designed to support both the collection of PRO data and the development of an economic model.

**PMC19**

**COST-EFFECTIVENESS ANALYSES OF BEHAVIORAL INTERVENTIONS: TOWARDS A MORE REALISTIC COST-EFFECTIVENESS RATIO BY INCLUDING INTERMEDIATE OUTCOME MEASURES**

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OBJECTIVES: Behavioral health interventions traditionally use a simple dichotomous outcome criterion: 'success' or 'failure'. In reality, though, behavior change is a complex process in which several steps towards success are taken. There has been little consideration, however, about whether future behavior change should be incorporated in cost-effectiveness analyses (CEAs). The aim of the present review is to identify and evaluate the usage of cognitive, intermediate outcomes in CEAs of behavioral interventions. METHODS: Electronic data sources (PsycInfo, WebofScience, Medline, ScienceDirect and Scopus) were searched for CEAs published before February 2008. RESULTS: Most CEAs and CUAs reporting cognitive, intermediate outcomes of behavior change fail to incorporate partial behavior changes. Only nine studies were eligible for inclusion in this review. Smith et al 2007 [1] conducted the only study in which partial behavior change was incorporated in the final outcome by modeling cognitive, intermediate outcomes: the stages of change, derived from the Transtheoretical model (TTM). The TTM is a stage-oriented model that describes the process by which a change in behavior takes place. It describes the readiness to change and the processes employed by individuals to achieve behavioral change. With inclusion of future behavior change, Smith et al showed that the incremental cost-effectiveness ratio declined compared to the standard analysis. CONCLUSIONS: The results suggest that CEAs of behavioral interventions can be further optimized by the measurement of intermediate outcomes and use these to determine partial behavior change at the end of an intervention period as well. In other words, when partial behavior change and relapse rates are incorporated in CEAs of behavioral treatments, a more realistic and transparent final outcome can be calculated. [1] Smith, MY, Cromwell, J, DePue, J, et al. Determining the cost-effectiveness of a computer-based smoking cessation intervention in primary care. Managed Care 2007;16:48–55.

**PMC20**

**QUANTITATIVE APPROACH TO DETERMINE THE EFFECT OF SEGMENTATION ON REVENUE GENERATION, POSITIONING AND PRICING OF PHARMACEUTICALS**

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OBJECTIVES: To develop a quantitative model that can determine the effect of segmentation and positioning on revenue generation based on different variables, health economic considerations and pricing scenarios, creating a tool which is easy to use for the first evaluation of options. METHODS: Literature review and interviews with industry experts were conducted followed by the development of qualitative framework, logic and the subsequently a quantitative model. The model was tested and validated using real life examples. RESULTS: A qualitative model was developed which presents an iterative strategy to align stakeholders' interest with different scenarios of segmentation. From a given asset base of active ingredients, the pharmaceutical company defines therapeutic areas for a component and determines segments within them, evaluating both attractiveness and specific propositions for patients, payers and prescribers in comprehensive scenarios. For the payer’s perspective in particular, health economic benefits of the proposed segmentation approach must be contemplated. Following this analysis, objectives and strategies for the chosen segments are developed and a holistic value proposition can be delivered to the market. Ideally, the process should be initiated early during development in order to design clinical trials according to the segmentation strategy. The process should also be monitored throughout the marketing and sales process in order to make improvements, and to react to changes in health care policies or the competitive landscape. Following the qualitative analysis, a quantitative model was developed in Excel that captures the effect of multiple variables such as age, gender, disease severity, co-morbidities, insurance type and multiple price points on revenue generation, positioning and pricing of pharmaceuticals. The model was tested and validated using the example of bipolar disorder (BPD) in women with childbearing potential. A new product with lower teratogenic risks was evaluated along different segmentation scenarios in order to determine improved overall cost-effectiveness when compared to conventional treatments. CONCLUSIONS: Segmentation is an important tool that could lead to better revenue generation from the company’s perspective and is accepted positively by payers due to optimized budget impact with better health outcomes.