patented medicines was roughly the same percentage of per capita GDP in 2012 (0.70%) as it was in 2001 (0.69%).

Similarly, at the national level, spending by private insurers on patented medicines has been as sustainable as the cost of dental services and vision care. Spending by private insurers has grown at a slower rate for patented prescribed drugs than for dental services and vision care since 2005. Another 2013 study published by CHPI used the most recent and comparable data from the PMPRB and CIHI to estimate and compare the national spending by private insurers on patented medicines versus spending on dental and vision care. It estimated that, from the end of 2005 to the end of 2010, total private sector insurance spending on patented prescribed medicines grew by 13.4% compared with 24.4% for dental services and 39.1% for vision care services. This means, private insurance spending on dental services grew almost twice as fast, and its spending on vision care grew nearly three times faster, than its spending on patented medicines.

The Forecast

Available data and analysis show that total drug costs in private drug plans are expected to grow at low single-digit percentages for the next five years and will therefore remain predictable, affordable and sustainable for the near term.

Canada's Research-Based Pharmaceutical Companies (Rx&D) commissioned from IMS Brogan a detailed empirical forecast of all (patented and non-patented) prescription drug costs specifically affecting the private drug insurance market. The analysis was based on actual data available through IMS Brogan's private payer databases, representing 70% of the national private claims market for 2008 to 2012 and a projection for 2013 to 2017. The analysis isolated the impact of drug costs from other drug plan costs such as administration and dispensing fees. It accounts for relevant cost drivers affecting future growth, including the incremental impact of three events that will occur during the forecast period: new medicine entry, loss of exclusivity (patent expiry) and aging of the population.

According to the forecast, from 2013 to 2017, the costs attributable directly to drugs are expected to grow at a compounded annual growth rate of between 1.6% and 2.8%. This is due, in part, to the following:

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INNOVATION TRAIN PICKING UP SPEED

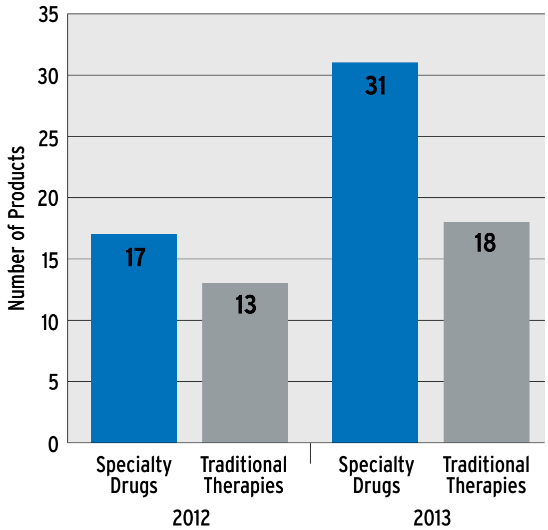
By Mike Sullivan

I can still recall the time when I was a student at the College of Pharmacy and Nutrition at the University of Saskatchewan when I first heard of this futuristic class of drugs called TNF alpha inhibitors that would revolutionize treatment of severe cases of rheumatoid arthritis and Crohn's disease. I remember reading about Remicade coming to market in the U.S. and being astonished at the science behind it. In my eyes, that seemed to mark the beginning of the specialty drug era that would follow the "blockbuster" era in the pharmaceutical industry.

In the late 1990s and early 2000s, specialty therapies were all the rage on the conference circuit, but they weren't having a major cost or utilization impact within the mainstream of drug therapy. Fast-forward 15 years, and it's amazing to see the change.

This table shows not only how specialty drugs have eclipsed traditional therapies in terms of new drug products to market in Canada but also the significance of their growth over the years.

NEW DRUG PRODUCTS APPROVED IN CANADA



Source: Cubic Health Canadian Drug Database, 2014

- the impact of innovative medicines is mitigated by brand name medicines' loss of market exclusivity and the adoption of generic pricing reforms, which continue to put considerable downward pressure on overall drug costs;
- the cost of innovative medicines is offset by the displacement of previous therapies as they are replaced by new therapies, so the net marginal impact of new drug entry on the total market is mitigated;
- high-cost specialty innovative medicines treat small patient populations and, as a result, the proportional impact of these products on the total market is mitigated; and
- the impact of new cancer medicines on private drug plan drug costs is moderated because these costs are often publicly funded by hospitals, cancer care agencies and provincial programs. (Roughly half of cancer drugs are paid for publicly.)

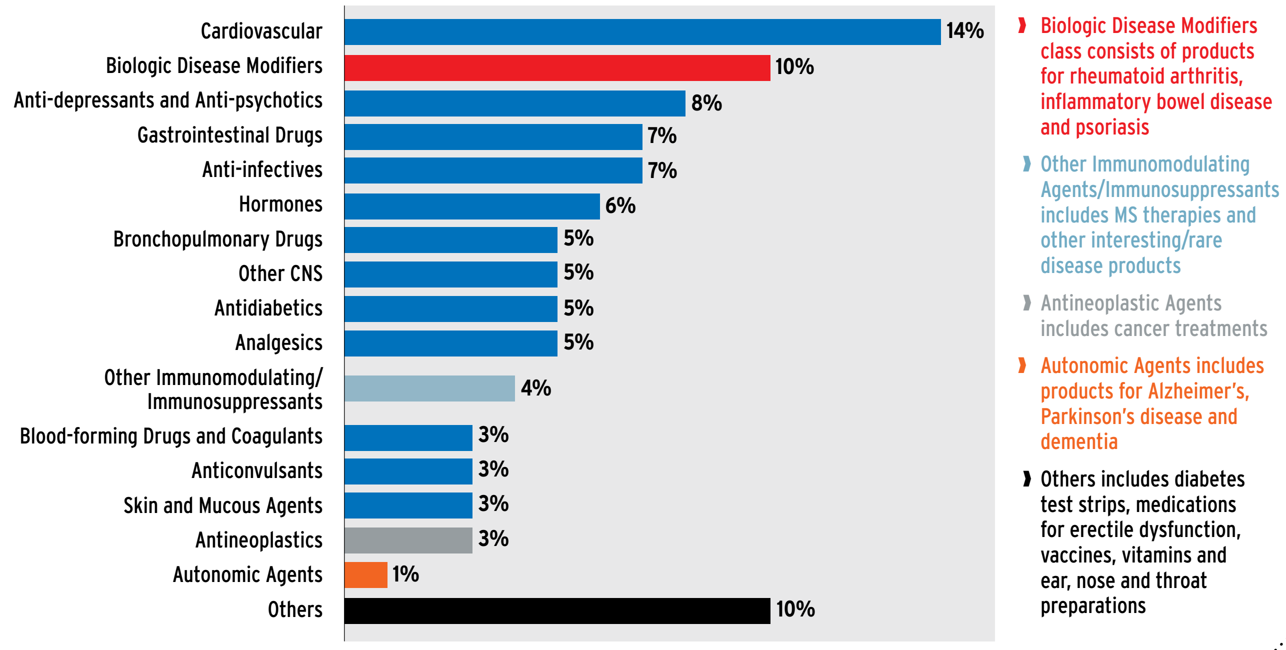
Weighing Cost and Value

The prices of innovative medicines are determined by the substantial risk-adjusted capital cost of research and development, which can be as much as $2 billion over 10 years (see "New Drug Discovery and Development Process," page 18). Yet according to the 2012 Annual Report of the PMPRB, the prices of patented medicines available in Canada have grown slower than the consumer price index (CPI) in 23 of the last 25 years. An analysis by the PMPRB of medicine products matched among seven comparable countries (France, Italy, U.K., Germany, Switzerland, Sweden and U.S.) showed that the prices of patented medicines in Canada have remained below median international prices for the last 12 years from 2001 to 2012.

As with any purchase decision, the question of cost must be weighed against the value it delivers. Innovative medicines are an efficient means for treating illness and improving health—and this saves potential costs for the health system. In fact, a healthy population is the basis for a more productive workforce. The socio-economic and health benefits generated from the use of innovative medicines are well established in research.

A 2013 study by G. Hermus and colleagues, which was published by The Conference Board of Canada, examined the health and economic benefits associated with total spending on pharmaceuticals in Ontario from 2007 to 2012. It found that the costs associated with the use of innovative pharmaceuticals were offset by reductions in the use of other types of healthcare resources (e.g., hospitals and physicians) and a reduction in the productivity losses associated with disease as a result of improved health outcomes. In particular, the $1.22 billion spent on six classes of pharmaceutical medicines in 2012 generated offsetting health and societal

SHARE OF PRIVATE DRUG PLAN DRUG COSTS 2012 (Forecast 2013 – 2017)



Source: IMS Brogan/Rx&D

6%

decrease in direct healthcare costs per plan participant

Source: Pitney Bowes case study, *American Journal of Managed Care*

benefits of nearly $2.44 billion in the same year—a 2:1 benefit-to-cost ratio.

One Employer's Experience

The link between improved health and productivity gains is not just a societal benefit; employers can capture the gains, too. A 2005 article by J.J. Mahoney in the *American Journal of Managed Care* details how the U.S. company Pitney Bowes was concerned about the rising costs of diabetes among its employees. In response, the company redesigned its drug benefits to be consistent with its disease management and patient education programs. Based on research showing that low medication adherence was linked to subsequent increases in healthcare costs in patients with diabetes, the company immediately made critical brand name drugs available to employees at the same co-insurance level as generic drugs. The rationale was that reducing patient out-of-pocket costs would increase adherence and reduce more expensive complications. The result was that direct healthcare costs per plan participant decreased by 6%. In addition, the rate of increase in overall per-plan-participant health costs slowed markedly, and net per-plan-participant costs were only 62% of the industry benchmark cost levels.

Employer Solutions

All workplace and healthcare stakeholders have an interest in ensuring that plan members have optimal access to the best available treatments. Immediate affordability solutions for individual drug plans can be found in better insurance and more comprehensive drug cost pooling agreements to protect plan sponsors against the risk of a rare high-cost drug claim. Employee-centred plan design can also help to address healthcare issues efficiently and effectively. And health promotion strategies can play an important role in encouraging long-term employee health, well-being and productivity.

Ultimately, a healthy workforce is a critical driver of success for any business. Decisions about employee health benefits have concrete implications for individuals and their families, and for the health and wellbeing of the organization. Ensuring that plan sponsors have access to the facts needed to make important strategic decisions is an obligation that *all* stakeholders share.

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