Introduction

PDCI Market Access Inc. (PDCI) is a leading pricing and reimbursement consultancy established in 1996 as Palmer D'Angelo Consulting Inc. Neil Palmer, PDCI's Principal Consultant, worked at the PMPRB as a contractor and employee from 1988 to 1994. During that time Mr Palmer was involved in the development of the *Patentees' Guide to Reporting*, as well as the development of the PMPRB's *Excessive Price Guidelines*. Since 1996, PDCI has been providing expert advice to manufacturers of patented medicines ("patentees") to help them understand their filing requirements under the *Patented Medicines Regulations* and the pricing limitations established by the Guidelines. PDCI also assists manufacturers with their submissions to the Canadian Agency for Drugs and Technology and Health (CADTH) and the Institut national d'excellence en santé et en services sociaux (INESSS) as well as to provincial drug benefit plans and private insurers.

PDCI's clients are primarily pharmaceutical manufacturers however the opinions expressed in this document are solely those of PDCI and are not the views of any manufacturer or industry organization. PDCI has not received any payment or compensation in connection with the preparation of this paper.

PDCI's motivation in preparing the response to the discussion paper is to assist the PMPRB in renewing its mandate by offering informed feedback based on more than 25 years of direct experience with the PMPRB Guidelines and the related legislation and regulations.

Responses

1. What does the word "excessive" mean to you when you think about drug pricing in Canada today? For example:

a. Should a drug that costs more annually than a certain agreed upon economic metric be considered potentially excessively priced?

The PMPRB discussion paper has not defined any "economic metric" prices tests nor how such tests would be agreed upon. Absent a change in legislation or the addition of a section 85 excessive price factor through regulation, any "economic metric" would have to reference existing section 85 excessive price factors. Accordingly, it is not evident how a change in the Guidelines alone could rely on "economic metrics" nor whether such a change is warranted.

b. Should a drug that costs exponentially more than other drugs that treat the same disease be considered potentially excessive?

This question needs to be qualified with a definition of what the PMPRB refers to as "exponentially more" and how many such cases it believes exist. The current guidelines would not permit such a differential unless the new drug offered a substantial therapeutic improvement over the older drugs, and, other (European) countries had permitted a similar price. Drugs that offer a "substantial improvement" are typically available in five or more PMPRB reference countries and the maximum allowable price is often established by European prices that take into account HTA factors including clinical and cost effectiveness.

c. In considering the above two questions, does it matter to you if a very costly drug only treats a small group of patients such that it accounts for a very small proportion of overall spending on drugs in Canada?

Drugs that treat a very small group of patients (ultra rare diseases) typically have the same or greater development costs as traditional pharmaceuticals but generally have greater clinical uncertainty as there are insufficient numbers of patients to demonstrate clinical effectiveness at statistically significant levels through randomized controlled trials (RCTs). Manufacturers must try and recover their development costs from a very small patient population (resulting in very high prices) and payers (and price regulators) must assess the high prices in the context of uncertain clinical evidence but the knowledge that patients with previously untreatable serious diseases now have a treatment option.

Traditional cost effectiveness metrics (eg, $/QALY) are often not appropriate and payers may rely on ethical considerations to provide coverage for the small number of patients affected but often with a commitment for further evidence development by the manufacturer (coverage with evidence development). For the PMPRB, prices for these types of products are difficult to assess apart from an international price comparison. HTA agencies (CADTH, INESSS) and provincial and private drug plans are best positioned to assess the relevant ethical factors and clinical value in the context of their health care systems as well as any real-world evidence that can be developed once the drug is on the market. Moreover, increasingly payers are insisting on pay for performance commitments from manufacturers such that the payer only pays for treatment successes.

d. Conversely, if a drug's price is below an agreed upon metric and in line with other drugs that treat the same disease, should it be considered potentially excessive if it accounts for a disproportionate amount of overall spending on drugs in Canada?

This question raises the same concern (as (a) above) with resect to undefined "economic metrics" and "disproportionate amount of overall spending". (Presumably disproportionate refers to disproportionately large). Is there a suggestion that all drug spending must some how be "proportionate" and if so to what? What is the metric that is being suggested here? Ideally highly effective drugs (vs less effective drugs) would have a disproportionately large share of overall spending but this outcome would be contrary to a conclusion of excessive pricing. Moreover, spending is determined largely by provincial drug plans that prioritize their spending

on clinically effective and cost effective drugs and often negotiate significant cost reductions through product list agreements.

e. What economic considerations should inform a determination of whether a drug is potentially excessively priced?

Section 85 of the *Patent Act* outlines the factors that PMPRB must take into account in determining whether a price is excessive. It is not evident from the discussion paper if the PMPRB is proposing new excessive price factors or if the suggestion is that there be economic considerations applied to the existing s. 85 factors.

2. Given that it is standard industry practice worldwide to insist that public prices not reflect discounts and rebates, should the PMPRB generally place less weight on international public list prices when determining the non-excessive price ceiling for a drug?

The so-called industry standard is the result of international price referencing (started by Canada in 1987) by many international jurisdictions. The cost effectiveness of a drug in a particular country is determined in part by the relative cost of the underlying health care system in which it is sold – each country will have its own cost effective price for each drug. International price referencing discourages manufacturers from marketing drugs in traditionally low cost countries - a situation that has been addressed through confidential rebates negotiated as part of product listing and risk sharing agreements.

Moreover, international price comparisons are fraught with challenges including shifting exchange rates, upcharges, taxes and distribution charges. While the PMPRB attempts to address these issues with its algorithms for estimating ex-factory price in the reference countries, these methods are at best inexact although under the Guidelines they are used to establish Canadian drug prices to four decimal places.

Accordingly, international price comparisons should be used in cases where there are no appropriate Canadian comparators or the Canadian price appears to be excessive when considering domestic comparators alone.

Moreover, otherwise non-excessive Canadian prices should not be considered excessive because of shifts in foreign prices.

3. In your view, given today's pharmaceutical operating environment, is there a particular s. 85 factor that the Guidelines should prioritize or weigh more heavily in examining whether a drug is potentially excessively priced?

The *Act* requires the PMPRB to consider all s. 85 factors and should not rely on any one factor to the exclusion of the others. Moreover, there should not be a presumption of excessive pricing

in the event a price appears to exceed one of the factors – the excessive price analysis should consider all the s. 85 factors before there is any presumption and investigation of excessive pricing.

4. Should the PMPRB set its excessive price ceilings at the low, medium or high end of the PMPRB7 countries (i.e. the US, the UK, Sweden, Switzerland, Germany, France and Italy)?

As indicated above, PMPRB should only rely on international prices to set excessive price ceilings when domestic factors are not sufficient. In those cases where international prices are the only reference, the PMPRB's use of the median and highest international prices are appropriate.

5. Does the amount of research and development that the pharmaceutical industry conducts in Canada relative to these other countries impact your answer to the above question and if so, why?

Overall research and development expenditures by industry are unrelated to drug prices. The locations of R&D expenditures are determined by global and national economic factors and are unrelated to local pricing regimes. To the extent that R&D costs for a particular drug is relevant to a determination of excessive pricing (ie, as an element of the cost of making and marketing the drug) the *Act* already provides a mechanism for considering these R&D costs.

6. What alternatives to the current approach to categorizing new patented medicines (based on degree of therapeutic benefit) could be used to apply the statutory factors from the outset and address questions of high relative prices, market dynamics and affordability?

The discussion paper has not established how affordability is a PMPRB price review factor (it is a payer budget issue) nor that market dynamics (concentration, price discrimination) are a driver of high prices in what is largely a monopsony market.

Several countries (France, Germany, Italy, Japan) use evidence-based systems of comparative effectiveness to categorize medicines for purposes of setting or negotiating prices. Although the categories are not identical there is high degree of consistency in the levels of therapeutic improvement among the countries using these systems. It is not evident from the discussion paper that there is a need for an alternative to the current system given that other countries may have lower (France, Italy) or higher (Germany) prices than in Canada. Rather than abandon the current system of categorization, the PMPRB should examine how other jurisdictions apply their systems and how the PMPRB system can be improved.

7. Should the PMPRB consider different levels of regulatory oversight for patented drugs based on indicators of risk of potential for excessive pricing?

The PMPRB should consider limiting its oversight of prices for multi source drugs (ie drugs with generic competition) and for drugs in mature therapeutic classes where there are several similar agents (eg, statins, ACE inhibitors, PPIs, etc).

8. Should the price ceiling of a patented drug be revised with the passage of time and, if so, how often, in what circumstances and how much?

Other jurisdictions review drug prices periodically and when there is a new indication or significant new clinical evidence. However, negotiated price reductions are typically tied to expanded reimbursement coverage and price changes are not automatic or formulaic. The provinces through the pCPA are already engaged in such negotiations for new indications and are actively seeking lower prices for certain classes of drugs. To the extent the PMPRB is considering periodic revisions to drug prices, it should take into account the pCPA initiatives.

9. Should price discrimination between provinces/territories and payer types be considered a form of excessive pricing and, if so, in what circumstances?

The underlying assumption of the question is that manufacturers use their market power to price discriminate. In fact, the market power lies with the purchasers that dictate their pricing policies and can change those policies at any time. Moreover, provinces can and do collude in price setting through the pCPA – competition law prevents similar collusion by manufacturers. Manufacturers set their prices in line with the PMPRB guidelines and prevailing provincial policies.

Furthermore, wholesalers, hospitals and retail pharmacies are different markets with different economic incentives. Hospitals are end-users and motivated to seek the lowest possible price through tendering, bundling and exerting purchasing power though group purchasing organizations. By comparison, wholesalers and pharmacies are not end users of the drug products and they either benefit from higher prices (through markups) or are agnostic to prices. Clearly the premise of price discrimination is misplaced. Indeed, s. 85 of the *Patent Act* recognizes that there are differences between markets and directs the Board to take into account the "relevant market" – it does not direct the Board to consider price differences between markets as excessive.

10. Are there other aspects of the Guidelines not mentioned in this paper that warrant reform in light of changes in the PMPRB's operating environment?

The PMPRB Guidelines are overly formulaic and rigid even when the results fly in the face of common sense. PMPRB staff need greater autonomy to make common sense decisions when applying the Guidelines.

11. Should the changes that are made to the Guidelines as a result of this consultation process apply to all patented drugs or just ones that are introduced subsequent to the changes?

Current non-excessive prices of existing medicines should be grandfathered and appropriate transition measures should be considered for new medicines.

12. Should one or more of the issues identified in this paper also or alternatively be addressed through change at the level of regulation or legislation?

The PMPRB should consider recommending changes in regulation / legislation to clarify its mandate and jurisdiction. In particular, the PMPRB's mandate should be explicitly limited in the *Patent Act* to prescription drugs for human use. Furthermore, the definition of a patented medicine should be clearly defined in the legislation. The majority of the PMPRB hearings (and subsequent judicial reviews) are disputes over whether particular medicines are patented or not for purposes of PMPRB irrespective of whether or not there is market exclusivity or a meaningful patent monopoly. This form of regulation creep through litigation is not in the public interest. Parliament (not the courts) should establish public policy and the extent and frequency of litigation on the definition of "patented medicine" is clear evidence that Parliament should establish a clear definition of patented medicine for purposes of the PMPRB.