Despite efforts to control prices in the European Union (EU), patients there still face an inequality in access to drugs based on their ability to pay. Governments struggle, given the current legal and political realities, to find the best way to achieve some form of differential pricing and create a “win-win situation” that improves access to new medications and puts more expensive drugs within the reach of all patients.

Some health economists have argued that differential pricing for medicines across countries, by which poorer countries could pay less than wealthier countries, might improve access to medicines, especially newer and more expensive drugs. However, laws in the EU supporting the free movement of goods makes it difficult to maintain different prices in different countries. While some countries have developed schemes that allow them to obtain confidential discounts, resulting patterns of price differences and access limitations are falling far short of what a coherent approach might provide, some experts say.

Of the various pricing plans, experts say that four systems—Differential Pricing, Ramsey Pricing, Cross-Border Collaboration, and External Price Referencing—could help to address unmet needs and lower prices to facilitate access to medicines in the EU. But each system has its drawbacks. In the discussion that follows, several well-recognized health economists provide their experiences and insights on these different pricing approaches.

**Differential Pricing**

According to Sabine Vogler, PhD, World Health Organization’s Collaborating Centre for Pharmaceutical Pricing and Reimbursement Policies, Vienna, Austria, differential pricing (DP) is the strategy of selling the same product to different countries according to their ability to pay or economic situation.

“We need to distinguish between the concepts of willingness to pay and ability to pay,” Vogler maintains. “Lower income countries may have the willingness to pay for medicines, but might not be able to afford them because of their limited ability to pay.”

Several questions remain on this issue, however. Because of the heterogeneity of individual patient preferences, how is the threshold in willingness to pay and the value of medicines captured in differential pricing? Aside from income levels, what other aspects should be considered when assessing willingness to pay and ability to pay when using differential pricing? Should information on patients taking multiple medications (sometimes for multiple diseases) also be taken into account?
For Vogler, one key challenge for DP in Europe is that parallel trade is allowed in the EU. While DP can produce lower prices and better access, she cautions that if DP creates lower prices in one country, exporting low-cost medicines to higher income countries (a process called ‘leakage’) must be avoided.

Vogler also notes that it is important to consider the impact of confidential discounts. “Confidential discounts lead to distortion because the payers risk paying higher prices,” Vogler says. “Confidential discounts are set by market actors, not policy makers.” In case of a DP, transparency, Volger believes, is the best way to ensure accountability to the public and to ensure efficiency.

According to Adrian Towse MA, MPhil, Office of Health Economics, London, UK, income per capita is likely to be the key driver of differences in willingness versus ability to pay. A key question here, says Towse, is whether we are talking about the third party payer or the patient paying out-of-pocket costs.

“High disease burden means a lot of patients, which reduces payers’ willingness and ability to pay,” he explains. “There is evidence that prices are lower, ceteris paribus, for a drug when volumes are higher. For an individual patient, however, high disease burden may increase willingness to pay.”

For Towse, establishing a voluntary agreement on a transparent set of prices might be very difficult. Transparency, observed Towse, may not always be good because there are circumstances where it reduces efficiency and links markets together, and that linkage may not be efficient.

Jo De Cock, National Institute of Health and Disability Insurance, Brussels, Belgium, calls unequal access to innovative medicines an “inconvenient truth.” He also suggests it may be relatively easy to distinguish between willingness to pay and ability to pay, but asked, “Under which circumstances can differential pricing be an appropriate mechanism to improve access to medicines in Europe?”

“Differential pricing is not only a matter of self-regulation by industry, but also a question of co-creation between public authorities and industry,” says De Cock. “This requires identification of different markets in terms of their ability to pay, and establishing transparent parameters for calculating a formula with agreement about the degree of transparency needed to value the medicines.”

“The pharmaceuticals to which DP could be applied should be limited to products with a high added value (i.e., those responding to an unmet medical need) and where no regular competition is possible,” De Cock says. “Countries could be clustered into different groups and ability to pay should be measured by different criteria. In other words, specific epidemiological elements must be taken into account.

Based on findings from experience with DP (Table 1), DP is simply not feasible for all 28 member states in the EU. In fact, Volger believes that DP may have more of an impact if combined with other policies and has already seen some voluntary cross-border collaborations that seem encouraging.

 Ramsey Pricing – A Good Alternative?

For Panos Kanavos, PhD, London School of Economics, London, UK, using Ramsey pricing raises several concerns. “It is a policy rule concerning what price a monopolist should set in order to maximize social welfare subject to a constraint on profit,” he explains. “For any monopoly, the price markup should be the inverse to the price elasticity of demand—the more elastic the demand, the smaller the price markup.”

In other words, Ramsey pricing is a strategy to increase the markup on goods with the most inelastic demand because consumers will buy those products anyway. According to Kanavos, this strategy is problematic for two reasons. “The goal of Ramsey pricing is to recoup the fixed costs from patients who have the fewest alternatives,” Kanavos says. “It also minimizes the distortion associated with prices in excess of marginal costs.”

**Cross-Border Collaboration**

Like Volger, Kanavos is encouraged by several initiatives taking place at the EU level and beyond that could lead to increased capacity and negotiation power through cross-border cooperation. Such “clustered” cross-border collaborations could also lead to negotiated outcomes for groups of countries and contribute to access and affordability (Figure 1).

For Kanavos, cross-border collaboration presents both opportunities and challenges. Cross-border collaboration requires HTA bodies and
reimbursement agencies to be prepared when a new technology is launched and to agree on its value.

“Even if DP is not politically feasible for all 28 states in the EU, we have already seen voluntary cross-border collaboration,” states Vogler, who coauthored a 2015 report entitled Study on Enhanced Cross-Country Coordination in the Area of Pharmaceutical Product Pricing. [1].

**External Price Referencing**

External price referencing (EPR) is defined as the ‘practice of using the price of a medicine in one or more countries in order to derive a benchmark (or “reference price”) for the purpose of setting or negotiating the price of the product in a given country’ [1]. EPR is also called international reference pricing, explains Towse. “Both terms mean that a price is set by reference to the price of the same drug / dosage / pack size in another country. However, it differs from therapeutic reference pricing, where prices are set by reference to existing drugs within the therapeutic area.”

Kanavos maintains that there are “unwanted effects” to EPR that lead to “unintended consequences.” The unwanted effects of EPR, he says, are launch delays, exchange rate volatility, and further price reduction. The unintended consequences associated with EPR range from delayed access for patients, lack of stability and skepticism about reducing new medicines, and “gaming” to introduce a notion of predictability.

Despite its many problems, EPR could prove to be a reasonable pricing system and provide the start of coverage negotiations, Kanavos says. “However, it is still unclear whether EPR will encourage innovation.”

**Putting Theory into Practice**

Towse suggests putting the theory of differential pricing into practice, starting with the recognition that “we have a practical problem of inequitable access in Europe.” In that regard, he asks, “Are we ‘prisoners’ of two ‘cults’?”

From Towse’s perspective, the first cult is “the law of one price,” which implies that different prices arise from lack of competition, lack of arbitrage, and non-trade barriers. The second cult holds that “transparency is always good and leads to a more efficient use of health care resources.” But he maintains that there are circumstances in which transparency reduces efficiency when it enables payers to link markets that may otherwise be quite different.

“For example, if Germany references prices in Greece, companies will not offer low prices to Greece even though per capita income is less than 50% of that of Germany,” he says. “They would rather not sell in Greece than have to give low prices. Germany could exercise restraint and not reference Greece (it has now reluctantly agreed to do this). But if Greek prices were not transparent, the issue would not arise and Greek and German prices could be different.”

There are barriers to implementing optimal differential pricing rules, Towse notes, not the least of which might be political feasibility and organizational challenges. However, there are two potential options that Towse feels may have merit, both of which have policy implications. The first would be to establish a two-tier Europe; that is, a block of lower per capita income countries with parallel trade allowed within but not between blocks. The second option would allow confidential price difference agreements at the member state level in order to limit the ability of countries that do not accept DP to undermine low prices obtained by others.

It is too soon to know whether these initiatives could achieve more affordable access to medicines for patients across Europe.

**References**


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**Additional information:**

The preceding article was based on a plenary session at the ISPOR 19th Annual European Congress.

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