

Pharmaceutical Executive

FOR GLOBAL BUSINESS AND MARKETING LEADERS

Optimal Pricing Strategies

by Andrew Parece,
Peter Rankin, and
Shomik Mehndiratta

PHOTODISC

©Reprinted from PHARMACEUTICAL EXECUTIVE, June 2002 AN ADVANSTAR PUBLICATION Printed in U.S.A.

Copyright Notice Copyright by Advanstar Communications Inc. Advanstar Communications Inc. retains all rights to this article. This article may only be viewed or printed (1) for personal use. User may not actively save any text or graphics/photos to local hard drives or duplicate this article in whole or in part, in any medium. Advanstar Communications Inc. home page is located at <http://www.advanstar.com>.



The Pharmaceuticals practice at Charles River Associates

provides consulting services to leading firms in the pharmaceutical, biotechnology, and medical device industries across North America, Western Europe, Japan, and Australia. Our emphasis is new product launch strategy, product pricing and contracting, and strategic responses to new market entrants. We specialize in the economics of business strategy, and our recommendations are based on quantitative analyses using game theory, marketing science, finance, and econometrics.

For further information on how the Pharmaceuticals practice at CRA could assist your company, please contact Dr. Gregory K. Bell, Pharmaceuticals Practice Leader, at (617) 425-3357 or by email at gbell@crai.com.

Optimal Pricing Strategies

SYSTEMATICALLY IDENTIFYING PRICE-SENSITIVE SEGMENTS AND EVALUATING THIRD-PARTY CONTRACTS CAN HELP COMPANIES MAXIMIZE PROFITS.

Andrew Parece,
Peter Rankin, and
Shomik Mehndiratta

Andrew Parece, MBA,
is a vice-president in the
pharmaceuticals practice
of Charles River Associates
(www.crai.com).

Peter Rankin, PhD, and
Shomik Mehndiratta,
PhD, are senior associates.

www.PharmExec.com

Pricing has never been more of a key issue for the industry than it is right now. Yet, even with the increased importance of pricing strategies, a lack of focus on critical market factors leads many manufacturers to forego profits or increase their vulnerability to aggressive payers. Aligning pricing and contracting can achieve a sustainable competitive advantage—if product managers objectively assess a product’s clinical benefits and address two key questions:

- Which segments of the market are sensitive to price, and how sensitive are they?
- What are the value and cost of improving formulary and reimbursement status at key customer accounts?

In each therapeutic and geographic market, the influence of pricing and contracting varies, requiring a different strategy for optimizing share, revenue, and

profit. Despite the uniqueness or complexity of any set of market conditions, economics will dictate the optimal strategy. In certain circumstances, setting a high price and not contracting for managed care formulary access makes sense. In other situations, it would be disastrous. This article demonstrates that assessing the market environment, identifying the costs and bene-



Research shows that doctors know about prices and that price and reimbursement status can influence prescribing decisions.

fits of alternative pricing strategies, and striking the right balance between pricing and contracting are critical. (See “Rx Drivers.”)

The Formulary Factor

Managed care formularies in the United States and national health system formularies in many other countries found the price–demand relationship by restricting access to some products in an effort to control costs. In the United States, formulary structures with tiered patient co-payments, prior authorizations, and physician budgets are common. When third-party payers shield patients from the real cost, then pricing is only one of several strategic options available to drive sales. Product managers must apply a different economic framework when price effects are overshadowed by formularies that dominate prescribing decisions. Specifically, they must compare

- the value of each formulary position for increasing share
- the cost of achieving or improving formulary position by offering rebates or other value-added services.

Contracting for preferred formulary status in key customer accounts—the “net price” decision—is a critical element of pricing strategy. Often, it is the contracting tactics that differentiate the product in the market. Pharma companies can use managed care contracting to target strategic customer niches, adapt pricing to reward share performance, align customer objectives through creative win–win contracts, and avoid the deleterious effects of potential price spirals.

Physicians and Price

There is considerable debate about whether physicians know or care about

the price of the drugs they prescribe. The authors’ research shows that doctors know about prices—especially the relative prices of key products—and that price sometimes influences prescribing decisions. For instance, doctors are more price-sensitive when prescribing for mild to moderate conditions, and they are sensitive to the price of prescriptions for chronic conditions.

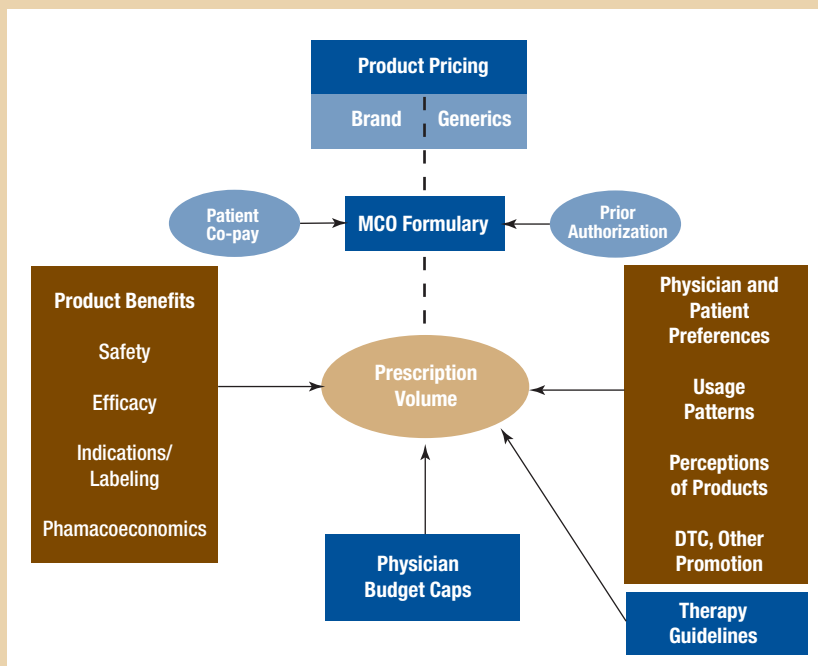
Physicians are also more price-conscious when prescribing for patients who must pay the full “out-of-pocket” cost. In some situations, doctors purchase and administer therapies to pa-

tients, as with oncology products in the United States or with many traditional prescription medications in Japan. They are usually reimbursed at a fixed amount for the product and its administrative costs; therefore, doctors are often concerned with the spread between the price and the reimbursement rate.

In contrast, physicians are less concerned about price if the patient has an acute condition requiring treatment for a short course of therapy. Even for chronic conditions, if the physician has tried several medications and encountered problems with tolerability or lack of efficacy, he is far more likely to disregard price when faced with a decision for the next course of therapy. Determining how much of the potential market for a product is price-sensitive requires product managers to understand patients in the therapeutic area and the responsiveness of prescribers to price at each decision point: first-line

RX DRIVERS

Factors such as physician preferences, managed care account status, and a product’s safety–efficacy profile affect prescribing decisions and drive sales.



Source: Charles River Associates

PE Graphic

choice, second-line product switch because of lack of efficacy or side-effects, add-on therapy, and so on.

There are also significant differences

in prescribing among various kinds of doctors. General practitioners are more likely to begin new patients on less potent prescription medications than are

specialists, who generally start patients at higher doses. Similarly, systematic differences exist between the patterns of “heavy prescribers,” who treat a large number of patients, and physicians who treat only a limited number of patients of a specific type. Also, as a result of DTC advertising, patients often have a certain brand in mind, or even a discount coupon, when they see their physician. New research from FDA says that 69 percent of the patients who ask for a specific brand ultimately get what they want.

For price-sensitive patient segments, market research about product demand provides product managers with the basis for optimal pricing strategy. First, they can use market research to determine the demand for therapy at different prices for each physician type and patient segment. That allows them to estimate the market share response to incremental changes in price and competitors’ possible price responses. From demand simulations, product managers can determine the price that provides the highest revenues and profits. That type of analysis, when completed for each physician type and patient segment, provides an aggregate demand profile that combines all segment information to identify the exact price that will maximize profits in price-sensitive segments. (See “Demand Curves” and “Reaction Curves.”)

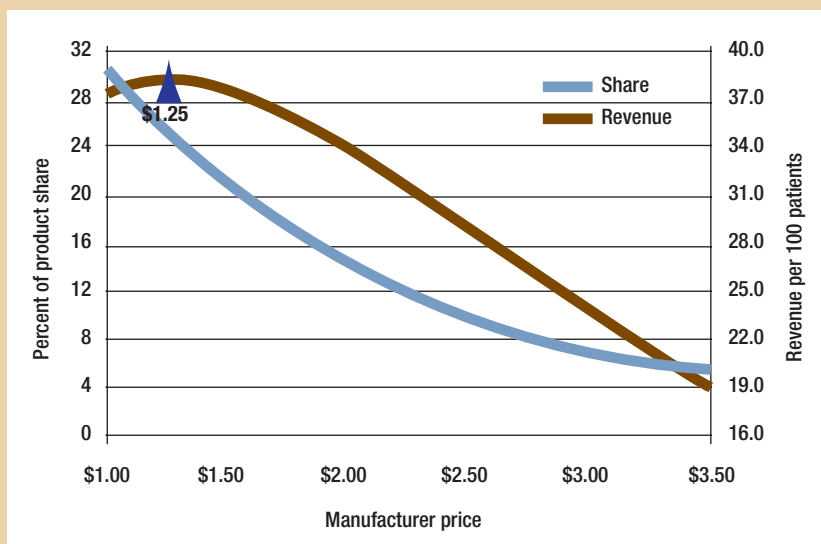
Managed Care Control

Reimbursement, which can insulate patients and physicians from the full price of a therapy, is perhaps the most important factor affecting demand for prescription pharmaceuticals. In the United States, roughly 75 percent of the population has prescription benefits covered by third-party payers. And managed care organizations (MCOs) commonly institute a formulary of preferred products to control pharmacy spending. Formularies can block products from reimbursement, specify patient co-payment differentials for brand-name therapies, and require prior authorization for non-preferred drugs.

Consequently, when prescribing for patients with “high control” formularies, physicians generally pay much

DEMAND CURVES

Product managers must estimate product demand—or market share—at each price point to calculate the revenues and profits at that particular price and to identify the optimal price across all market segments.

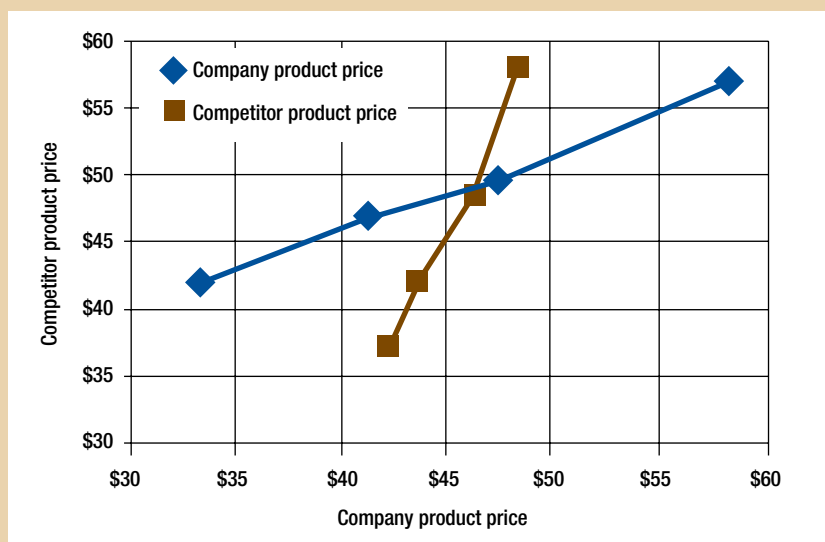


Source: Charles River Associates, data disguised from actual project

PE Graphic

REACTION CURVES

By plotting pricing strategies—how competitors will respond with price competition—product managers can identify a product’s “equilibrium” price.



Source: Charles River Associates, data disguised from actual project

PE Graphic



Product managers must be prepared to walk away from MCO contracts that do not profitably affect share.

more attention to formulary guidelines than to the price of a therapy. When physicians share the responsibility for controlling pharmaceutical costs on a per-patient basis, the influence of formularies is offset and price becomes more important.

Two trends demonstrate the increasing importance of successful contracting strategies for formulary position. First, MCOs are moving toward higher co-payment differentials and more tiers. Second, some plans are exploring percentage-based co-insurance payments in lieu of co-payments. One MCO's recent formulary reform provides a good example of both trends. The MCO introduced a four-tier formulary in 2001 to differentiate cost-sharing provisions among all therapies, including injectibles, generic therapies, and biotechnology treatments. For the first three tiers, patients face co-payments ranging from \$5 to \$45; for therapies in the fourth and most expensive tier, patients are responsible for 25 percent of the product cost. Such cost-sharing provisions indirectly influence physician prescribing by causing some patients to request less expensive medicines.

Formulary status and the elements of an MCO benefit plan—patient co-payments, prior authorization requirements, and so forth—have more impact on physician prescribing for MCO patients than price does. Therefore, it is imperative for product managers to identify the MCOs that are most able to affect prescribing through their formularies—those who can “move share”—to understand what drives formulary decisions and to compare the costs and benefits of getting on formulary or improving formulary position. Segmenting accounts by their potential to affect share through benefits structure and formulary control can help apportion contracting resources. (See “Getting the Most From Managed Care.”)

To Contract or Not to Contract?

Determining the value of a managed care formulary position requires product managers to estimate the share increase that can be expected from an improved formulary position. Comparing expected share increases with the cost of improving the formulary position—through rebates or other value-added services—provides a cost-benefit assessment of formulary contracting efforts. (See “Share Loss from Formulary Restrictions,” page 7.) As formulary control increases—because of higher patient co-pays or prior authorization requirements—product share decreases.

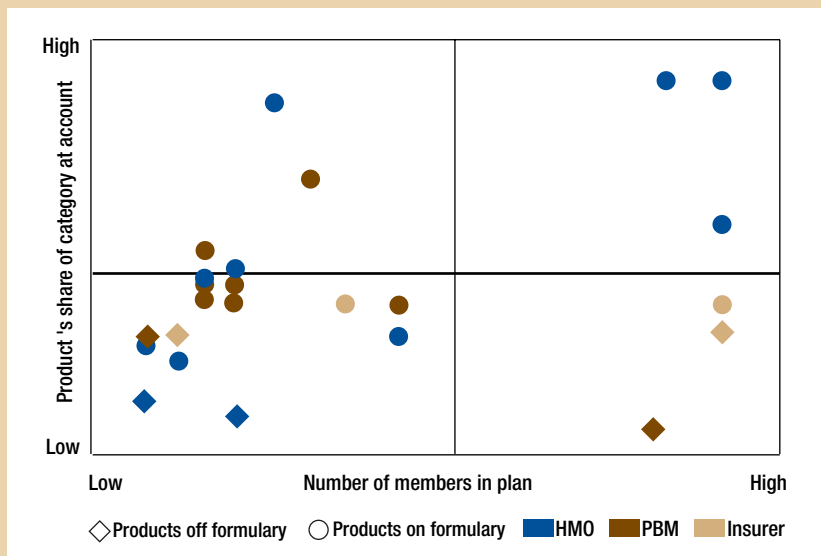
Another way of looking at the value of formulary access is to determine the price reduction that would be necessary to offset the share loss resulting from a

restrictive formulary position. In one example, with a co-pay increase from \$10 to \$20, price might need to fall by 35 percent to offset the share loss. In the same scenario, with a \$40 co-pay, price would need to fall by 55 percent to offset the share loss relative to a “no restrictions” situation. (See “Price Impact of Formulary Controls,” page 7.)

Contracting strategy boils down to providing rebates, discounts, or other value-added programs in return for improved formulary position—when it makes economic sense. Knowing the “up side” to improvements in formulary position—the expected share increase—defines the break-even point for negotiating formulary position with an MCO. In the previous example, the share impact of moving from third tier with a \$40 co-pay to second tier with a \$20 co-pay is roughly 10 share points. In that case, a pharma company would be better off walking away from contracting discussions if the MCO required a rebate in excess of the total profit increase associated with a 10 point increase in share. In some cases, leverag-

GETTING THE MOST FROM MANAGED CARE

Some managed care accounts have more potential than others. The size of the account and whether the product is on or off formulary can determine the product's share performance. In this illustration, products with the highest share are both on formulary and placed with accounts that have a high number of members.



Source: Charles River Associates, data disguised from actual project

PE Graphic

ing a portfolio of products can increase the bargaining position for formulary placement and reduce the overall rebates required to get on formulary.

Identifying the value of formulary status imposes economic discipline on contracting with MCOs; the company should only pay up to the potential value of the improved position. Understanding the trade-off between value and cost is crucial to negotiating a contract. Without it, product managers will miss the mark in targeting accounts for formulary access, overpaying in some or

failing to realize the potential of others by not bringing enough to the table. To be successful, product managers must segment customer accounts by plan type (low-control, high-control) and potential (size and growth of the market) and compare the value of formulary access against its costs.

Putting the Pieces Together

Optimal pricing strategy requires understanding the factors—both clinical and economic—that are most critical to prescribing decisions. Product managers

must understand

- patients, physicians, and MCO segments
- the medical conditions for which the product will be used
- how the product stacks up against competitors with regard to key attributes such as efficacy, safety, tolerability, and convenience.



Decision makers must also consider the relative importance of price-sensitive segments. Through research, they can determine whether the product will be used primarily by patients who are more sensitive to price, or in situations where physicians view price as important in prescribing decisions—chronic, mild-moderate severity, first-line, and so forth.

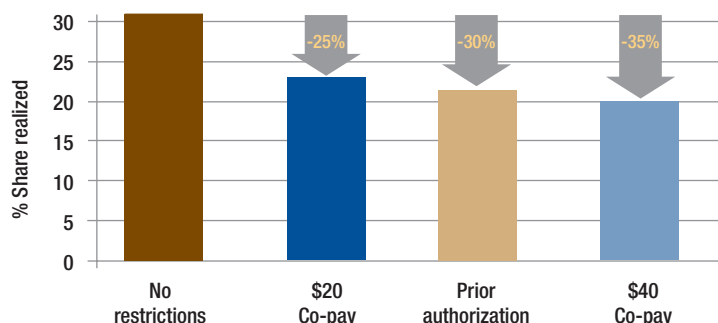
In each segment, the demand for the drug identifies the share to expect at each potential price. Product managers derive the optimal price for maximizing profits directly by aggregating the results from each of those segments.

For patients covered by third-party payers such as MCOs, product managers need to quantify the share potential of improved formulary positions with the payer. For managed care plans in which the formulary has proven effective in moving market share, it may be worth substantial rebates to secure a lower co-pay than competitors have, or to avoid being blocked or disadvantaged in some way by the plan formulary. With reliable data on the value of an improved formulary position, product managers can make informed, economically sound decisions about how much to rebate or discount to optimize profits.

Pricing and contracting strategy go hand-in-hand. By applying a systematic approach to identifying both the optimal price in price-sensitive segments and the value and cost of contracting with key third-party payers, decision makers can maximize profits when faced with complex pricing choices in dynamic markets. ■

SHARE LOSS FROM FORMULARY RESTRICTIONS

As formularies become more restrictive, companies realize less of the product's share potential. In this illustration, the share loss ranges from 25 to 35 percent.

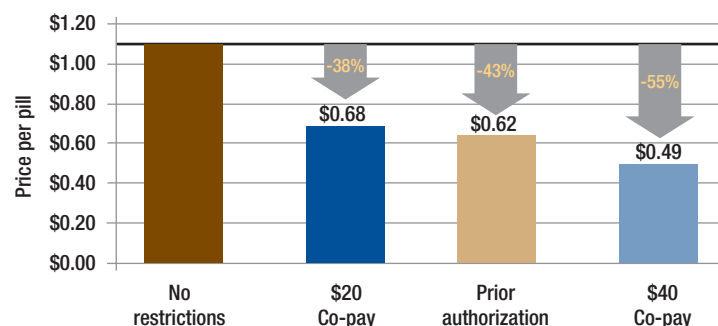


Source: Charles River Associates, data disguised from actual project

PE Graphic

PRICE IMPACT OF FORMULARY CONTROL

Product managers would need to drop a therapy's price substantially to offset the share loss resulting from increasingly restrictive formulary controls.



Source: Charles River Associates, data disguised from actual project

PE Graphic

ABOUT CRA

Founded in 1965, Charles River Associates, an economics, finance, and business consulting firm, works with businesses, law firms, and governments on issues of economic and strategic significance. CRA combines economic and financial analysis with expertise in litigation and regulatory support, business strategy and planning, market and demand forecasting, policy analysis, and engineering and technology management. In thousands of engagements, CRA has distinguished itself by its corporate philosophy of providing responsive, top-quality consulting; an interdisciplinary team approach; unsurpassed economic, financial, and analytic skills; and pragmatic business insights.

Our business consulting practice provides services directly to companies seeking assistance with strategic issues that require sophisticated economic or financial analysis, and which typically require “mission-critical” decisions for the client, such as positioning and pricing a new product or developing new technological processes. We apply a highly analytical, quantitative approach, helping companies analyze and respond to market forces and competitive pressures that affect their businesses. Our engagements often result in client-specific decision support tools. Our consultants possess in-depth industry knowledge and are able to provide insightful, value-added advice by challenging conventional approaches and avoiding predetermined solutions or methodologies. CRA has always been a leader in developing and translating advanced analytic techniques into practical solutions for clients.

CRA has 400 consulting professionals worldwide with offices in Australia, Canada, Mexico, New Zealand, the United Kingdom, and the United States.

CRA is affiliated with a select group of academic and industry experts, including senior professors from such institutions as Georgetown; Harvard; MIT; Stanford; the University of California, Berkeley; the University of California, Los Angeles; the University of Melbourne; the University of Toronto; and the University of Virginia.

Dr. Gregory K. Bell leads CRA’s Pharmaceuticals practice. For further information on how CRA can help your company, please contact Dr. Bell in the Boston office at (617) 425-3357 or by e-mail at gbell@crai.com.

CHARLES RIVER ASSOCIATES INCORPORATED
Corporate Headquarters

John Hancock Tower
200 Clarendon Street, T-33
Boston, Massachusetts 02116-5092

(617) 425-3000
fax (617) 425-3132
www.crai.com

