

# ***Pricing Research in Healthcare Markets***

## **6.1 Issues in Pharmaceutical Pricing Research**

A variety of techniques have been developed which allow price sensitivity to be evaluated as follows:

- Monadic Pricing Research
- Gabor Granger
- Conjoint Analysis
- Brand Price Trade Off
- Price Sensitivity Meter/Van Westendorp Analysis /Perceived Value Pricing

However, pricing research techniques should be applied and interpreted with caution in the pharmaceutical sector to avoid the risk of major bias in making pricing decisions, since there are issues affecting research design associated with:

- 'Politically correct' responses leading to unreliable responses
- Varying levels of awareness of actual prices affecting responses
- Potentially ambiguous price definitions (per pack, per day, per month, per outcome?)
- The effect of more than one decision maker on price elasticity
- Varying price elasticity throughout the product lifecycle and at various stages of the adoption process
- International issues (e.g. reimbursement status / patient requirement to pay)
- Sequence of questions/order effect
- Thus, research overestimating or underestimating price elasticity of demand

Careful research design is essential to overcome these potential problems including the appropriate choice of research technique and its adaptation to the needs of the specific market being researched which may also include:

- Evaluation of the effect of price on inclusion within repertoire/formulary, expected positioning for certain patients and use in specific patient consultations
- Reference to specific patient records to ensure a realistic appraisal of the likely use of the new product
- Analysis of outputs by patient subgroups to identify different levels of price elasticity in different market segments

## **6.2 Monadic Pricing Research**

Monadic pricing research exposes a proportion of the sample of respondents to a product at one price and another part of the sample to the same product at a different price. By comparing the two (or more) sub-samples it is possible to determine the effect of price on prescribing.

This approach is especially useful in the pharmaceutical sector where there is pressure on prescribers to rationalise prescribing, since they are not aware that a pricing research exercise is being conducted. However, the need for large sample sizes can limit the extent to which this approach is used.

### **Potential advantages include:**

- Monadic pricing research is generally regarded as the methodology at least risk of introducing bias on the basis that the clinician is not aware that price is being evaluated
- A monadic study is the only approach (other than econometric analysis of previous product uptake) that can identify opportunities presented by an inverse price elasticity of demand- that is, demand may be higher at a greater price owing to the association between price and product quality
- Monadic research can be used with a diary study to evaluate the effect of price on prescribing in specific patients

### **Potential disadvantages include:**

- More costly than other methods and potentially impractical due to the need for larger sample sizes
- If there are any differences between the sample compositions of different subgroups, this can itself introduce uncertainty. Although matched demographic characteristics can be applied, there is no guarantee that the sample is necessarily matched in terms of psychological profile
- Unmatched samples may be a particular problem when seeking to analyse outputs relating to subgroups of patients
- In consumer/FMCG research, monadic studies have been criticised as not reflecting product adoption

### **Applications**

Monadic approaches are most useful in the following situations:

- Less 'rational' markets where it is important not to artificially suggest that price is a factor
- Where there may be particular issues around price that may otherwise bias responses

## 6.3 *Gabor Granger*

Gabor Granger is a pricing technique widely used in the consumer sector. The approach involves exposing a respondent to a range of price levels in rotation and, for each of these, asking the respondent to state how likely (and/or how extensively) a product will be used.

### **Potential advantages include:**

- Relatively simple and straightforward to administer
- The use of Gabor Granger removes one of the concerns with monadic price evaluation - that unmatched samples may affect comparisons between the price elasticity measured in different respondent groups
- It provides an explicit measure of price elasticity in the context of a more fully 'branded' concept than is usually possible via conjoint approaches
- It allows evaluation of the opportunity for the products in the context of specific patients thus providing greater opportunities for evaluating differential price elasticity in different segments

### **Potential disadvantages include:**

- Caution must be exercised when using this approach since there is a risk that respondents may become aware that a pricing research exercise is being conducted which may artificially enhance levels of price sensitivity.
- In particular, there is a danger of the sequence in which price levels are tested will affect the results of the research and, in particular, the starting price assessed may introduce a perceptual norm against which subsequent prices are evaluated by the respondent. Thus, prices tested which diverge widely from this initial price point may be affected by the perception of the respondent that they are exposed to a large difference compared to their 'baseline' price which may artificially enhance price elasticity.

### **Applications**

These limitations can be largely overcome by the way Gabor Granger research is designed. In published Gabor Granger research where prices tested were rotated, this artificially increased price sensitivity. However, where the highest price was tested first, there was no adverse effect on price elasticity compared to monadic research.

A Gabor Granger approach can be useful in a wide range of situations including:

- Where it is important to assess price elasticity in the context of patient records
- In complex or heterogeneous markets
- Where there are no particular issues around price that are likely to bias responses

## **6.4 Conjoint Analysis in Pricing Research**

Conjoint analysis allows the relative importance of all attributes (including price) to be determined, by using one of a range of techniques which asks respondents to state preferences between various combinations of product alternatives.

By analysing the extent to which price is a factor influencing preferences it is possible to determine the importance of price compared to other factors in influencing purchasing or prescribing.

Most conjoint analysis approaches provide a simulation model which allows the effect of various possible future market scenarios to be evaluated- for example, launching a product at various prices.

### **Potential advantages include:**

- Conjoint methods explore price sensitivity in the context of other attributes.
- Conjoint analysis therefore allows flexible and dynamic evaluation of price in a range of potential scenarios.
- Conjoint can be used in conjunction with other techniques in order to corroborate or contrast with other research outputs.

### **Potential disadvantages include:**

- Conjoint techniques typically assume a rational consideration of product attributes and thus may not replicate the true decision making process
- Conjoint assume that price operates in the decision making process as one of a range of attributes whereas in some markets it may operate as a barrier to consideration of other benefits
- Conjoint techniques may not take account of external influences (e.g. quality/weight of promotion, sampling etc)

### **Applications**

Although conjoint can be an extremely valuable tool in helping reach pricing decisions it should normally be used with other approaches and outputs interpreted with caution, dependent on the market being explored. Conjoint tends to be most useful in the following situations:

- More 'rational' markets
- Where a number of changes to the market may occur between the research and the product launch/pricing decision

Full Profile Conjoint or Choice Based Conjoint are generally regarded as the most appropriate conjoint methods for exploring price sensitivity since they derive the utility of each price level in

the context of assessing the attractiveness of entire 'brands', as opposed to ACA which trades off subgroups of attributes.

## **6.5 Brand Price Trade Off**

BPTO is widely used in the consumer sector, and when customised to reflect the FMCG purchasing process, is widely regarded as the pricing approach of choice (dependent on market characteristics) and there is evidence to suggest its greater predictive power than monadic approaches in such markets.

Typically, the prices of products within the market are provided along with the lowest price of the product(s) being evaluated. Respondents are then asked which product they would prescribe. If one of the test products is chosen, the price of that product is increased, and the question asked again. This process is repeated until one of the existing (non-test) products is chosen.

Thus BPTO allows the preference for each new product to be determined at any combination of prices for the products being evaluated.

### **Potential advantages include:**

- Assesses price in the context of other product choices
- Can be used to assess the choice between a number of test products
- Allows a model to be developed at any combination of price levels tested

### **Potential disadvantages include:**

- An artificial exercise which does not reflect the decision making process for many products
- Price levels are introduced sequentially with lowest prices shown first, thus there is a high risk that respondents are sensitised to price
- Complex analysis process

### **Applications**

BPTO should not be employed in many ethical markets, because it is the method with greatest risk of artificially sensitising respondents to price.

It may have a role in commodity markets where the decision maker places a high emphasis on price and this is a transparent element in the decision process.

## **6.6 Van Westendorp PSM / Perceived Value Pricing**

The Van Westendorp Price Sensitivity Meter is an approach which typically exposes the respondent to a visual analogue scale marked with a number of price levels over the range to be tested and asks the respondent to indicate, on this scale:

- At what price is the new product regarded as expensive
- At what price is the new product regarded as inexpensive
- At what price is the new product regarded as too expensive to use
- At what price is the new product regarded as so inexpensive as to cast doubts on its quality (i.e. too cheap)

The principle behind this approach is useful in understanding potential thresholds but needs to be adapted for the healthcare market since prescribers are aware that regulatory bodies exist to prevent products being launched with suspect quality.

Perceived Value Pricing is an extension of the PSM approach which firstly asks respondents to indicate their perceptions of the prices of existing products and then asks respondents to indicate the expected or highest acceptable price for the test product in the context of its relative value vs. other products.

### **Potential advantages include:**

- Relatively simple and straightforward to administer
- Assesses a wide range of price levels

### **Potential disadvantages include:**

- Caution must be exercised when using this approach since respondents are likely to be sensitised by the fact that a pricing research exercise is being conducted which may artificially enhance levels of price sensitivity.
- It does not easily allow evaluation of the opportunity for the product in the context of specific patients
- The concept of expensive may not necessarily correlate to a change in prescribing behaviour in the healthcare sector

### **Applications**

This approach is useful when used in combination with other methodologies since it allows existing price perceptions to be used as the basis for understanding the expected price or perception of a new product. However, because this technique is essentially attitudinal rather than behavioural in nature and does not refer to specific prescribing decisions, caution should be employed when using this technique in isolation.

In summary, Van Westendorp/PSM/PVP is extremely effective in evaluating perceptions around pricing but less so in relating these to a prescribing decision. It should usually be used in combination with other methods as a 'qualitative' tool to provide a further understanding of pricing issues.