Health Care's Retail Solution

A Consumer-Focused Cure for the Industry

A strategy+business Reader

Booz | Allen | Hamilton

Health Care's Retail Solution:
A Consumer-Focused Cure for the Industry
A strategy+business Reader

Edited by Amy Bernstein and Cindy Vanderlinde-Kopper
Introduction by David G. Knott, Ph.D.

The issues facing us in health care today are as urgent as they are complex. Escalating costs, inconsistent quality, uneven access, and devastating pandemics are all pressing problems that elude easy answers. A key underlying cause of these challenges lies in the disjointed structure of the U.S. health care system — an industry that places employers in the middle of health benefits decisions and payments, insulates consumers from the consequences of their lifestyle and treatment choices, and limits true competition among the suppliers of health care products and services. Just about everyone agrees that we need to reform health care, but few agree on how to do it.

Health Care's Retail Solution offers a consumer-centric vision for health care. It describes how a system that puts the consumer at the center of everything we do can help align all stakeholders on improving the well-being of individuals while significantly enhancing the value of the insurers, providers, pharmaceutical manufacturers, and other companies serving them. In addition to laying out an overarching vision, this book analyzes fundamental changes that need to be made in order to realize a consumer-focused future in health care. *Health Care's Retail Solution* is essential reading for everyone who is committed to transforming health care in the U.S. and beyond.

Health Care's Retail Solution

Health Care's Retail Solution

A Consumer-Focused Cure for the Industry

A strategy+business Reader

Edited by Amy Bernstein and Cindy Vanderlinde-Kopper
Introduction by David G. Knott, Ph.D.

Booz | Allen | Hamilton

A strategy+business Reader
Published by strategy+business Books

Visit Booz Allen Hamilton online at www.boozallen.com

Visit strategy+business online at www.strategy-business.com

Increase your intellectual capital by subscribing to strategy+business. To subscribe for one year (four issues), visit www.strategy-business.com or call toll-free 877 829 9108. (Outside the U.S., call 850 682 7644.)

Design: Opto Design
Cover art: eboy

strategy+business Books
Publisher: Jonathan Gage
Editor-in-Chief: Art Kleiner
Executive Editor: Amy Bernstein
Managing Editor: Elizabeth Johnson
Deputy Managing Editors: Laura W. Geller, Laura Fredrickson
Senior Editors: Theodore Kinni, Melissa Master Cavanaugh

Contents

Introduction: A Retail Future for Health Care

by David G. Knott, Ph.D.

IF ANY SECTOR needs a magic wand, it is health care. Nearly everyone can agree on what a perfect health care system would do and what it would achieve. It would be transparent and responsive to consumers. It would give them the power to decide for themselves what kind of care they receive, with a full understanding of the costs and consequences, and it would deliver that care impeccably. The challenge lies in getting from here to there — and convincing the players and forces at work that change is not only desirable but also politically feasible and affordable. The articles in this s+b Reader address that challenge.

The first revolution in the U.S. health care system began with the introduction of Medicare and Medicaid in the mid-1960s. Although these programs preserved the employer-based insurance system for most working Americans, they almost fully enfranchised the poor and the elderly. Medicare and Medicaid also, in combination with rapidly accelerating technological innovation, demonstrated the awesome power of virtually unchecked demand. Government efforts to curb demand, control prices, and limit the supply of beds and technology were only marginally successful.

Starting in the 1980s, managed care was touted as the answer. It was designed to counter the overuse, underuse, and misuse of services. However, consumers loudly protested their loss of choice,

which the system insisted was the price of progress. Managed care has since faded from its position as "the answer" to one of many products and approaches in the market.

By the late 1990s, "consumerism" came on the scene, seeking to change the role of patients in making decisions about their own health care. Key to the new approach was the introduction of financial incentives to shop around — with help — for the most cost-effective treatments and products. Major changes in tax laws, such as the debut of health savings accounts with their deductibility, portability, and ability to be rolled over from year to year, enabled the new consumer-driven products to gain traction in the market, but the supply side has shown the difficulty of creating a robust retail marketplace for health care services. What will be needed to complete the transition is addressed by David G. Knott, Ph.D., Gary Ahlquist, and Rick Edmunds ("Health Care's Retail Solution"). Taking a longer-term view of consumerism and the possible decoupling of health benefits and employment, Joni Bessler, Sanjay Saxena, M.D., and Susanne Leisy look at convergence and synergy at the intersection of health care benefits and financial services ("Health Meets Wealth").

These two essays set the scene for an exploration of various ways to address consumerism issues and opportunities; they also highlight the disconnects in the current system that will need to be addressed regardless of the nation's future direction in health care policy. Robin Portman, Kevin Vigilante, M.D., and Brenda Ecken describe a poignant, real-world example of the misaligned incentives and information gaps in our cancer-care research and treatment systems — leading them to call for a nationwide cancer information network ("Connecting Research and Practice").

Rick Edmunds, Charley Beever, and Danielle Rollmann, using their own extensive experience in the industry and proprietary Booz Allen Hamilton research, find much to like in the new consumerism

thrust, but they point out the critical gaps in the current information, counseling, and support functions for patients and for caregivers ("Drug Firms in the New Retail Marketplace: When Consumers Choose for Themselves"). They suggest a fundamental reimagining of the role of both consumers and physicians, and they highlight the changes in thinking and practice that pharmaceutical firms will need to make in a consumer-oriented world.

The heretofore mundane world of how health care services are paid for and reimbursed is the subject of Joyjit Saha Choudhury, Kristine Martin Anderson, and Karl Kellner ("The Future of Provider Payment"). Many experiments have been aimed at influencing provider behavior and improving outcomes (at lower total cost, of course). Provider payment emerges as a lot more than the bookish concern of accountants; it can and should be a real tool in the increasingly consumer-driven marketplace. Evidence-based bundled case rates emerges as the most promising mechanism from these authors' analysis of current and past payment innovations and experiments.

The need for a robust backbone of IT enablers such as electronic health records is the jumping-off point for Gil Irwin, Kristine Martin Anderson, Giri Rao, and Rahul Rosha ("Informatics as a Competitive Advantage for Health Plans"). Health plans, they argue, must learn to make operational and strategic use of information that will soon be available through regional and perhaps national health care information networks, in addition to the rich veins of information already available from their ongoing business. The authors discuss other industries for which informatics (information and its strategic use) has been transformative — both for the businesses as a whole and as value propositions for specific, enlightened competitors. No matter what direction health care reform takes, the ideas in this essay are likely to shape health plans' strategies for better serving patients and providers.

Enter the 800-pound gorilla of health care: the government. Kimberly Michienzi, Susan Penfield, and Tricia Purdy tackle this topic by focusing on what federal policy should do at a high level ("The Great Facilitator: Government's Role in the Transition to a Retail Health Care System"). As various health care reform proposals take shape (and cross-pollinate), government policy could lead to bureaucracies and budgets targeting specific roles for the nation's largest purchaser of health care services. The authors explore the characteristics and strategies inherent in three major options for the government in the coming market evolution: catalyst, wielder of the big stick, and experimenter. Although the political process will obviously be where these battles are fought, a critical view of the implications of government's alternative roles is long overdue.

As a final introductory thought, we believe some key features must remain in the foreground of the accelerating evolution of the nation's health care philosophy and systems. (See "Does Health Care Have a Future?" by Joe Flower and David G. Knott, Ph.D., *strategy+business,* Spring 2007.) New plans and even tweaks in the existing system must meet (to some extent, at least) eight commonsense criteria if they are to be judged practicable, affordable, and just. They must be:

- Capable of delivering consistently high-quality care and outcomes
- Likely to deliver lower costs
- Available to all
- Designed as a single model (no two-tiered care systems)
- Shaped by market forces
- Practical
- Progressive (no grand schemes implemented in one fell swoop)
- Self-reinforcing (spreading throughout the system).

The outcome of this round of the national dialogue on the future shape of the health care system is uncertain, although we

continue to believe that consumerism must be one of the new world's major ingredients. That said, the goals of this largely political process must be quality, affordability, and fairness. The essays in this Reader and the criteria summarized above are significant contributions to the substance and values that should be integral parts of the process and outcomes.

The authors wish to thank Cindy Vanderlinde-Kopper, Kristine Martin Anderson, Phil Lathrop, and Amy Bernstein for their assistance in editing this Reader. +

Health Care's Retail Solution

by David G. Knott, Ph.D., Gary Ahlquist, and Rick Edmunds

IMAGINE A FUTURE in which the health care system provides consumers high-quality care in a variety of convenient forms at competitive prices. In this vision, insurers, employers, and governments offer consumers financial incentives to take better care of themselves — to exercise, eat right, stop smoking, and follow treatment regimens for chronic problems such as asthma and diabetes. The system encourages consumers to plan for the health care needs they can anticipate (i.e., nonemergencies) by "shopping" for products and services much as they do for a new car; consumers make informed decisions based on readily available reports on quality, service, and price. Providers and product manufacturers compete for different segments of the market using a variety of channels, formats, and business models. And consumers confused by the profusion of offerings can turn to agents who help them design the most suitable health care programs for themselves and their families.

Such a robust retail health care market is more than a vision; it is a real possibility. Today's troubled U.S. health care industry is the result of decades of good intentions and unintended consequences. Payors (defined as government and employers, who foot the bill for most health care costs) and patients alike struggle to cope with complexity and cost. But most efforts to control costs — by government and by the private sector — have proven unsustainable and have

unintentionally increased complexity. The upshot is a situation in which only 60 percent of employers offer coverage for active employees, approximately 30 percent cover retirees, and 47 million Americans are uninsured.

The problem is structural. Major decisions about health care in the U.S. have traditionally been made by employers, who determine for their employees which benefits and forms of coverage are needed, what types of providers are included in the network, and which organizations administer the benefits. But this paternalistic approach effectively allowed the consumer to be a passive participant in his or her own health care. The consumer has had no economic incentive to seek the best care at the fairest price, or to give up unhealthy habits. Limited competition, unclear pricing, inconsistent quality measures, and complex regulations preserve the disconnect among the three major stakeholders in the system — payors, consumers, and suppliers. This last group includes doctors and other care providers, hospitals, and pharmaceutical companies.

Since 2003, however, the situation has come to seem far less intractable than it once did. That year, Congress enacted the Medicare Prescription Drug, Improvement, and Modernization Act (MMA), which could lead to a transformation of the entire U.S. health care industry from a wholesale to a retail model, in much the same way that retirement plans moved from defined-benefit to defined-contribution schemes. We're already seeing early signs of a true retail marketplace:

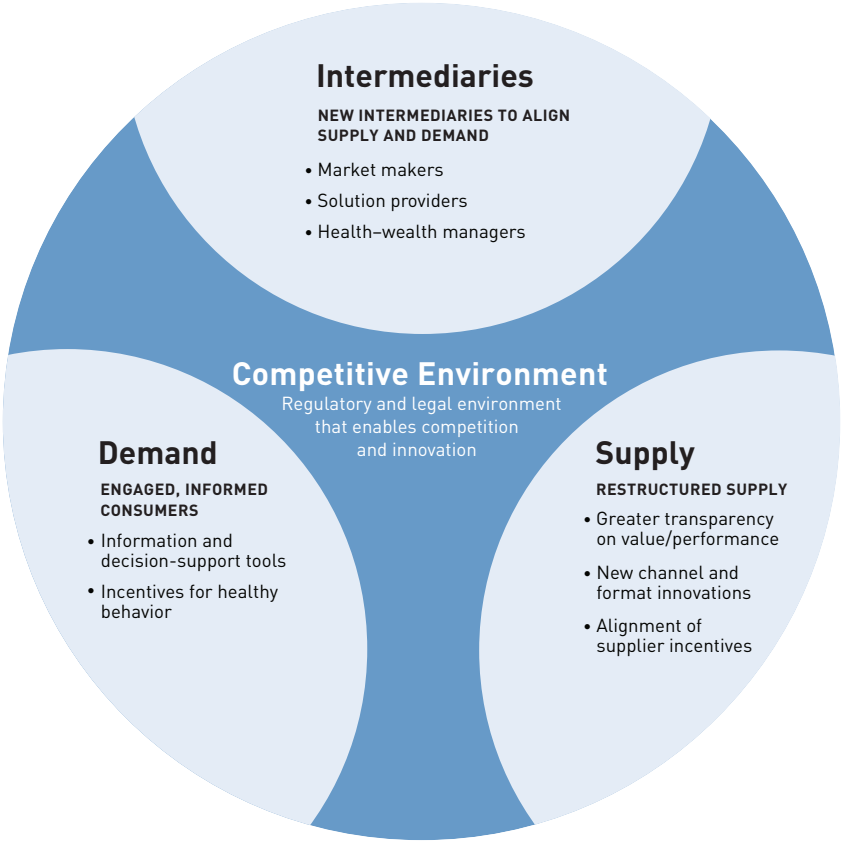
- New health care formats and competitors are gaining traction, with MinuteClinics and RediClinics — low-cost, walk-in health care centers for common ailments — at one end of the spectrum, and highly personalized "concierge care" at the other.
- Companies that aren't traditional health care players are leveraging their capabilities to create entirely new offerings that enable and encourage the move toward health care consumerism.

Fidelity, for example, is developing products and tools that exploit the emerging health–wealth intersection, such as a calculator that helps predict out-of-pocket health care costs.

- More employers are starting to offer consumer-directed health plans (CDHPs): high-deductible policies that are usually paired with health savings accounts (HSAs) or health reimbursement arrangements (HRAs) designed to help consumers save money that they can use to offset additional health-related expenses whenever they arise.
- In perhaps the single biggest change, the federal government and leading private-sector payors are driving providers to make cost and quality data more transparent so that consumers can make better-informed choices. Standardized data on cost, service, and outcomes has the power to establish a new basis of competition. Payors are also pushing for new payment mechanisms, such as pay-for-performance, that base reimbursement on outcomes or adherence to broadly accepted clinical guidelines, known as "evidence-based medicine."

These are promising developments, but not all the pieces that make up a true retail market have fallen into place — and those missing pieces represent real opportunity. Drawing on experience and the insights gained from a 2007 Booz Allen Hamilton study of 3,000 consumers and 600 physicians, we are starting to see which factors will enable the system to work well. (See Exhibit 1.) To make competition and innovation among payors and suppliers possible, the system will require the following: consumers who live healthy lives and plan for their future health care needs; a fundamentally restructured supply side that provides consumers all the information they need to make wise choices and is quick to respond to changing consumer demands; and new kinds of intermediaries (perhaps the payors of today, perhaps not) to help align the supply and demand

Exhibit 1: **Requirements for a Robust Retail Health Care Market**



Source: Booz Allen Hamilton

sides and help consumers navigate the complex system. All this requires an environment, both regulatory and technological, that encourages innovation and competition. There is tremendous potential for those players who empower consumers in this arrangement, with information, tools, and services that help them take control of their health care immediately and in the future. None of the three — consumers, payors, or suppliers — can drive the changes alone. As with any other market, the system won't function unless all the elements are moving in harmony.

The goals of this retail revolution are to improve health and health care and to transform an annually evaporating asset — traditional health insurance — into a lifelong benefit with real wealth-building potential for consumers over and above any near-term risk management features. New approaches and mechanisms for payment have already emerged, but enormous gaps still exist between the supply and demand sides. Those gaps are where the opportunity lies for players who can bring to market new products and services that align the two sides. The consumer-centric offerings already appearing and those that have yet to emerge are more than cost-cutting tools or cynical antidotes to forced-choice HMOs. They're probably the country's last chance to preserve a largely private health care system.

Consumer-Centrism

Consumerism is not a new phenomenon in the $2.3 trillion U.S. health care sector. We've seen elements of it, such as direct-to-consumer drug advertising and independent health information sources like WebMD, emerging for more than 20 years. In the last couple of years, however, innovations like CDHPs, tiered drug benefits, and restricted insurance coverage have begun to take hold and are accelerating the retail shift. More than 13 million people, or 8 percent of the population covered by private insurance, are now insured by CDHPs, and the number has been growing rapidly since 2004. We expect CDHPs in the U.S. to reach the tipping point — generally defined as 15 percent penetration — within the next few years; once that happens, we'll see the entire market, including doctors, hospitals, drug companies, or device makers, respond with a more consumer-centric approach, or be left behind.

Informed decision making. Much of what is needed on the demand side is in place today or likely to emerge in the near term. CDHP enrollees offer an early glimpse of subtle changes in consumer atti-

tudes in a retail market. Our study shows that CDHP enrollees are more likely to be aware of price and quality differences in products and services and more likely to have seen information and shop around; they're more likely to ask for prices up front, more likely to negotiate prices, and more willing to trade convenience for lower prices. They're also more likely to segment health offerings: For those products or services viewed as commodities, they will pick lower-cost alternatives, choosing, for example, generics over branded prescription drugs. They are more likely to plan ahead when making health care decisions and to invest dollars now to prevent problems later.

But there's much more to be done to get to a true retail marketplace. Payors and suppliers need a more finely tuned segmentation of customers to reflect their varying degrees of sophistication, needs, values, and financial wherewithal. A retail market requires more comprehensive, trustworthy information and education for consumers. And it needs new kinds of products and services that align with consumer needs to help them become sophisticated and engaged shoppers.

Consumer segmentation in the health care industry is rudimentary at best. For the most part, payors and suppliers treat consumers as a monolith, with basically the same needs, values, and levels of sophistication. But consumers in any retail market are not homogeneous, and in health care, distinct segments are emerging with different value drivers and varying comfort levels in navigating an increasingly complex health care market. The industry's current one-size-fits-all approach to product design, consumer education, and service simply does not work. Clearly, structural change is in order.

Here we can look to innovations in other retail markets for inspiration. (See Exhibit 2.) Leaders in a number of industries leverage sophisticated segmentation capabilities to understand unmet needs across a customer's life cycle, and then use a strong brand,

along with product and service innovations, to drive new demand. Marriott International has 10 hotel brands, each with its own business model that appeals to a different segment of the market. Perhaps the most sophisticated consumer segmentation can be found in the financial-services industry, especially in retirement programs. One lesson from the transition to defined-contribution retirement plans is that different customers want help to do different things. Some place greater value on their time than on lowest cost, and therefore hire financial planners to help them prepare for retirement. A self-service segment of the market wants to manage its own assets. And some consumers can't or won't manage a lot of complexity, so they are best served by automatic enrollment in 401(k) programs, annuities, and life-cycle funds.

Exhibit 2: **Lessons Learned from Consumer-Centric Industries**

Build business around consumer segments, not around products.
Monetize consumer relationships based on deep insights into needs and lifetime value.
Tailor sales/marketing to consumer needs and preferences: "right message, right place, right time."
Use personalization and customization to drive consumer loyalty and lock-in.
Align business operations to ensure consistency across key touch points.
Link offerings with other partners/brands to increase value proposition.

Source: Booz Allen Hamilton

Another insight from retail segmentation is that different consumers need different types of information and education. There are plenty of decision-support resources available and emerging, but they're not necessarily in formats consumers can easily use, in a language they understand, or from sources they trust. Our study and our experience suggest that consumers have the least confidence in certain traditional sources of information. Of these, health plans provoke the least skepticism, followed by employers, then the government, and finally pharmaceutical companies. Consumers want better communication with their physicians and more user-friendly independent sources, such as *Consumer Reports*. Those are a start,

but the most important step will be standardized metrics and the transparency they offer on cost, quality, and service. The U.S. government is trying to drive this kind of transparency, and has made some progress, particularly with quality measures, but efforts are nascent. We'll see real progress when consumers and employers join the government and leading private-sector payors in demanding this information.

Some interesting pilots show the direction in which the market for information is headed. Health plans are beginning to offer provider cost and quality data along with decision-support tools. In 2005, Aetna began testing tools that allow consumers to compare physicians on actual cost, so that they can gauge their out-of-pocket expenses. WellPoint has embarked on a pilot program at the suggestion of General Motors to provide complete comparative cost data for hospitals on "episodes of care." Patients on the GM health plan who are having their gallbladder removed, for instance, can get a cost estimate for every hospital-controlled element of that treatment, including tests, room and board, drugs, and other ancillary services. A growing class of niche players such as WebMD (with its purchase of Subimo) are evaluating hospitals and physicians using emerging quality measures, such as error rates and adherence to evidence-based medicine.

Long-term incentives for healthy living. Along with better information, consumers need stronger incentives to make smart long-term choices about their health. These incentives will come from product innovation — in particular, stronger linkages between employer-sponsored plans and Medicare. We still don't know whether CDHPs, for example, will encourage long-term behavior change as consumers become eligible for Medicare. The retail market requires incentives that lead consumers toward healthier behavior and toward better management of chronic diseases such as diabetes over both the short and long terms. That will mean aligning employer-

sponsored incentives with those in the Medicare program; for example, reducing Medicare contributions in exchange for demonstrated healthy behavior in the working years.

Behavioral incentives have already started to appear. In the U.S., Pitney Bowes has reduced co-payments for diabetes and asthma medications to encourage employees to follow their treatment regimens closely. Taking a page from successful innovations in South Africa, Definity Health has pioneered a "Rewards for Action" program that combines personalized health education with financial incentives tied to getting screenings, treatment, and other recommended care for chronic conditions. Wells Fargo is piloting this program and has already achieved promising early results.

A number of employers, including Safeway and Freddie Mac, are also finding success with wellness programs. Typical wellness programs feature free or low-cost health screenings and other sorts of preventive care, including flu shots. Some of these plans mandate that employees undergo health-risk assessments in order to get medical coverage. These programs pay off in better employee health and reduced costs for both employee and employer.

These pilots are a start, but the industry will need to experiment to find the right approach to providing tailored information and long-term incentives. The private sector can't do it alone; behavior changes must extend past the consumer's working life as he or she ages and moves onto the Medicare rolls. It's already apparent, however, that greater consumer engagement is in turn creating pressures for a different market structure from what we have today.

Reshaping the Supply Side

The supply side of health care significantly lags the demand side in the shift to a retail market. Health care providers have yet to put significant effort into establishing the enabling conditions that will accelerate that shift: transparency on quality, service, and price; new

channels and format innovations; and alignment of provider and consumer incentives.

Transparency and innovation. Consumers are still looking to physicians to provide the cost, quality, and service information they want, but physicians are not prepared to answer those needs. Our study shows that although most doctors believe that consumerism will have the greatest impact on their practices in the future, relatively few plan to alter the way they serve their patients or to share comprehensive cost and quality data. In a true retail market, suppliers who do not embrace the concept of standardized information on cost, quality, and service will be at a disadvantage. Not only do health care providers need to make the data available, but they need to use it when they refer their patients to hospitals or other physicians and when they evaluate treatment alternatives.

Standardized measures will enable consumers to pick and choose medical services and products based on the dimensions that matter most to them. We already see competition at the margin in the form of different value propositions. Among the new formats are MinuteClinics and RediClinics, which compete on price and convenience. They're spreading quickly across the country in high-traffic locations, such as workplaces and stores like CVS, Target, and Wal-Mart. Today these clinics deal with routine needs, like school physicals and sore throat treatment. In the future, they'll help manage the ongoing needs of patients with chronic conditions.

On a more personalized level, concierge care features doctors who oversee all aspects of a patient's health care, including advice and treatment, for a flat fee. Today, concierge care is a service mostly for the wealthy. In the future, it may address a broader range of patients; we'll probably see concierge offerings tailored to children, chronic-disease sufferers, the aged, and other populations for whom the service represents a reasonable value.

Hospitals, too, are devising new formats and products. Some

have developed specialties in complex diseases such as heart disease and cancer; greater volume in treating a specific disease often translates into enhanced efficiency and quality of care. Increasingly, the retail marketplace requires that hospitals rethink everything they do to focus tightly on the patient–customer. Hospitals must consider which services really need to be provided within their own walls; whether to relocate certain services, like diagnostic testing, to convenient settings in shopping malls or physicians' offices; whether to outsource their back-office and other functions, including aspects of radiology; and whether services should be bundled to provide soup-to-nuts care in such areas as obstetrics and orthopedics.

Michael E. Porter and Elizabeth Olmsted Teisberg promote that last scenario in their recent book, *Redefining Health Care: Creating Value-Based Competition on Results* (Harvard Business School Press, 2006; see "Does Health Care Have a Future?" by Joe Flower and David G. Knott, Ph.D., *s+b,* Spring 2007), and we agree it is the best path forward. Porter and Teisberg are correct to note that what little competition there is today on the supply side is at the wrong level: It's health plan competing against health plan, or hospital against hospital. Competition will work best for all when it takes place on the level of solutions to medical conditions, as in one knee-repair team or one diabetes-care team versus another. If and when that happens, we'll finally have true competition that gives consumers quality and value.

Advances in technology and connectivity. Enabling these changes will be advances in medical technology and health information technology (IT). Connectivity among providers is crucial, as is the ability to monitor and consult with patients from afar. The technology already exists to help monitor chronic conditions from home: Diabetics can test their blood sugar levels using a device that automatically sends the data to their physicians or a third-party monitoring service. Similar technology is being developed for distance

monitoring of asthma and cystic fibrosis. Cleveland Clinic now has an electronic second-opinion service on the Internet, as well as a comprehensive e-services product line that provides patients and non–Cleveland Clinic doctors access to an individual's electronic medical record and test results.

But additional investments in health IT and greater connectivity among providers will be needed to ease sharing of patient health information and enable consumers to better manage their own health. Leading providers have implemented electronic prescribing, electronic medical records, and clinical decision-support systems, but the market is still relatively unconnected — "islands of automation" exist. Connectivity among systems and between providers and patients is limited. Comprehensive interoperability among systems and players is a must for the retail market.

There has been progress on this front. Intel, Wal-Mart, and BP, among others, founded Dossia, a pathbreaking initiative to store digital health records for their employees in a data warehouse linking hospitals, doctors, and pharmacies. This program, now in pilot mode, could be the first step on the path toward giving patients access to their own health records in order to coordinate their own care. The big question here is whether consumers will actually trust employers to have access to their medical records.

Aligning supply-side incentives. In order for the supply side to better align with consumer needs, the right incentives must be in place. The incentives today for health care providers and other suppliers are simple: Get, keep, and grow your business. Health plans from the private and public sector alike squeeze doctors on reimbursement rates, driving some doctors to bump up the number of patients they see and the number of services they recommend. Furthermore, suppliers have no financial reason to provide patients with the advice and information they need.

Employers and health plans are exploring new payment schemes

with strong incentives geared toward providers. Some are experimenting with pay-for-performance programs. More than 150 such programs are in operation today in the U.S., and some have shown promising results. These programs, however, are in their infancy and lack the standardized performance measures, electronic medical records, and connectivity they need to be truly effective.

Strengthening the system's transparency, innovation, and incentives will reshape the health care value chain. Existing players will battle new entrants for market leadership roles and will have to reconsider the roles they do play. They'll need new capabilities and new ways of doing business. Players may need to move beyond care provision or drug manufacturing, for example, to assume a more advisory role, to help consumers align individual demand with supply-side options. Our survey indicates that consumers may be open to new offerings — for example, individualized care management programs and performance guarantees for prescription drugs.

New Intermediaries

The least-understood aspect of the retail health care market is the fledgling hybrid role that exists between supply and demand to help consumers navigate the complexities of health care. The players that have traditionally held intermediary roles — employers, government, and health plans — do not inspire trust in consumers, nor do they answer all the consumers' needs. The new intermediaries will identify consumer needs and steer the supply side to answer them. Further, they will catalyze change as suppliers' inadequacies become more obvious. Though they have barely started to take shape, these new intermediaries will be a potent force in determining which players succeed and which fail in a consumer-centric retail health care market.

We're already seeing entrants in this burgeoning space. AOL founder Steve Case brought Revolution Health to market in 2007,

after spending hundreds of millions on acquisitions, with an information/community portal, a network of RediClinics, a health concierge service, and a consumer-driven health insurance marketplace. Financial-services companies like Fidelity are also, as mentioned above, moving into this business. They will not be alone.

We see three important intermediary roles in the near future: market makers, solution providers, and health–wealth managers:

- **Market makers.** Every large market in the nation will need transparent, objective, and reliable information on pricing, quality, and service. Over the longer term, this arena may evolve to include such features as spot pricing, offering discounts for care at less busy times. Insurers already have skills and databases that they could leverage for such a play, but they will most likely need to partner with third parties that are viewed as more objective and trusted. Groups like the American Heart Association or the American Cancer Society could become market makers for disease information or a seal of approval.
- **Solution providers.** Solution providers are emerging to bring evidence-based treatments to consumers, especially to those with difficult, chronic, or expensive conditions. We can see the outlines of a "bundler" role: Instead of offering services à la carte for diseases like diabetes, providers could handle the entire treatment of a disease over a person's life. In *Redefining Health Care*, Porter and Teisberg recommend packaging best-of-breed treatments into an easily purchased bundle and then taking responsibility for the result, such as lower blood sugar levels or fewer ER visits. These players will be the masters of disease management, and it is possible to imagine some CDHPs requiring participation in such programs as a condition of continued enrollment. The space will offer some of the most interesting opportunities in the long term, especially for market-leading providers with exceptional skills and experience. Eventually, we

can see this role combine with that of the market maker.

- **Health–wealth managers.** Consumer-directed health care players have focused so far on simply managing health-asset transactions. But as CDHPs gain more traction, health savings accounts will combine with the larger world of wealth management to form an entirely new industry. Financial-services players are likely to dominate, but cobranded alliances with health plans could be powerful. Within this arena, customer service and product innovation — such as offerings that tie in disability and long-term-care insurance — will be critical for success. This convergence of health care benefits and broader financial services will potentially involve hundreds of billions of dollars and will spark new thinking about the nation's savings behavior and lifelong wealth creation and management.

At this early stage, it may be tempting to think that there will be one answer in each of these three arenas and that fast followers will be disadvantaged. A more likely scenario is that segmented plays will thrive, each catering to different demographics, diseases, life stages, and wealth levels. Still, the battle for critical intermediary positions will be intense — in part owing to the large financial opportunities, but also because the intermediary role gives suppliers critical access to target customers. How that pie will be divided is still up in the air, but it's clear it will be shared differently than it is today.

The Competitive Environment

As a market maker and an enabler of change, government plays a vital role in creating the right environment for a more transparent and competitive retail marketplace. But for that environment to function well, federal and state regulations and laws need to enable, not hinder, competition and innovation.

Many of the conditions that helped spark the latest health care

industry product innovations were put in place after the passage of the MMA in 2003. This bill and subsequent policy clarifications by the Internal Revenue Service allowed for the creation of portable and tax-advantaged CDHPs and HSAs. The legislation resembles the 1978 law that enabled the creation of 401(k) accounts.

The federal government, however, cannot reshape the marketplace on its own. Many of the current barriers to competition and product innovation exist at the state level. For the most part, unless employers are self-insured and therefore regulated under federal Employee Retirement Income Security Act (ERISA) employment laws, the states regulate health insurance. Most states mandate which benefits must be included in employer-sponsored insurance plans. These benefit mandates limit product innovation and make the cost of health insurance higher for those companies that are too small or that lack the know-how to self-insure. Employers cannot obtain a no-frills, high-deductible package.

Some states also oversee the construction or renovation of health care facilities, and even regulate the purchase of high-end medical technology, such as MRI scanners. Although the original intent was to ensure that any region's health needs were met and to prevent excess supply, the oversight process has become politicized. It tends to protect existing players' interests, discourage new entrants and innovations, and limit options for consumers, thus reducing competition.

Finally, state laws governing the licensing of clinical professionals also retard the development of new care-delivery models. Although some regulation is necessary to ensure safety, regulations often restrict tasks that other licensed clinicians can perform. For example, in some states, only licensed radiology technicians can perform certain diagnostic tests, even if nurses or others with related skills could be adequately trained to perform these activities as part of a team-based approach. Other state mandates governing staffing

ratios and minimum lengths of stay for certain procedures attempt to improve patient safety but also inhibit providers from improving the delivery of care while protecting the jobs of those who helped craft the regulations. For the health care market to more efficiently and more creatively meet the needs of consumers, these kinds of obstacles need to be lifted.

The Road Ahead

It's clear that the future of health care in the U.S. will be consumer-centric, but exactly how this will play out is still coming into focus. The evolving model will be influenced by a number of factors, including retail health experiments now unfolding in other countries, as well as by the experiences of other consumer-driven industries such as retailing and banking. What is certain is that the health care landscape is undergoing a profound alteration that will change the dynamics of all the industries connected to it.

The shifts will create enormous opportunities that will challenge and reward insurers, providers, product makers, intermediaries, and even new entrants. Virtually all of these opportunities are in new or significantly altered competitive spaces. And in each of these spaces are gaps that need to be filled in order to connect increasingly involved consumers with the right providers, in the right setting, at the right time, with the right services, at the right price. When that does happen, we'll see genuine competition that addresses the affordability crisis, increases coverage for the uninsured, and provides a sustainable private-sector solution for health care in the United States. ✚

Editor's Note

Also contributing to this article were Booz Allen Hamilton Vice President Danielle Rollmann, Principal Cindy Vanderlinde-Kopper, former Vice President Phil Lathrop, former Associate Bela Prasad, and former Consultant Jeffrey L. Hung.

This article was originally published in *strategy+business,* Spring 2007.

Health Meets Wealth

by Joni Bessler, Sanjay Saxena, M.D., and Susanne Leisy

DESPERATE FOR RELIEF from the growing burden of health care costs, employers have started shifting more of the responsibility for health decisions and financing onto employees. It is not yet certain where these moves will ultimately lead: which tests, procedures, treatments, and medications will actually be covered, and what percentage of them will be reimbursed. Forecasts range from the moderate — employers carving off noncore benefits and making dependent coverage an option, with employees bearing most of the cost — to the draconian, with dramatic cuts in benefits.

Employers and employees alike will need help navigating this evolution, and we believe the financial-services and health care industries will come together to answer the concerns of both groups. Indeed, we've already seen signs that this is happening, although the movement is still in its very early stages.

As the two industries converge, they can capitalize on at least three types of opportunities: technological integration, which could, for example, lead to credit cards that are embedded with the holder's electronic health record; new financial arrangements, such as collection services for doctors and other providers, including assumption of bad-debt risk; and unique blended products. Under the last category, we've already seen the emergence of consumer-directed health plans (CDHPs), which typically pair high-

deductible major medical policies with tax-advantaged health savings accounts (HSAs) or health reimbursement arrangements (HRAs). Over the long term, we expect to see the emergence of a whole new class of innovative products and services that bring the sophistication of financial planning to health care management, so that individuals will prepare for their future medical costs the way they now plan for their retirement expenses.

"Although it's impossible to predict exactly how the system will operate over the long run, we are looking at ways to foster simpler, secure transactions while allowing for real-time information exchanges," says Jay Gellert, CEO and president of Health Net. "We are focused on integrating the best of financial services and health care management to improve the health care experience."

How can the health–wealth industry players best approach this opportunity? The key lies in the framework of the financial planning life cycle, which has long driven the creation and marketing of consumer and business banking products. The four stages of that framework are transact (to enable purchases when income is low), borrow (to finance purchases), accumulate (to ensure long-term security), and protect (to pay now to avoid a big hit later). There's every reason to believe the framework can also be a useful guide to devising new classes of products that help consumers, employers, and health care providers manage, plan for, and finance their health-related expenses. The company that adapts that framework to the evolving needs of those groups will have a real strategic advantage in the emerging health–wealth environment.

The marriage of health care benefits and broader financial services carries the potential for new thinking about the nation's savings behavior and lifelong wealth creation and management. One index to the size of the opportunity is the savings behavior of employees presently enrolled in employer-sponsored high-deductible health plans (HDHPs) with HSAs. According to Aetna HealthFund 2005

data, individuals deposited an average of US$903 a year in their HSAs, most of it contributed by employers; 70.5 percent supplemented their employer's contribution with their own funds, adding an average of $1,280 a year. Aetna also found that the average HSA balance at the end of 2005 was $847. Similarly, WellPoint's Lumenos Consumer-Directed Health Plans found that among 66,819 employees enrolled after one year, 72.6 percent had an average of $940 in rollover funds in their HSAs; and of 25,659 employees enrolled after three years, 84.9 percent had an average of $1,382 in rollover funds.

Although CDHPs now cover just 8 percent of the privately insured population in the United States, that number doubled in each of the first three years the plans were in existence. If the percentage caps at 25 percent, as some observers suggest, the total amount of money in HSAs/HRAs could amount to as much as $14 billion (25 percent of the privately insured market of roughly 43 million accounts, which can cover two or more individuals, multiplied by $1,000). Extend that calculation over the 40 years of an individual's employment, factor in the growth of HSAs/HRAs, and you end up with an even more staggering sum of money.

The imperatives for both the financial-services industry and the health care industry to address the health–wealth gap will be overwhelming. Employers are clamoring for help; corporate executives tell us that covering health care costs is a paramount concern. For good reason: Goldman Sachs recently found that retiree health plans at U.S. companies among the S&P 500 are underfunded by almost $325 billion, compared with a shortfall of $80 billion in defined-benefit pension plans. Short of a significant change in public policy, it will be virtually impossible for the government to fill that gap.

The costs of sitting out the health–wealth convergence are high. We estimate that as much as 10 percent of a bank's net income could be at risk if both corporate and individual customers start seeking a one-stop shop. That could translate to a drop of $1 billion or more

in profits for a major bank. Increasingly, the edge will belong to the institution that can take on benefit plan design and administration, risk assumption, bridge financing, and other matters related to benefits, and integrate those with a broader range of private client and treasury management services.

"Convergence is where I believe the industry is going," says José Becquer, executive vice president of the health benefit services group at Wells Fargo. "I think it could have as much potential as 401(k)s."

Health care players will have to respond to the same set of dynamics to defend their core business and answer to the needs of the changing market. If they do not acknowledge the shift, the risks are considerable. Among the conceivable scenarios: Health plans could lose employers to other plans, along with an average of almost $4,500 in annual premiums per individual and more than $12,000 per family; they could lose the enrollees most likely to choose HDHPs and HSAs/HRAs, who tend to be younger and healthier. The health plans might then find themselves saddled with a disproportionate number of members with a greater need for health care services; they could be reduced over time to manufacturing indemnity/catastrophic coverage policies, which will increasingly become commodities. Or the market could move to ever-greater transparency with providers listing prices, obviating the health plans' proprietary network discounts.

For many health care and financial-services organizations, failure to meet the evolving needs of consumers and employers could provoke a fundamental transformation of core business models. For those players, it will be a question not of whether to get into the health–wealth arena, but of how and when.

Reframing Personal Finance

The health–wealth intersection is already taking shape. Players from each sector are experimenting with offerings that cross the bound-

ary between the two, such as reverse mortgages to finance nursing-home costs and arrangements that let individuals tap into their life insurance policies to cover medical costs. But the new health–wealth business will evolve and change shape for at least the next couple of decades, as the retail health care market coalesces and consumers take on more responsibility for their medical needs.

Understanding how an individual's health needs will inform his or her financial needs will reframe the way everyone — consumers, employers, providers, and the health–wealth industry — plans for the future. Employers have always covered most health expenses, but soon employees will have to weave health care into their financial planning. To answer the integrated need, traditional health and financial-services products will be bundled at each stage of the life cycle and, given that medical needs can be so unpredictable, they will have to accommodate great variability.

The financial-planning life cycle provides the real insight into how the new health–wealth arena might develop. For consumers, employers, and providers, the products will become more innovative over the next decade. We envision products that fall into classic financial-services life-cycle categories. Products for consumers at the stages described above might include:

Transact

- Debit cards for out-of-pocket payments, with rewards programs; these will eventually use algorithms to draw funds sequentially from multiple consumer accounts.
- Stored-value or credit cards embedded with electronic health records and plan information with network access, eliminating the need for claims processing.

Borrow

- Health plan–branded credit cards with rewards programs.

- Loans to cover out-of-pocket expenses and elective procedures, such as in vitro fertilization, cosmetic surgery, and laser eye surgery, using other assets — for example, a house or 529 education savings plan — as collateral.
- Nontraditional group insurance for such communities as church groups.

Accumulate

- Investment options for HSA/HRA funds, à la 401(k) plans.
- HSAs/HRAs that are combined with flexible spending accounts (FSAs) into portable lifetime tax savings vehicles.
- Tax-advantaged savings vehicles (like 529s for college) to save for such critical, largely unplanned needs as a heart transplant, with options for rollover and designation of beneficiaries.
- Consolidated savings vehicles for a broad spectrum of expenses, including education, health care, and child care.

Protect

- Supplemental risk products (e.g., gap insurance for non-covered services, especially experimental drugs and treatments).
- Melded health–retirement benefits packages.
- Multipurpose life-stage insurance that morphs over time from health insurance to long-term-care insurance to a death benefit.

For employers, additional product possibilities include ways to move health care liability off the balance sheet, more innovative cafeteria plans that combine financial services and health benefits, and protection against catastrophic employee expenses.

And for providers, we might see products that provide real-time full payment for services rendered (both consumer and health plan components) and that assume risk for bad debt; outsource all business activities, including payroll and benefits; and automate point-

of-service billing and collection with the ability to check a patient's spending against the remaining deductible in real time, and assign responsibility to the plan or consumer accordingly.

For employers, providers, and consumers, we'll see a heightened need for advice. They will need help with comprehensive planning and help in choosing the right plans and offerings from an increasingly complex menu. They will also need decision support tools that calculate costs and, eventually, quality of providers and procedures, and that factor health care needs into financial planning. For employers, we might someday see products that advise on everything from the best mix of retirement and health care benefits to explicit links between those benefits and productivity.

How and When to Play

Many players have started to address the needs highlighted by our framework. Most financial-services firms are taking a low-risk route into the health–wealth arena by repackaging their existing products and services. For example, JPMorgan Chase and others are marketing existing custodial accounts as HSAs/HRAs that tap into checking accounts, debit cards, interest-bearing deposits, and mutual funds. In addition, they are cobranding debit cards with health plans, offering transaction processing and providing credit for health care expenses. Among the more aggressive players today is Fidelity. Its new Health and Wealth group builds on the decision-making tools and provider ratings produced by its partners, WebMD and Health Dialog, to augment its core retirement planning with health advisory services.

There has also been movement on the health care side. UnitedHealthcare is actively pursuing an integrated offering through acquisition, organic business development, and strategic partnerships. UnitedHealthcare acquired CDHP specialist Definity Health, insurer Golden Rule, and IT solutions provider Claredi to

form its Exante Bank subsidiary, and partnered with MasterCard, Discover Card, and credit card processor TSYS. WellPoint is seeking an industrial bank charter to become a custodian and transaction processor for HSAs/HRAs. And the Blue Cross Blue Shield Association has already received federal approval to create a bank to administer HSAs/HRAs.

Many other players, however, are sitting out the early stages of the health–wealth convergence — and that's a mistake. With the retail market still fairly unformed, a measure of restraint is certainly prudent; we estimate that there's breathing room for the next five years. But the opportunities to capitalize on new business opportunities are growing even now.

For financial-services organizations, HSAs/HRAs and other products offer opportunities for new high-margin income streams; account and service fees; interchange fees; and net interest income from a spectrum of services, including borrowing and risk management. For the institution that offers a competitive individual insurance product, something that more and more consumers will have to buy for themselves, there's a huge opportunity to further cement retail relationships and lock in customers for life. And in dealing with providers, there's a particular need for services that address the heightened risks of bad debt and the increased administrative burden that the retail evolution will bring.

For health care, potential lies in new finance-related products and innovative lifelong insurance, supplemental high-deductible gap insurance, and savings products. With health plans offering such similar products and provider networks, the new offerings could be critical differentiators. And as more financial-services and health care organizations move to partner with one another, a health plan that manages its medical costs and demonstrably improves the health outcomes of its members will be all the more attractive to potential financial-services partners.

Although existing players in financial services and health care don't need to worry about new entrants with the soup-to-nuts offerings, they will probably need to defend themselves against niche players. We expect to see upstarts carve off high-margin health–wealth businesses, just as they've done in health care. For example, we foresee a role for independent aggregators that assemble packages of products and services tailored to particular consumer segments; eHealthInsurance has already moved in this direction, with a retail portal where consumers can compare and select health-plan coverage and get advice from licensed health insurance agents. Healthways and Matria are positioning themselves as health care support providers that can improve outcomes and reduce costs.

Getting There from Here

The hybrid industry we envision is still years away. It will develop in tandem with the growth of the retail environment. However, leaders in both industries can and should be asking themselves a series of questions:

- Are we going to play in this space, and can we afford not to?
- If we are going to play, what strengths can we capitalize on, and where are our gaps?
- Will our offerings be comprehensive or specialized?
- Given our company's historical strengths and weaknesses, how are we going to assemble our offerings? Will we join a network? Acquire? Make or buy?

It's vital to recognize that change is coming and to see its contours. Yet the evolution of the marketplace is already under way, and smart players will begin forming their health–wealth strategies now, before it's too late. +

Editor's Note

This article was originally published in *strategy+business,* Summer 2007.

Connecting Research and Practice

by Robin Portman, Kevin Vigilante, M.D., and Brenda Ecken

IN SEATTLE AND Baltimore, two university-based cancer research teams have competed for years. Isolated from each other, the teams have spent countless hours creating similar software tools intended to mine a variety of genomes for clues to cancer. Now they've each had a breakthrough: The two teams have separately discovered the same gene. But they've given the gene slightly different names, and they correlate it with different functions — one team associates it with the efficacy of a cancer drug, the other sees it as a marker for certain types of brain cancer. Linking these two observations would provide valuable insights for the drug-development process, but barriers to communication, both technical and cultural, prevent that crucial connection from being made.

Another story is unfolding in a small suburb outside Buffalo, N.Y. A cancer patient named William B. visits his oncologist to treat the stage 4 glioma that has invaded the left side of his brain. William asks his Buffalo-based doctor if he is aware of any experimental drugs or research programs that might help him. The physician, already two hours behind schedule with 20 more patients to see before running back to the hospital, stares back at William blankly, says he will look into it, and scribbles a reminder in the paper chart. Of course he never follows up. So William never learns about the clinical trials at an academic medical center in Cleveland, where a

doctor — we'll call her Dr. Kelly — is struggling to recruit a sufficient number of glioma patients to test the efficacy of a new investigational drug.

These two stories represent the rule, rather than the exception, in biomedical research. In the first case, expensive redundancy drives up the cost of taxpayer-funded basic research while information silos undermine the potential for scientific collaboration. In the second case, a patient is denied treatment that might have been beneficial while inefficiencies in recruiting research subjects drive up the cost of a clinical trial designed to test a promising new compound.

The second story also illustrates a particularly compelling challenge: how to build stronger links between medical research and medical practice. Doctors and their patients desperately need information on the latest therapeutic breakthroughs and clinical trials, but "bench scientists" and research physicians who run clinical trials rarely interact with community physicians. And yet the care that a patient receives represents the end of a long value chain to which each of these individuals, and many others, make important contributions.

Finally, both stories help explain the current stagnation in new drug research. The pharmaceutical industry and the National Institutes of Health (NIH) have each more than doubled their investments in research and development over the last decade. Yet despite this dramatic increase in spending, the number of new chemical compounds submitted to the U.S. Food and Drug Administration (FDA) annually has declined from approximately 45 in 1996 to approximately 25 in 2003, according to a March 2004 FDA report titled *Innovation/Stagnation: Challenge and Opportunity on the Critical Path to New Medical Products.* The shortfall in biomedical research won't be cured by infusions of cash; we've tried that. What is required is a fundamental change in the way research is conducted.

Collaboration and Communities

The National Cancer Institute (NCI), the lead federal agency for cancer research, is confronting these challenges through a paradigm-changing program called the Cancer Biomedical Informatics Grid, or caBIG. Launched by the NCI's Center for Bioinformatics in 2003, caBIG aspires to create an informatics network that connects cancer researchers (and eventually all researchers) nationwide — a World Wide Web of cancer research.

Using common standards and an open source approach (one that encourages participants to join in designing and expanding the system), caBIG links data, research tools, scientists, and organizations in a virtual research environment. The goal is to create a voluntary forum in which the sharing of data produces research synergies and speeds the process of discovery. The most significant challenges are not technical, but cultural. For scientists to achieve the vision, former competitors will need to collaborate.

Today, research teams sequester precious data as they race to publish their findings in peer-reviewed journals. Those who publish first, and most often, are rewarded with grants, promotions, and tenure. Although competition certainly encourages productivity, the stagnation in discovery of new chemical compounds suggests that the benefits of isolated research do not outweigh the costs. Therefore, in addition to making information sharing technically feasible, the caBIG designers are seeking to prompt a dramatic cultural change in the cancer research community to make collaboration more likely. This will not occur through goodwill alone; incentives such as grant awards, academic promotion, and tenure are needed to break down the "information silos" that separated those researchers in Seattle and Baltimore.

Now consider the case of William B., the patient in the second story, who is grappling with brain cancer — and a communication breakdown as well, though he doesn't know it. The inability to

match William in Buffalo with Dr. Kelly in Cleveland is both tragic and expensive. Currently, it costs an average of more than US$900 million to bring a new drug to market, with an average clinical trial budget of $162 million. Approximately 16 percent of the clinical trial budget goes to patient enrollment: finding people like William whose diseases qualify them for participation in the experiments. Pharmaceutical company executives have ranked patient enrollment as the process with the greatest opportunity for improvement in their clinical research enterprise. This perspective is supported by the CenterWatch "State of the Clinical Trials Industry" report for 2005, which estimates that more than half of the delays in clinical trials can be attributed to patient recruitment problems.

Why is it so hard to find patients for trials? Because physicians don't have the information they need for referrals. Only one-third of patients learn about clinical trials from their primary-care or specialty-care physicians. That's hardly surprising, given the results of another CenterWatch study — "Will Physicians Refer Their Patients into Clinical Trials?" (March 2004) — in which 58 percent of physicians said they don't refer their patients because they lack information on the treatment or trial, followed by 30 percent who said they didn't have enough time to learn about and evaluate the trial, and 28 percent who said they were unsure where to refer their patients.

Intelligent Health Care Records

Imagine a different scenario for William. Instead of a paper chart, his physician uses an "intelligent" electronic health record (EHR) that links to a research infrastructure network such as caBIG. Smart applications scan William's health data and note that he is 53 years old, that his liver and kidney functions are normal, and that his CAT scan reveals a brain mass measuring 4 centimeters in diameter. The biopsy report in the EHR confirms the diagnosis of glioma. The computer then scans a list of current clinical trials in NCI's

databases, whittles it down to those relevant to glioma, and further examines inclusion and exclusion criteria for those trials — factors such as tumor size, duration of previous treatment, age, and kidney and liver function. The EHR recognizes that William may be eligible for at least three clinical trials that are still recruiting patients, including Dr. Kelly's. A message appears on the computer screen in William's physician's office, stating William may be eligible for clinical trials at one or more NCI-designated cancer research centers. William's physician clicks on one of the links, and a user-friendly recruitment process has begun.

Except for one or two trips to Cleveland, William receives his care and experimental medications from his current oncologist near Buffalo. Reports regarding tumor response and side effects of the treatment are automatically extracted from the EHR and sent to Dr. Kelly and the study nurse coordinator in Cleveland for review. Not only have William and Dr. Kelly been matched at low cost and almost without friction, but the trial is being monitored remotely without the need for paper files.

The benefits of building this type of intelligence into the health care records system are obvious. Patients get access to the newest treatments; researchers can conduct trials more efficiently; and those who pay for these trials — largely the pharmaceutical industry and the taxpayers supporting NIH — can expect better results at a lower cost. In addition, the available pool of cancer patients for trial recruitment is richer and more easily identified.

Linking community oncologists with the research enterprise will enable them to become true customers of research, giving them ready access to the rapidly expanding body of medical understanding that can improve their practice. It has been well documented that there are disparities between new research evidence, particularly that involving effective medical interventions, and the general state of clinical practice. Outdated therapies persist despite new

findings; advances in medical knowledge and treatment capabilities can take years to reach patients.

To be sure, physicians are supposed to base their practice on the evidence of new research studies, as published in the academic peer-reviewed literature. But there are thousands of journals publishing many thousands of articles each year. It is almost impossible for busy clinicians to keep up with the abundance of new information coming from the scientific community. Physicians are often influenced more by the practice habits of local colleagues in their social networks than by the evidence-based literature. So although evidence-based medicine is the foundation of sound judgment and quality care, there are significant challenges to infusing this evidence into clinical practice.

If practitioners were linked with research networks and cutting-edge evidence, patients (and their insurers) could be reassured that they were receiving the most appropriate care for their medical condition. Evidence-based medicine would also reduce variability in practice and contribute to improvements in the quality of care in other ways. Physicians are more likely to refer patients to clinical trials when research results will be readily shared with the referring physicians.

All of this is technically feasible, and yet, like so many other forms of innovative infrastructure, a "research web" connecting laboratories to community physicians remains a vision for the future. But progress toward this goal is accelerating. In 2004, President George W. Bush called for the widespread adoption of electronic health records by 2014. He also created the Office of the National Coordinator for Health Information Technology (ONCHIT) in an effort to jump-start the vision. ONCHIT seeks to modify existing conceptual frameworks to describe two important concepts that would facilitate the achievement of the president's goals — a national health information network (NHIN) and regional health information organizations (RHIOs). The NHIN can be thought of as a

national infrastructure designed to support connectivity and information flow among health care organizations, professionals, and citizens across the country. RHIOs are the local governance structures that foster EHR adoption and interoperability in communities.

Currently, RHIOs tend to focus on connecting community doctors, hospitals, labs, and pharmacies in the service of everyday care. Their role in supporting research is often overlooked.

But it wouldn't take much to extend the RHIO concept to include the creation of "research RHIOs." These local organizations could focus on connecting the network of community caregivers with the network of cancer researchers, using caBIG as their medium. (Of course, these projects would have to be careful to safeguard the privacy of patients and would need to comply with privacy rules mandated by the U.S. government's 1996 Health Information Portability and Accountability Act.)

Personalized Medicine

Although decreasing friction in research and clinical information flow is important today, it will become even more important as care becomes increasingly customized to an individual's genetic characteristics. Today we create drugs for populations that are differentiated mostly by the disease or condition they happen to have — arthritis, hypertension, elevated cholesterol, non-Hodgkin's lymphoma. For often unclear reasons, drugs work better for some than others and produce side effects that vary from person to person. This variability is probably due in some cases to subtle differences in genetic characteristics of the individuals taking these drugs, and, in the case of cancer patients, genetic differences of the cancer tissue. As research reveals the underlying genetic differences that drive the different responses to the same drugs, compounds that are tailored to the genetic characteristics of individuals will be created.

This will improve drug efficacy and safety while creating chal-

lenges in clinical trial recruitment. In the future, our fictional oncologist may not be looking merely for glioma patients with normal liver and kidney function. She may be looking for glioma patients with certain genetic characteristics. Instead of choosing from the universe of existing glioma patients, which is already a relatively small population, she will be looking for a subset, say the 20 percent of glioma patients with certain genetic characteristics that correlate with a higher response rate to the drug she is testing.

In this environment it will be vital to use national networks to identify patients for clinical trials. Without such networks, the costs of recruitment will continue to climb and will become increasingly disproportionate to the size of the market for which a given drug is relevant. In some cases, the costs of development will become prohibitive and the drug will not be produced. In other cases, the cost of the drug will be significantly higher than it otherwise would have been, and will create added financial stress for organizations already buckling under the pressures of health care costs. The promise of personalized medicine will not be fully realized until information networks link researchers with community caregivers and the patients they serve.

Weak Ties, Strong Science

In the process of linking scientists and practitioners through an informatics network, not only is the transfer of information being facilitated, but vital social ties between individuals and social systems that previously had no reliable links are being created. Such "weak links," or casual and informal social ties and connections, are easily fostered by electronic networks and have been shown to be effective in exposing people to types of information they are unlikely to encounter in their usual social environments.

For example, sociologist Mark Granovetter studied job referrals in the early 1970s and found that attractive opportunities were

unlikely to come from close friends and coworkers, who travel in the same social circles. By linking researchers in different "ivory tower institutions" with one another, and then linking them with community-based medical caregivers "in the trenches," this new network will facilitate a web of weak social ties.

This should be the broader objective of any new research-oriented electronic network: to enable the sharing of information and knowledge across different disciplines and thus create a more robust network in the research and practitioner communities. Although the Internet has provided a way for highly motivated actors to forge weak social ties with one another, there can be time and effort barriers that make it difficult for beleaguered physicians like William's doctor to identify researchers doing highly specialized clinical trials. In other cases, as with the research teams in Seattle and Baltimore, information systems that speak different scientific dialects prevent scientists in different social networks from sharing information with one another. Bringing these communities together in the service of science and patients promises to provide synergies in both domains that could not have otherwise been achieved.

William was looking for a simple answer to a simple question: How can science help me live longer? His doctor probably knew that somewhere in the large social system of medical researchers, someone could answer that question, but, unfortunately, he was not aware of a mechanism to find that person. Properly constructed information tools and connections could have provided that answer and linked the researcher with the practitioner. Such episodes of interdisciplinary social linkage can be life-changing for people like William, and over the long term can accelerate the pace of basic scientific discovery. ✚

Editor's Note

This article was originally published in *strategy+business,* Spring 2006.

Drug Firms in the New Retail Marketplace: When Consumers Choose for Themselves

by Rick Edmunds, Charley Beever, and Danielle Rollmann

WITH MORE CONSUMERS taking on significant first-dollar cost responsibility, the U.S. health care system is undergoing a fundamental shift from a wholesale to a retail model. Although there is reasonable debate on the pace of growth and future penetration of consumer-directed health plans (CDHPs), we see these products as part of a larger pharmaceutical-market transformation that, as shown by a 2007 survey conducted by Booz Allen Hamilton, should not be ignored. (See Survey Methodology, page 57.)

The challenge for drug companies, as well as the opportunity, lies in the differences in how the two principal decision makers in this new retail world — consumers and physicians — respond to the new patient economics. Patients will increasingly shop for value, looking for more information on the cost and quality of health products and services. They appear to view products, including pharmaceuticals, as less differentiated than services, and they are willing to disregard physicians' recommendations if they can save even small amounts of money. Paradoxically, these patients appear to expect their doctors to play more of an advisory role in coming years — to provide more comprehensive cost and quality information and to educate them on treatment options.

Our research suggests that physicians, in contrast, do not see their role changing dramatically in the future. Some intend to

expand the services they offer and provide more cost and quality information, but gaps exist between what patients expect and what physicians are planning to provide.

Overall, the greater cost burden on patients is likely to hurt branded pharmaceuticals, as consumers increasingly choose generic drugs or lower-cost brands. Even so, we see real opportunities for pharmaceutical companies to enhance their competitive positioning and capture greater value in this transformed retail marketplace. To do so, they will need to ensure that they work effectively with the full set of information channels to which consumers will turn, that they strengthen their value proposition to physicians by helping physicians meet the needs of the new financially focused consumers, and that they better engage the more involved consumer.

Consumerism Gaining Momentum

Patients began acting like retail consumers even before CDHPs and other high-deductible health plans (HDHPs) grew in popularity. When customer co-pays for branded products began rising significantly, patients noticed. They responded to financial incentives and became more cost-conscious and engaged in product selection. The growth of CDHPs and HDHPs has only accelerated this trend, and it will continue as these plans become more widely adopted.

And they will be widely adopted. Discussions with leading employers across the United States suggest that "consumerism" is viewed as a critical strategy in containing health care costs and improving the quality of care.

Even physicians, who are often cited as the last to embrace major change in the health care system, expect that consumer-directed health care will be one of the most significant trends affecting their practices. About half of the 600 physicians we surveyed selected consumer-directed health care as the trend that would have the most significant impact on their business over the next three to

five years, more than selected pay-for-performance or evidence-based medicine initiatives.

Our research suggests that consumers in CDHPs and HDHPs are significantly more invested, literally and figuratively, in decisions about their health care than are those enrolled in conventional health plans such as preferred provider organizations (PPOs) or health maintenance organizations (HMOs). About half of the nearly 3,000 consumers surveyed, including those in conventional plans, are dissatisfied with the level of information on cost and quality that is currently available for prescription drugs, primary-care and specialist physicians, and other health care products and services.

This dissatisfaction is even more pronounced among consumers with greater cost responsibility. Although 49 percent of patients enrolled in conventional plans rate themselves as not at all or only somewhat satisfied with information available on the cost of prescription drugs, this increases to 60 percent for patients with greater cost responsibility. Patients express similar frustrations with the availability of data on quality. Forty-three percent of patients in conventional plans are not at all or only somewhat satisfied with information on the quality of prescription drugs, compared with 52 percent of patients in both CDHPs and HDHPs.

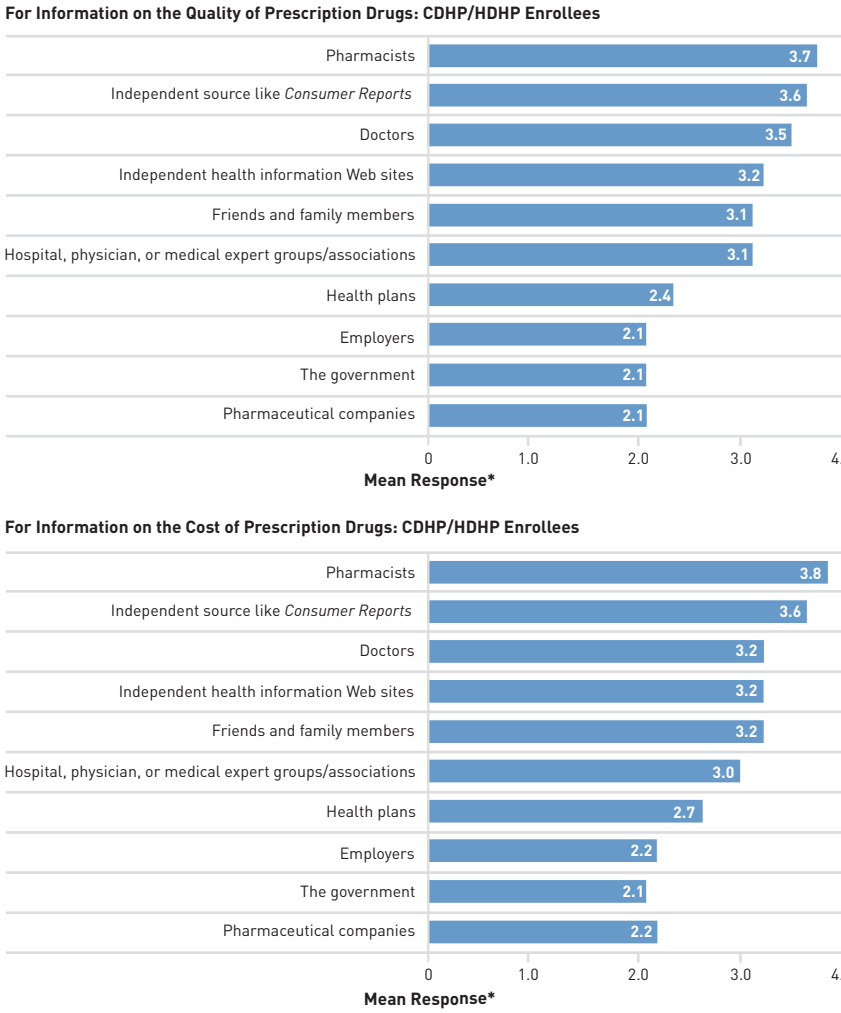
As they become eager for more robust health information, retail health consumers have begun to form views on which sources they trust most. For cost and quality information about prescription drugs, both physicians and pharmacists are at the top of consumers' list of most trusted sources. This finding suggests that both of these stakeholders could play an enhanced advisory role by providing more health information to consumers. Patients with greater cost responsibility also have high trust in independent sources like *Consumer Reports* for both cost and quality data on prescription drugs. (See Exhibit 1.)

It is interesting to note that physicians have a very different view

on the "best" sources of drug information. They rank doctors and pharmacists as the best sources for information on drug quality, but for cost data they look to pharmacists and health plans.

With more incentives to seek value for their health care dollar,

Exhibit 1: **The Sources Consumers Trust on Prescription Drugs**



***** On a scale of 1–5 where 1 = "Do not trust at all" and 5 = "Trust completely."

Source: Booz Allen Hamilton Consumer Survey 2007

patients with more cost responsibility are more aware of variability in price and quality than are those enrolled in conventional plans. Approximately three-quarters of all CDHP and HDHP members see a fair to great amount of variation in the cost of drugs prescribed for the same condition, compared with 64 percent in conventional plans. Unfortunately for pharmaceutical companies, patients perceive far less difference in the quality than they do in the price of these prescription drugs. (See Exhibit 2.)

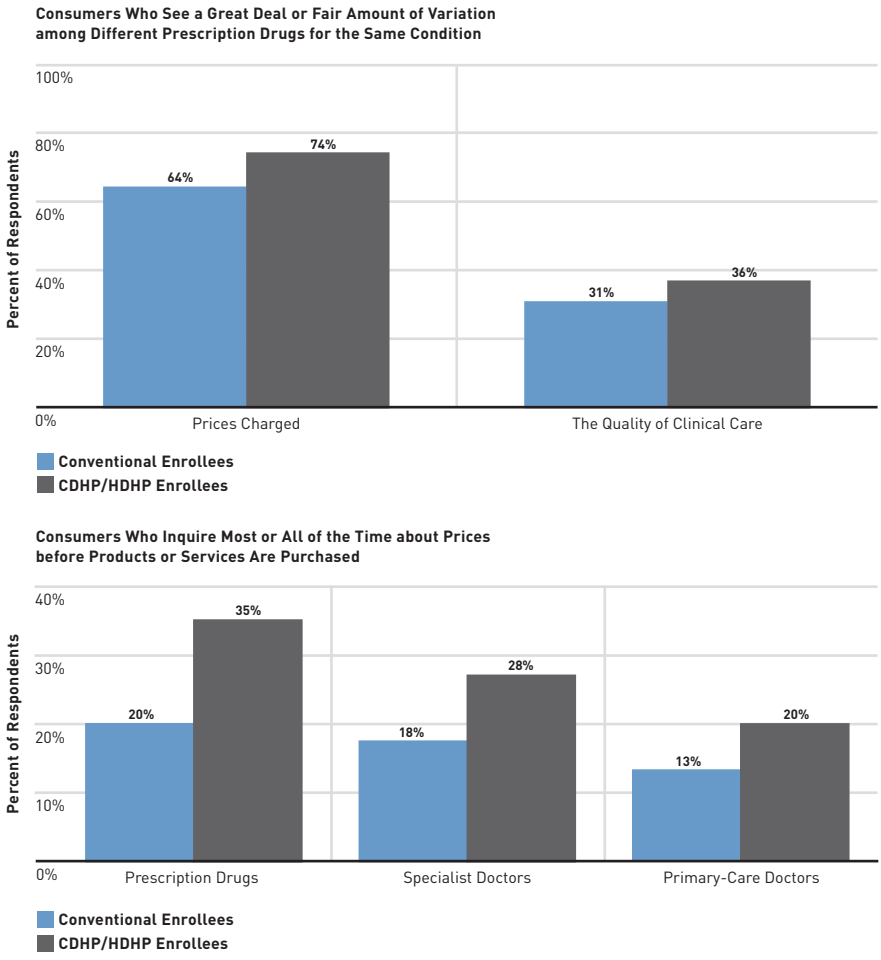
These cost-sensitive patients are also more likely to ask about costs up front, to try to negotiate prices for health care products and services, and to substitute lower-cost options for items they view as less differentiated. Although relatively few patients do these things regularly, it is interesting again to note the discrepancy in behavior between patients in conventional health plans and those with more cost responsibility. In our survey, 68 percent of patients with CDHPs/HDHPs stated they were very or extremely likely to use a generic drug instead of a brand-name prescription, compared with 62 percent of those in conventional plans. Thirty-five percent of patients enrolled in these first-dollar plans ask health care providers about the cost of prescription drugs most or all of the time, whereas only 20 percent of patients in conventional plans do so.

The Changing Role of Physicians

Although physicians recognize the significance of consumer-directed health care, they do not yet understand how it will affect their patients and practices. The majority of physicians expect some positive benefits from consumerism; for example, increased patient attention to health care costs, quality, and service. They also expect a reduction in health care utilization, both unnecessary and necessary. (See Exhibit 3.)

Physicians do not, however, expect consumer-directed health care to lead to dramatic changes in other areas, such as increased

Exhibit 2: **Customer Perceptions of Cost and Quality Variability across Health Products and Services**

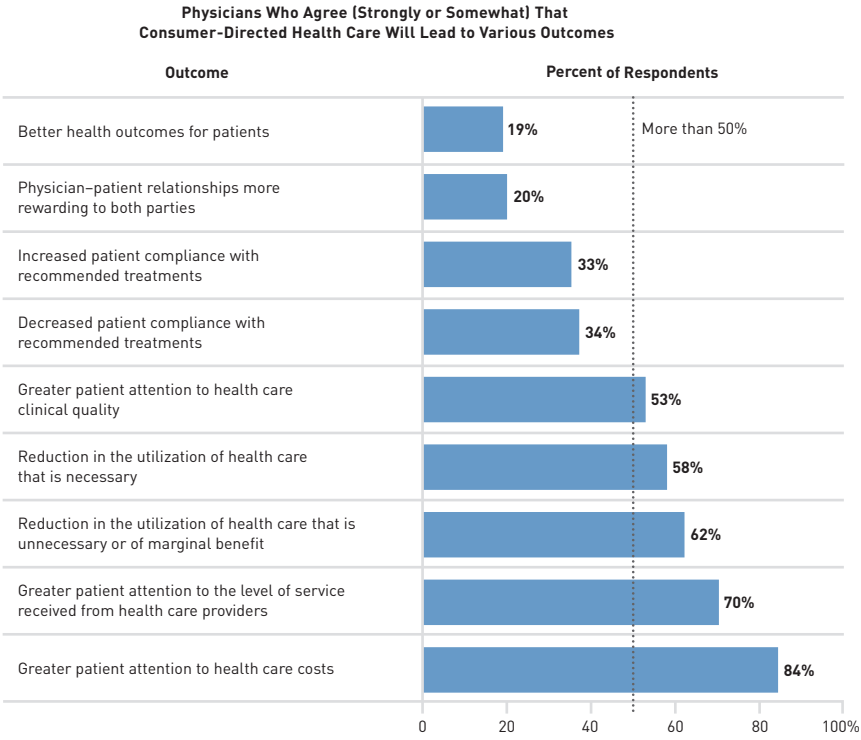


Source: Booz Allen Hamilton Consumer Survey 2007

patient compliance with recommended treatments, more rewarding physician-patient relationships, or better clinical outcomes.

In the future, physicians will need to adapt their behavior and offerings to meet the needs of more engaged consumers with greater cost responsibilities. The physicians we surveyed expect to compete for these patients on price, documented clinical quality, convenience, and personalization of service. Although they expect

Exhibit 3: **Physicians Have Mixed Views about Consumer-Directed Health Care**



Source: Booz Allen Hamilton Physician Survey 2007

increased competition, physicians are not sure what form it will take or how they should respond.

When asked what effect consumer-directed health care will have on the prices they charge, almost 30 percent of physicians were not sure. An additional 36 percent thought it would not affect the prices they charge for health care services, 26 percent thought it would force them to lower prices, and 10 percent thought it would allow them to raise prices.

The situation will be challenging: Physicians will need to work with consumers who have more choices and who turn to them as a trusted source of information, but who will not always follow their recommendations. For example, more than half of those consumers

surveyed with CDHPs and HDHPs indicated they would select a different medication than the one recommended by their doctor for savings of less than US$30 per month.

And therein lies a key opportunity for pharmaceutical companies to address some of the problems consumer-directed health care will cause them: helping physicians give the new financially focused patients what they need. According to our survey results, physicians are not prepared to give patients what they say they want. For instance, nearly two-thirds of consumers with greater cost responsibility reported that they would find data on expected out-of-pocket costs for a medical product or service extremely or very useful. However, only about half of physicians either supply this information now or plan to in the next two to three years. Similarly, nearly two-thirds of consumers indicated that quality information pertaining to a provider's medical error/safety rate for a specific type of treatment would be useful. In this case, only 35 percent of all physicians surveyed either currently make available comprehensive quality data (including safety record, patient satisfaction ratings, and physician quality ratings) or plan to do so routinely in the next two to three years.

Opportunities to Help Physicians with Their Patients

With increasing substitution of generic drugs for branded, the early days of consumer-directed health care have been challenging for pharmaceutical companies. But so far drug firms have not taken a truly consumer-oriented approach. By enhancing their research capabilities, pharmaceutical companies can address rising levels of consumer engagement and focus on value. This will not only help them tailor their product lines, marketing approaches, and reimbursement strategies to better fit with consumers' needs, it will also provide the basic data and tools to enable physicians to help patients with individual, value-based decision making and treatment trade-

offs. For example, how will different market segments of physicians and patients make trade-offs between the cost and convenience of oral insulin, when available, and those of injectable insulin? How do different segments of multiple sclerosis patients balance their health goals and lifestyle against the different dosing schedules, efficacy, and tolerability of the various treatments?

Understand how consumers form perceptions of drug value. The first step in taking a consumer-oriented approach is to extend consumer research programs beyond exploration of the effectiveness of individual products, including research into how consumers form perceptions of product value and any connected financial or service support. The consumers we surveyed clearly associated different values with different product characterizations. For example, although 68 percent of CDHP/HDHP enrollees indicated they were very or extremely likely to use a generic prescription instead of a brand-name prescription, only 26 percent intended to substitute an "older" prescription drug for a "newer" drug, even though generics are almost by definition "older drugs." In addition, many individuals in consumer-directed plans expressed interest in a variety of programs as guarantees of product performance, even when the programs involved paying a small or moderate premium.

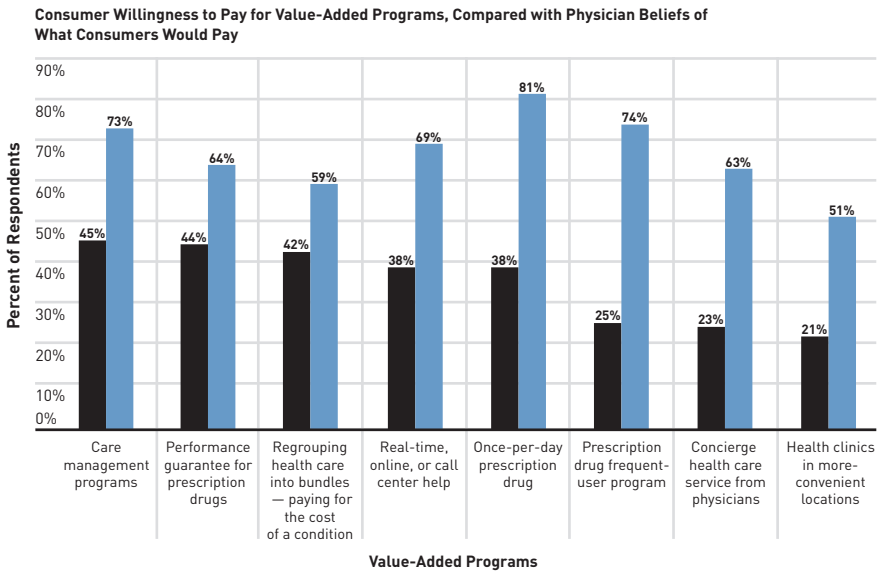
A more nuanced understanding of consumer needs will allow pharmaceutical companies to increase value-added services; define, develop, and market product attributes targeted specifically at patients with greater cost responsibility; and tailor their clinical trial design and post-marketing studies to support the differentiation and value-added nature of their products. (See Exhibit 4.)

Improve physician counseling support. In a retail-oriented pharmaceutical world, drug companies need to show doctors how to satisfy patient needs, because the gap between what customers want and what physicians know how to provide is widening. By supporting physicians in their ability to address this otherwise unmet patient

need for more health information, pharmaceutical companies can achieve competitive advantages through greater physician trust, appreciation, and access.

For example, pharmaceutical companies can help physicians with "decision-support" approaches as they help individual patients weigh differences in the price versus differences in the product/service attributes of various products. In dealing with immediate demands, companies can help physicians and their patients better understand the financial implications of prescribing drugs that are on and off formulary (the payor's list of preferred drugs) — in many cases today, physicians are unaware of the magnitude of co-pay differences associated with drugs' formulary status. More importantly, pharmaceutical companies can develop and provide support tools to

Exhibit 4: **Real Potential to Compete through Value-Added Programs**



Sources: Booz Allen Hamilton Consumer Survey 2007; Booz Allen Hamilton Physician Survey 2007

physicians to help them discuss patient options for alternative treatments and products. These decision-support tools — tailored for individual patient situations — can help physicians and patients weigh the near-term and long-term costs, risks, and value of even small differences in efficacy.

More broadly, companies can help educate physicians on the range of CDHP designs and how they fit with the needs of different patient groups. This will enable the physicians to provide information to their patients on the medical and clinical priorities that should factor into spending on health and their coverage choices.

Influence benefit plan design and patient incentives. Along a different path, pharmaceutical companies need to ensure that individual patients — especially those at higher risk — are provided appropriate financial support and information. As consumers take on more cost responsibility, physicians are becoming increasingly concerned that patients may forgo recommended treatments and get sicker. Drug companies need to take an additional step to move payors from one-size-fits-all reimbursement schemes to co-payment structures customized to the needs of individual patients.

Influencing benefit plan design is not a pipe dream. A few employers and health plans are already piloting such a value-based concept of benefits design. Aetna's ActiveHealth unit, for example, works with employers to leverage claims and other clinical data to identify patients at risk for certain chronic conditions, such as hypertension and diabetes. It then alters the co-pay structure for certain classes of both branded and generic drugs for targeted individuals. With some focus on the issue, drug companies could come up with additional insights to share with payors to aid them in these efforts and protect the premium for branded drugs.

Invest in educating other consumer advisors, including pharmacists. Drug companies also need to invest in — among other types of consumer advisors — pharmacists, whose value is clear to both physi-

Survey Methodology

The data in this article comes from the first study of consumerism in health care focused on parallel surveys of consumers and physicians. The surveys sought to understand the extent to which greater cost responsibility through high-deductible health plans (HDHPs) and consumer-directed health plans (CDHPs) has begun to change both consumer and physician behavior and to what extent each stakeholder is prepared for a retail health care market. The research supplements historical studies that have focused on projecting growth of CDHPs or assessing consumer satisfaction or behavior associated with these new plan designs.

The survey was conducted online within the United States by Harris Interactive on behalf of Booz Allen Hamilton between June and August 2006 with 2,969 consumers between the ages of 18 and 64 enrolled in private insurance plans (1,620 in conventional plans, 1,051 in HDHPs, and 298 in CDHPs) and with 600 physicians (200 primary-care doctors and 400 specialists). To reflect the populations under study, the consumer data was weighted by age, sex, education, income, race, and insurance plan type; the physician data was weighted by age, sex, region, and specialty. Harris Interactive used its standard score weighting to adjust for respondents' propensity to be online. The survey results were published in the spring of 2007.

cians and patients. As a source of information, pharmacists were the only group that achieved a high level of support from both consumers and physicians. In other studies, the Asheville Project in North Carolina being among the best known, pharmacists have also proven to be effective partners in helping patients understand and more actively manage their chronic conditions.

Given that physicians may be less willing or less prepared to work with consumers to assess quality/cost information and that both patients and doctors trust pharmacists to provide this information, pharmaceutical companies need to ensure that pharmacists have the latest information on their products' performance, that they understand the relative value of their products, and that they support appropriate utilization of the products by consumers. In addition, pharmaceutical companies will need to actively monitor the emergence of any new, independent consumer-oriented information channels and ensure that those channels reflect an accurate understanding of the total value of pharmaceuticals.

Underlying each of these tactics is a single basic market change: As they pay for an ever-larger share of their health care expenses, consumers will make more of the decisions once left to physicians. Unless they have the tools and understanding to choose differently, they will increasingly select the lower-cost options — putting further pressure on pharmaceutical prices. The business mandate: Drug companies must provide those tools not only to consumers themselves but to the advisors — physicians and pharmacists, in particular — to whom patients turn for counsel. +

Editor's Note

A version of this article was originally published as "Competing in a Retail Health Consumer Marketplace" in *In Vivo: The Business & Medicine Report*, April 2007.

The Future of Provider Payment

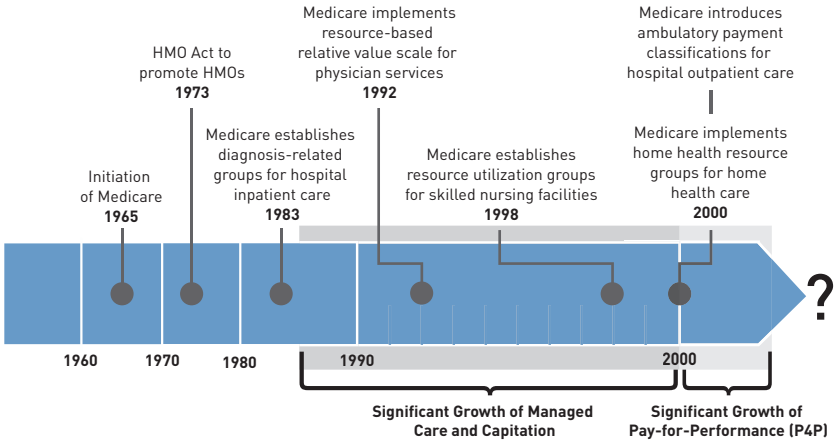
by Joyjit Saha Choudhury, Kristine Martin Anderson, and Karl Kellner

OVER THE LAST several decades, public and private payors have experimented with a variety of payment mechanisms to manage rising premiums and underlying medical costs. Although there were early successes, such as Medicare's introduction of diagnosis-related group (DRG) payments for inpatient stays, costs have continued to climb at unsustainable rates. The number of uninsured and underinsured individuals, meanwhile, has also continued to rise, turning health care into a major political issue. We believe that the right set of payment reforms could address many of the systemic problems — including misuse, underuse, and overuse of medical care — and lead to net cost reductions of 15 to 25 percent.

To manage costs, the health care industry is focusing primarily on demand-side levers, such as consumer-driven health plans and cost shifting within conventional plans. But demand-side levers are not enough. The industry requires dramatic restructuring on the supply side to promote innovation and competition. Consumers will not change their behavior until they can choose from a range of differentiated provider value propositions that balance cost, quality, and service. History has shown that provider payment is a key lever for prompting supply-side change in the U.S. health care system — practice follows payment. (See Exhibit 1.)

As momentum builds for change, there's broad agreement that

Exhibit 1: **Time Line of Major Payment Changes in the U.S. Health Care System**



Source: Centers for Medicare & Medicaid Services, Institute of Medicine, Booz Allen Hamilton

the current fee-for-service system has failed because it often rewards providers for activity and complexity but not necessarily for the most appropriate care. Industry players — health insurance plans, employers, the government, and other stakeholders — accept that reform is warranted but are deeply divided on what shape that reform should take and how we should get there. There are two major schools of thought: The "incremental reformers" want to leverage the fee-for-service model that has evolved over decades into the mainstay of our current system, while the "fundamental reformers" want to revolutionize the underlying system to become more outcome focused and market oriented.

Four Viable Models and One Preferred Path

We've identified four promising models for reforming the payment system but believe that one solution in particular — evidence-based, bundled case rates — offers the most promise. An increasingly retail-oriented market may embrace each of these models or combinations of them to encourage payment innovation. Although the

path forward is not entirely clear, it is obvious that a collaborative effort across players is necessary if we are to remodel the nation's health care payment system.

1. Pay-for-performance. Much of the emphasis in payment reform is currently focused on pay-for-performance (P4P) programs, which offer incentives for improvements in the process of providing care. Because there are already more than 150 employer- and payor-sponsored P4P programs in place and nearly 20 percent of doctors in group practice have pay linked to quality performance measures (according to a January 2007 study released by the Center for Studying Health System Change), this approach appeals most to incremental reformers. It promotes a gradual shift in provider behavior, relying on financial incentives to drive changes in provider performance. Even fundamental reformers tend to see P4P as an important early step toward a total system transformation because it opens a dialogue between providers and purchasers of health care, and it begins to reward providers for the quality rather than the quantity of services.

Although P4P is certainly a move toward delivering higher-quality health care, its incremental nature cannot deliver the kind of transformational improvements in quality and efficiency needed for fundamental reform. The limitations stem in part from the structure of P4P programs themselves, which are built on the inherently flawed fee-for-service reimbursement system. They also carry a number of risks, particularly for providers. Under P4P, providers take on a greater administrative burden and put a greater portion of their income at risk, which could affect both their take-home pay and their access to capital. P4P can also create incentives for providers to focus on improving their scores for a subset of patients, which could lead them to spend disproportionate energy "teaching to the test" rather than improving outcomes for all patients.

The impact of P4P on quality is another unknown. We lack

well-developed evidence-based guidelines with associated metrics, along with mature systems of data collection, analysis, and dissemination. Few programs have been evaluated scientifically, and the results are mixed. Only six of 17 programs examined by the National Academy of Sciences' Institute of Medicine in 2006 exhibited "methodological strength," and a recent RAND report found "no studies demonstrating a relationship between P4P and improved performance in the hospital setting." Until we have comprehensive scientific measures combined with a robust data collection and monitoring process, we cannot know the true impact of P4P on quality.

Furthermore, according to a 2006 Congressional Research Service report, "There is little evidence that pay-for-performance programs save money in the long run, and they could actually increase health care expenditures." Once again, the problem is inadequate metrics. Most evidence-based metrics currently available target underused resources; very few target overused or misused resources. For a P4P program to lower costs, it needs to include measures of efficiency and also tackle the regional variations in care practices and outcomes. Such metrics will likely need to cross silos of care and to evaluate outcomes from a patient's perspective.

Although P4P has its limitations, we believe that the first generation of programs has proved worthwhile, because it underscores the urgent need to define and measure value. Having taken the initial steps in developing P4P programs, we now need to drive payment from fee-for-service through pay-for-performance to more transformational models.

2. An eBay for health care. A more transformational approach to realigning incentives for providers would be the creation of a system resembling the market-making function of eBay, where consumers find trustworthy information comparing the cost and quality of different providers and then use that system to schedule an appointment with the preferred provider for a specified service.

At first the concept would probably apply only to commodity services, such as laboratory tests or X-rays. Eventually the eBay model, which is best suited for elective or discretionary procedures, could be used to pay for more sophisticated services, such as colonoscopies. We're already seeing how market dynamics are affecting the price, quality, and availability of services typically not covered by medical insurance, such as plastic surgery. In that area, providers now compete in what is essentially a free market.

There are drawbacks to this model. One major obstacle is that much of what could potentially be sold in an eBay-type health care marketplace has not yet been "productized" into discreet bundles of services that competing providers could "bid" to conduct for consumers. Ideally, health services would be bundled into solutions that address consumer health problems. Without the appropriate bundling of services into product offerings, the lack of clarity in what is being bought and sold would undermine the effectiveness of an eBay-style auction model. Furthermore, even once health care services have been integrated into products, widely accepted definitions and metrics would be important not only for cost but also for quality and service in order to allow providers to compete on the basis of different value propositions. The appropriateness of these metrics and the accuracy of measuring provider performance against them, would be critical prerequisites to fostering support for this model, both for consumers who are looking to purchase such services and for providers who are interested in competing to offer them. Finally, although in theory greater transparency often leads to increased competition and value in many industries, in health care it is unclear whether it will lead providers to innovate and increase affordability, quality, and service. (Indeed, there is anecdotal evidence from early experiments in transparency of providers raising their rates to match higher priced providers in a given region rather than increasing competition.) All of these challenges can potentially

be addressed over time, but the current state of evolution of the health care industry makes the immediate applicability of an eBay-type model problematic.

3. Results-based payment. In a pure results-based system, providers could be paid to maintain and improve the health of patients, without regard to whether those patients are chronically ill, in need of acute care, or perfectly healthy. This model is likely to be controversial, however, because it hinges on the development of widely agreed-upon health care outcome metrics — no simple task. It would also require complex new risk adjustment mechanisms, new attribution models, and methods to track patient adherence to treatment plans.

The Centers for Medicare & Medicaid Services (CMS) is taking preliminary steps in this direction by disallowing payment for the treatment of certain hospital-acquired infections and complications beginning with October 2008 discharges. In the future, CMS may consider paying providers on the basis of their ability to maintain or improve the health status of a patient population, divided into appropriate patient risk segments. Such a program design would help alleviate the negative consequences of treating the very ill.

This model promises to meet with significant resistance from providers. The problem isn't just the lack of accepted metrics. It's that providers know that their control over outcomes is limited; treatment success, especially with chronic conditions, often relies heavily on the behavior of patients themselves. In addition, desired outcomes are difficult to define for different patient populations. But some providers and suppliers are moving forward on their own. In Danville, Pa., for example, Geisinger Health System is now offering a 30-day warranty on cardiac surgery; in the United Kingdom, Johnson & Johnson offers a money-back guarantee to the National Health System on its cancer drug Velcade.

A system based solely on results could also raise politically sen-

sitive questions about fairness and access to health care. If a results-driven system identifies the providers that get the best results, those providers might become so valued they could charge fees that would effectively shut out all but the wealthiest consumers. Moreover, it is unlikely that the providers that get the best results would have the capacity to treat a significantly higher number of patients.

To successfully implement this model, health plans would have to partner with other players to develop outcome metrics and sophisticated risk adjustment formulas that would account for such factors as comorbid conditions (the effect of all ailments afflicting the patient other than the primary disease) and statistical errors in measurement. Plans would need to monitor the system constantly for unintended consequences, including the danger that providers could be penalized for treating sicker populations. They would also need to conduct wholesale redesigns of their benefit plans, tailoring them to results-oriented treatment.

4. Evidence-based bundled case rates. The model that we believe carries the greatest power to transform the system relies on evidence-based bundled case rates. Under this system, a team of medical providers would be paid for providing care to a certain patient risk segment — people afflicted with heart disease or diabetes, for example — based on guidelines with documented success in a clinical setting. The guidelines would spell out the appropriate mix of health services over a particular period of time or an episode of care tailored to the patient's needs. The services would then be valued at fair local market rates, and quality measurement would ensure compliance with the guidelines, providing added incentives for high performance.

The power of this model is that it could theoretically be applied to a wide range of health care services, particularly those involving the management of chronic conditions, which account for the majority of all health care spending. This model could also be used for acute episodes like hip replacements, where diagnosis, treatment,

and follow-up care could all be covered under one bundled case rate. This approach has captured the imagination of some of the leading thinkers in health care, among them Michael Porter of Harvard Business School, who notes that this bundling approach provides the critical prerequisite to improved transparency and smarter consumer choices — the fundamentals of a true retail marketplace.

The model's reach, however, will depend on the evolution of evidence-based medicine (EBM), the movement to apply uniform standards of scientific measurement to medical practice. Given that EBM cannot cover the entire universe of health care conditions in the future, the model cannot cover all health care services. However, by 2016, experts predict EBM could cover 50 to 75 percent of all health care delivery. If the health care system started moving in a serious way toward evidence-based bundled case rates today, we estimate cost savings on a net basis of 10 to 15 percent by 2016.

This approach is still taking shape, as the industry tests ways to demonstrate quality. But it's already clear that certain factors will determine success. We see promise in evidence-based bundled case rates that cover patients' treatment through an acute phase of illness and an entire continuum of care, including pre- and post-hospitalization, an approach that Medicare has been testing with large physician groups since 2005. For example, bundled rates could cover not only a stroke patient's physician and hospital fees, but also the costs of physical therapy or nursing home care. One other critical success factor is neutrality in treatment sites — balancing the need for provider accountability in managing each patient's care with consumers' clear preference for flexibility in choosing their providers. Forcing care toward rigid delivery networks that are static for all diseases and all patients ties providers' hands and limits patients' choice. Patients balked at their lack of choice in the era of managed care. In today's more consumer-driven health care market, it would be all the more untenable.

Another critical success factor is establishing a single provider to take responsibility for coordinating medical care with the authority to make treatment decisions in consultation with the provider care team. This lead provider could also be responsible administratively for the allocation of payments to the provider care team. Prometheus Payment Inc., an independent nonprofit group aimed at reforming the health care payment system, is in the process of developing evidence-based case rates. A coalition of health care stakeholders, including the American Hospital Association, Bridges to Excellence, and the BlueCross BlueShield Association, is involved in the Prometheus effort.

Providers in this model would be free to take a more flexible, holistic approach to patient care. In the past we have seen physicians come up with simple and effective innovations driven by payment models with similar case-based characteristics. In many cases, these providers were capitated — that is, they were paid a fixed amount for each patient — so they had incentives to ensure that their patients remained healthy. For example, in low-income neighborhoods where stores typically stocked only white bread, some doctors used flexible spending authority to supply whole-grain bread to diabetic patients. For asthma patients, some doctors provided air conditioners to prevent expensive emergency room visits or hospitalizations. With a more holistic approach to patient care, evidence-based bundled case rates carry the promise of cutting back on overuse of the health care system and correcting underuse that can lead to higher costs in the long run.

The limitations to this model are the lack of evidence-based medicine; providers' inexperience in setting risk-adjusted case rates; and the scarcity of "episodes of care" methodologies that are based on expected, rather than delivered, care. Currently, EBM covers only about 25 percent of total medical costs, according to one industry estimate. Some providers may fear that bundled case rates

will shift an increasing amount of insurance risk onto their practices. To win provider buy-in for this type of reform plan, it is essential that payors and regulators address this issue and virtually eliminate that risk when setting case rates.

Specialists are likely to balk at the bundled case rates model because it resembles the capitation approach of managed care and will thus threaten their revenues. But there are three major differences between bundled case rates as we envision it and capitation: (1) the rates will be evidence-based, rather than determined arbitrarily or by negotiation, and thus will cover all necessary services and diminish access and underuse problems (though such problems may not be eliminated); (2) the rates will typically span all providers responsible for a patient's care; and (3) there will be an "out clause" that gives consumers flexibility in choosing providers. Whether specialists grow to like the model or not, it will appeal to integrated health systems, multi-specialty groups, and primary-care physicians and other providers who are oriented toward holistic treatment.

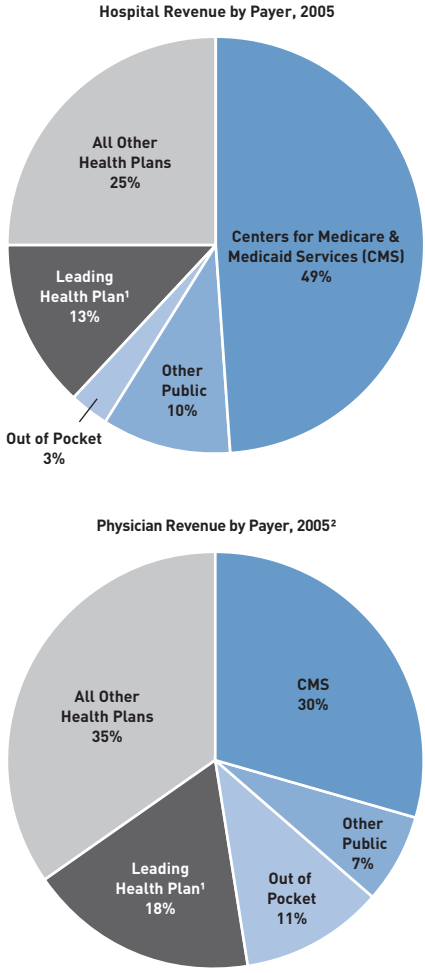
Finally, the system will require a complex payment formula that will necessitate new systems and infrastructure. To enact this model, health plans will have to actively partner with other organizations to develop targeted EBM and appropriate bundled case rates.

Collaboration Is a Must

Implementing any of these payment models will be complicated and politically difficult. Health plans, employers, consumers, providers, and government will all be sensitive to different aspects of each payment system but nonetheless will need to work together at some level to achieve meaningful progress. The key is to use payment reform to reduce or eliminate the misuse, underuse, and overuse of medical services that are driving up the cost of health care.

Although it is unlikely that any single health plan can drive national payment reform, there is one agency that must take part if

Exhibit 2: **No Single Health Plan Can Drive Change**



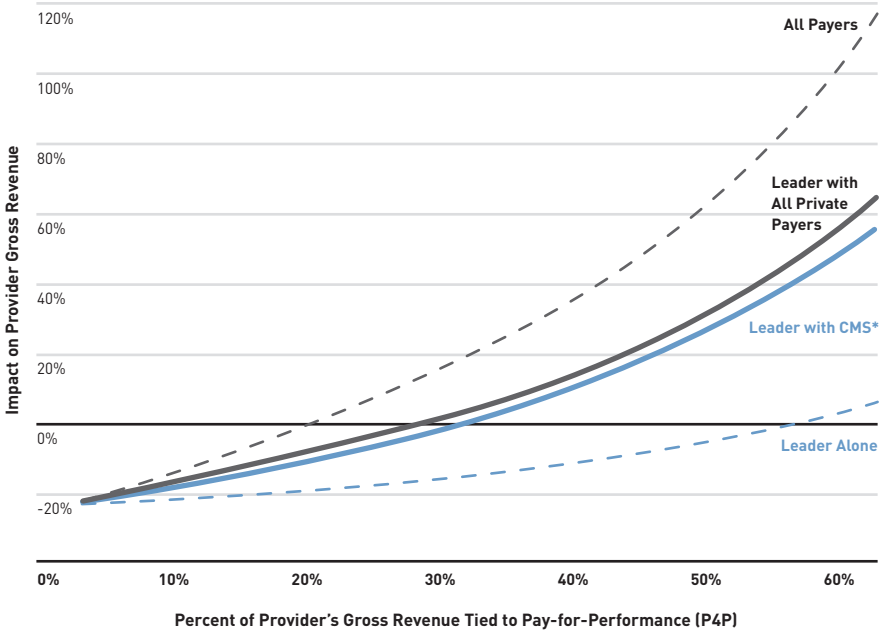
¹ Assumed that the leading health plan is a Blue plan with 35% of the commercial market share
² Does not total 100% due to rounding

Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group; Booz Allen Hamilton

payment reform is to succeed: CMS, the nation's largest single payor. (See Exhibit 2.) CMS provides about 30 percent of physician revenue and almost 50 percent of hospital revenue. Even leading local commercial insurers, those that claim up to a 35 percent share of their markets, typically account for only 13 percent of total hospital revenue and 18 percent of total physician revenue. If a payor decided to push through a pay-for-performance model that would be transformational, rather than incremental in its impact, on its own, it would have to pay about 50 to 60 percent of provider revenue through bonuses or incentive programs — far more than these programs currently pay — to make up for providers' likely loss in revenue. (See Exhibit 3.)

Put more starkly, a payor that decides to go it alone by attempting a P4P program with transformative intent without collaborating with other payors could be setting itself up for disaster. That payor would have to pay for the incentives on its own, and those incentives would have to offset the revenue that providers lose

Exhibit 3: **Impact of Mature P4P Scenarios on Provider Gross Revenue — Physician Example**



*Centers for Medicare and Medicaid Services

Source: American Medical Association; Medical Group Management Association; Booz Allen Hamilton

by changing their care practices to reduce overuse and misuse, or the providers would likely refuse to treat patients insured by that payor to avoid a negative balance sheet. Meanwhile, the providers' improved care practices would benefit all payors in terms of reduced health care costs, thereby creating a free-rider problem. On the other hand, if all payors collaborate on a P4P program with transformative intent, they would each put less into a bonus program to make up for the likely loss in provider income. This would allow cost growth to be slowed without an immediate and drastic drop in provider income. Also, because all payors would contribute to the provider bonus program, no one payor would be disproportionately disadvantaged on costs.

At the urging of Congress, CMS has already taken steps to

explore future payment models and seems open to collaborating with the private sector, as long as providers volunteer to participate. Pilot programs will speed learning, test reforms, and move the public and private sectors toward reform. A coordinated policy approach in Washington could hasten the work necessary to build the analytic underpinnings supporting new payment models. CMS could work with leading health plans and their local providers to design pilots and support them through demonstrations and waivers. MedPAC, the independent Medicare Payment Advisory Commission, could work to identify and recommend changes to Medicare payment legislation with strategies emerging from the pilots. Congress would enable the process with legislation and funds.

Individual health plans could have an important impact, too, but they should first determine how payment reform fits their corporate strategy, their near-term demands, and local market conditions that dictate the level of difficulty in introducing new payment schemes. For more than a generation, steep increases in health care costs have spurred cyclical attempts to remake the system. A sense of urgency is mounting again as employers face unsustainable increases in their health care premiums and government health plans slip closer to insolvency.

At the same time, we're seeing a growing emphasis on the consumer side of the health care equation. The provider-payment side of that equation needs to keep pace in order to trigger transformational change in care delivery. Tweaks won't be enough. We need major change to the current payment scheme. Only with real reform, including new payment models, will our health care system be able to provide care that is safe, effective, efficient, and patient-centered at affordable prices. ✚

Editor's Note

This article was originally published in 2007.

Informatics as a Competitive Advantage for Health Plans

by Gil Irwin, Kristine Martin Anderson, Giri Rao, and Rahul Rosha

POWERFUL, EMERGENT MARKET forces are spurring most U.S. health plan organizations to make deep investments in a rapidly evolving approach that should help them compete more effectively. That approach — informatics — is the systematic leverage of health information assets to help benefit plans better understand business risks, evaluate the performance of plans and providers, identify the need for new offerings, and assist consumers in making informed choices about their health care. Employers and governments increasingly regard robust informatics capabilities as a requirement in their plan purchasing decisions. But buyer beware — although informatics delivers a clear and compelling business case for investment, executing a cost-effective informatics strategy takes careful planning.

Rising operating costs and medical costs, increased market competition, a nascent consumer movement, and the need to support pay-for-performance initiatives are the primary forces leading health plans to informatics. The health plans' traditional strengths, such as broad networks and provider discounts, along with their efforts to shift costs and decision-making responsibility to consumers, are giving way to focused competition — at the level of specific diseases and conditions — squarely aimed at lowering costs and improving the quality of outcomes. Health plans are abandoning broad-based approaches in favor of a more targeted methodol-

ogy pinpointing segment-based offerings, focused medical management, tiered provider relationships, and informed care choices for members. Utilization management efforts, for example, are more likely to focus on diminishing problematic physician practices while encouraging practices that are known to be cost-effective and of high quality.

As a result, the need for reliable, actionable information is more critical than ever before — not just for health plans' decision makers, but for consumers and employers as well.

Increasingly, health plan members will seek data they can trust to support their personal choice in selecting a provider and medical treatments on the basis of cost–quality trade-offs. Although plan data often yields the most complete information on the cost of health care services over an episode of care, proprietary research conducted jointly by Booz Allen Hamilton and Harris Interactive suggests that consumers don't see health plans as the most trusted source and therefore don't look to plans for this information. This gap between the availability of data and the extent to which it is sought out presents health plans with an enormous opportunity. By leveraging informatics and working with other industry stakeholders, plans can begin building relationships with consumers to provide information critical to supporting informed choice. This information will become increasingly valuable as the health care industry evolves into a retail model.

Likewise, among employers, the need for fast, detailed health plan and provider performance information has become essential for proactive change and cost management. With ever more information and intermediary competitors entering an already competitive health care market, increased emphasis on cost containment and efficient administration is the norm. Informatics answers employers' needs for business decision support, transparency, and accountability.

Value Drivers and Benefits

Informatics has proven to be a powerful competitive differentiator in many transaction-intensive industries. In the casino industry, for example, Harrah's leads its competitors in understanding the behaviors and preferences of customers thanks to its use of informatics in targeting customer satisfaction. Every business decision, whether choice of location, personalized promotion, or funding allocation, is based on this approach, and it is delivering big benefits for the gaming giant.

Informatics has also delivered on its promise in the financial-services industry. Capital One's enterprise-wide commitment to informatics as a lens into customer behavior is given credit for the company's sustained profitability. In 2007, the firm had more than 500 information analysts in operations functions and more than 300 in marketing.

Our experience and our research into how leading health plans are leveraging informatics suggests the potential for similar success. The chief advantages of informatics are improved health care outcomes, reduced costs, enhanced revenues, improved member targeting, a stronger customer value proposition, increased operating margins, and improved competitiveness in an era of performance measurement and demands for transparency. Improving quality while reducing cost remains the main focus for most health plans, but industry leaders are beginning to leverage informatics to drive product and service innovation and increase cross-selling opportunities, which in turn lead to additional revenue as well as lower attrition among new services. (See Exhibit 1.)

Our work with leading health plans suggests that informatics can reduce costs across varied management and administrative functions, including provider pricing and performance, claims leakage (miscalculation of benefits due to fraud or other causes), medical costs, provider network management, billing, and fraud detection.

Exhibit 1: **Key Drivers of Value Capture**

	Enhanced Revenues	Reduced Care-Related Costs	Increased Operating Margins	Reduced Administrative Costs
Value Drivers	• Development and sale of new products • Development and sale of new services • Increased cross-sell	• Trend management • Provider performance management • Provider pricing management • Member-centric management • Claims leakage	• Product portfolio management • Customer portfolio management • Strategic pricing	• Rating and underwriting • Product development • Sales and marketing • Enrollment and billing • Provider network management • Care management • Claims administration • Information technology • Finance and accounting
Expected Benefits	• 10–12% increase in new revenues from priced services • 10–30% reduction in attrition from new services	• 2–3% reduction in medical costs • $5–$20 reduction in total per-member/per-month costs • 1–1.5% reduction in care costs from fraud detection • 10–12% improved outcomes via informed decision making and compliance	• 50 to 100 basis-point improvement from shifting out of less-profitable products • 50 to 100 basis-point improvement from shifting out of less-profitable customers • 0.5%–1.0% improvement from better pricing	• 15–20% reduction in rating and underwriting costs • 10–18% reduction in care management and provider network management costs • 10–15% reduction in enrollment, billing, claims, and IT costs

Source: Booz Allen Hamilton

It can also enhance operating margins by providing critical data that enables health plan decision makers to identify product and portfolio management strategies and strategic pricing models. Still other streamlining opportunities exist in sales and marketing, product development, finance, and accounting functions.

Finally, informatics provides the basis for the transparency of health care quality and cost that has become a national mandate. The president, Congress, and an increasing percentage of the nation's governors and employers have mandated that payors share provider performance information with their members. Public programs and private plans are being encouraged to work with health care providers to establish quality and cost measurement methods that are fair and understandable. These, in turn, are designed to be used by consumers as they begin to make informed provider buying decisions. A number of recent "transparency pilots" around the country are now in place.

Required Capabilities

A broad set of capabilities and best practices must be in place before a health plan can begin to capture the full potential of informatics. (See Exhibit 2.) The core competencies necessary for informatics success may be viewed as a tripod, in which all three legs are necessary for the whole to stand up.

The first leg is alignment of the informatics strategy with organizational goals and strengths. The strategy must deliver a distinctive value proposition reflecting an organization's market presence and customer base. Sustained value capture is possible only where

Exhibit 2: **Health Plan Informatics Best Practices**

Best Practices Attributes	Health Plan Informatics Best Practices
Strategic Focus and Commitment	• Alignment of the informatics strategy with business strategy and selection of the appropriate strategic posture • Focused senior management advocacy • Investments used for competitive differentiation or optimization of the business system, not me-too investments
Informatics as a Center of Excellence	• Analytic resources centralized, or established as a shared service, to maximize scale and leverage expertise • Effective integrative mechanisms (e.g., governance and co-location) to drive alignment • Critical mass of analytical, financial, and clinical expertise (e.g., biostatisticians, epidemiologists)
High Information Orientation/Analytical Sophistication	• Analytical, fact-based decision making • Use of sophisticated predictive modeling and optimization techniques • Information transparency and proactive orientation to information use
High-Quality Data	• Incremental approach to acquiring, cleansing, and integrating data. Selective incorporation of clinical data (outcomes, lab values); acquisition of appropriate level of granularity at point of capture (e.g., rendering physician, member vs. subscriber) • Best practice information management practices (e.g., standard taxonomy, data ownership)
Agile, Integrated Information Architecture	• Access to integrated enterprise data, minimizing integration points across systems • Appropriate use of extract, transform, load, enterprise information integration architectures for access to real-time operational data where required • Open-standards development, extensive leverage of standard commercial off-the-shelf software and middleware • Minimal number of business intelligence tools across the enterprise

Source: Booz Allen Hamilton

information and insight align with business goals to deliver a unique and compelling customer benefit.

The second leg is an organization's commitment to deep analytical capabilities as a driver for its business decisions. The organization must have a culture in place that understands and values the power of informatics and data mining in decision making. Also, it must allow unimpeded information flow across functions, disciplines, and management layers such that the entire organization makes business decisions via a single, uniform set of indicators and metrics.

The third leg is enabling capabilities — the technology and tools that allow for access to high-quality, reliable data. This requires common books of record across claims, members, and providers. It also requires that these repositories be augmented with additional critical data elements, including prescriptions, medical test results, episodes of care, and normative values. Moreover, to implement these capabilities cost-effectively, plans must put in place foundational technologies, including extract, transform, and load processes (ETLs), service-oriented architectures, middleware integration layers, and an IT organization construct that makes these common business services possible. We find that purchasers are increasingly demanding sophisticated plan information as evidence of a plan's value.

A typical purchaser might request the following informatics capabilities:

- Integration of external pharmacy data
- Integration of external lab data
- Integration of external radiology data
- Integration of external hospital data
- Integration and interoperability of data across the delivery system
- Interoperability of electronic medical record (EMR)/ personal health record (PHR) data
- Condition-specific or episode-based cost and quality search

capabilities for provider-specific services
- Procedure search with average cost per service
- Procedure search with regional cost per service
- Procedure search with provider-specific cost per service
- Condition-specific search with average cost per service
- Condition-specific search with regional (metropolitan statistical area, county, or zip code) cost per service.

Implementing and perfecting these core capabilities — the three legs of the tripod — yields an organization whose character, architecture, and operational processes provide a fertile and cost-effective environment for informatics.

A Phased Implementation

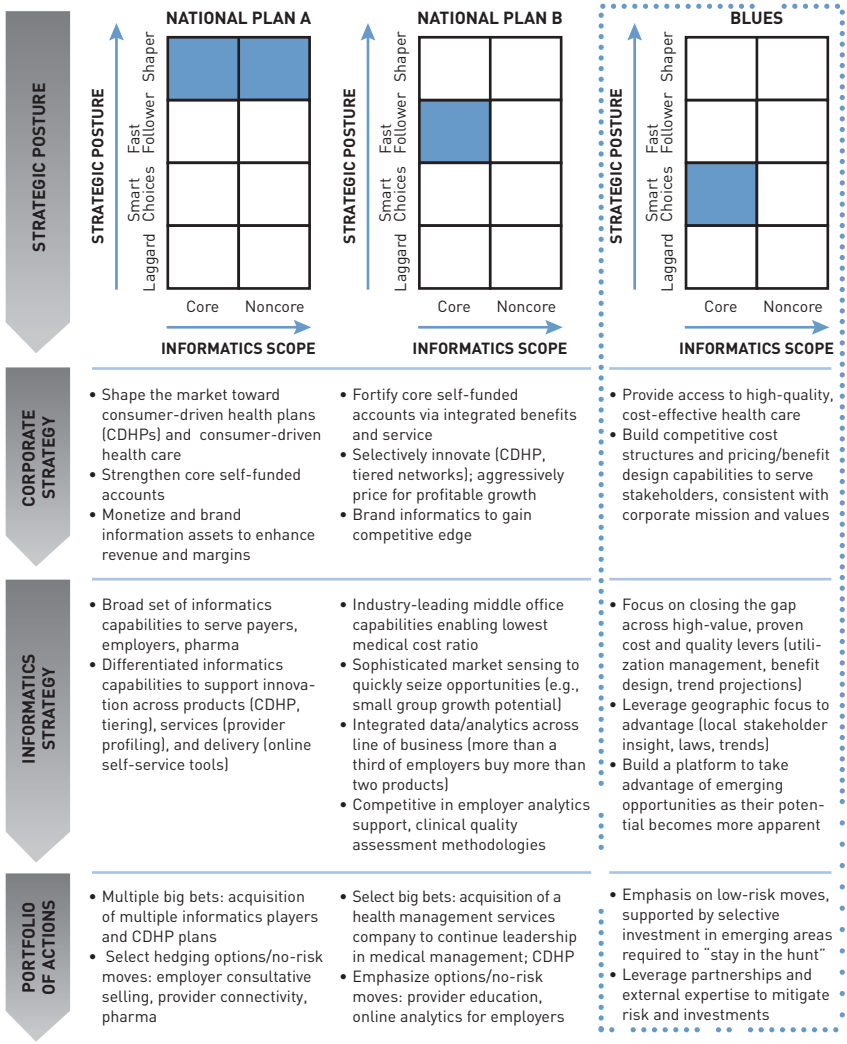
To get the most from an investment in informatics, model companies have followed a phased approach to implementation, balancing benefits against the implementation risks and steep costs of enterprise-wide initiatives.

The largest national plans are spending hundreds of millions of dollars annually on broad informatics implementations; however, regional plans and those with more limited resources must be more selective in their efforts. Sequencing the implementation to balance the near-term priorities with the long-term vision limits risk and creates self-funding opportunities.

Exhibit 3 offers a sample of a sequenced implementation by a regional plan ("Blues") compared with those of more deeply funded national plans. Here, strategic posture and corporate strategy drive long-term investment.

One regional Blue Cross Blue Shield (BCBS) plan, challenged with escalating medical costs and declining market share, followed a targeted strategy aimed at building competitive cost structures and pricing and benefit models. Whereas health plans with deeper pock-

Exhibit 3: **Strategic Posture and Corporate Strategy Should Drive Long-Term Investments**



Source: Booz Allen Hamilton

ets invested in informatics in a scattershot manner broadly intended to improve the bottom line, the regional plan's investment was designed to close the market gap and secure more customers with targeted new product offerings at lower cost. The informatics strat-

egy called for a new centralized organizational structure to maximize scale. It also sought to leverage critical expertise by implementing a series of integrative mechanisms that would drive alignment. The plan would lead to enhanced competitive differentiation while also managing risk and spreading costs over an extended period.

A four-phase approach to meeting strategic priorities can help organizations achieve selective market differentiation. In the initial phase, the informatics foundation is laid by demonstrating the value in existing technology investments, such as electronic data warehousing. Health plan decision makers would focus on enhancing foundational capabilities during this phase, to include data infrastructure, analytical expertise, key processes, and governance.

The second phase moves beyond the foundation to focus on expanding analytical capabilities through the implementation of new tools and the employment of additional analytical experts (potentially including specialists like epidemiologists). In the third phase, we begin to see the practical outcomes of the work of the preceding phases. This is the point at which advanced consumer tools and advice are developed to meet the needs of the marketplace.

In the fourth and final phase, health plans achieve market distinction by creating and exercising options identified through analysis of the informatics data. For example, a health plan might begin to provide consultative selling to employers based on superior account-level analytics and pricing expertise. Another scenario might see a health plan develop treatment guidelines based on collected information to improve outcomes. Still another scenario might involve informatics based on lab results providing the key to improved medical cost–quality trade-offs.

An Evolving Discipline

Even with its compelling value drivers, informatics is, in many ways, an evolving discipline. It is almost universally leveraged as a compet-

itive tool rather than a collaborative one, with information rarely shared industry-wide. Therefore, its potential to benefit health plans has not yet been fully exploited.

For health plans, the benefits are clear: Informatics is a powerful tool to improve outcomes, cut costs, enhance revenues and operating margins, spur new product development, and deliver insight into customers and health care providers alike. However, successful implementation of an informatics strategy is a slow dance. Core capabilities and competencies must first be in place. Smart implementations require measured, strategic advances in harmony with corporate goals — balancing risks, costs, and benefits at each phase of development. And, just as important, a robust informatics strategy is an absolute requirement for participation in the emerging consumer-oriented marketplace for health care. ✚

Editor's Note

Also contributing to this article was Mark Rattray, M.D.

This article was originally published in 2006.

The Great Facilitator: Government's Role in the Transition to a Retail Health Care System

by Kimberly Michienzi, Susan Penfield, and Tricia Purdy

IN ITS EFFORTS to address such concerns as uneven health care delivery, overburdened practitioners, ever-rising costs, and consumer frustration, the health care industry is clamoring for government help. Only government has the leverage over providers, payors, and suppliers to turn a ship as large and complex as the $2.3 trillion U.S. health care system and set it on a free-market, consumer-centric course.

How government does that depends on a number of factors, including the role it plays within the system and the level of engagement its leaders choose to pursue through policy. Thomas Scully, former administrator of the Centers for Medicare & Medicaid Services (CMS), the federal agency that provides health insurance for more than 74 million Americans, says that government must take a leading role in moving the entire industry toward a retail model. As he puts it, "Consumerism is driven by tax codes." Others take a more moderate position. Industry leadership, especially during dramatic transformation, "should be a public–private partnership," says Andy Webber, president of the National Business Coalition on Health (NBCH), a nonprofit membership organization of employer-based health care coalitions. And Newt Gingrich, the former Speaker of the House of Representatives who now leads the Center for Health Transformation (CHT), articulates a third

view, calling for government to serve as "a shaper of the environment rather than being directly involved in making decisions."

Given the complexity of health care reform, we believe that the federal government's proper role cannot be monolithic. It should lead where it has unique capabilities or dominant scale; for example, as a payor. And it should facilitate where the private sector may need a push; for example, as an information broker and even as a market maker. In its natural function as policymaker and regulator it has the power to do both, while shoring up change by enforcing the rules as they evolve in a complicated market transformation.

Leveraging Market Clout

CMS, the country's single biggest purchaser of health care, possesses unequaled power to steer the entire health care system and already has moved toward a more consumer-oriented model with ample product choices. For example, Medicare Advantage allows beneficiaries to enroll in private health plans such as health maintenance organizations (HMOs) or preferred provider organizations (PPOs) rather than the traditional fee-for-service (FFS) Medicare program. Similarly, Medicare Part D offers a variety of drug plans to address different needs and assists consumers in selecting their plans by providing online information and tools. But CMS can and should do more to design demand-side incentives, drive greater transparency of costs and quality, and experiment with new payment models to create more engaged and informed Medicare beneficiaries.

Promote demand-side incentives. "The toughest challenge is to get consumers to make better choices," says NBCH's Webber. "It will have a profound impact on both health and the health care delivery system." Medicare recipients have a great deal of choice today, but few, if any, financial incentives to make smart decisions about care and well-being. Four-fifths of all Medicare beneficiaries are enrolled in the FFS program, which gives them access to most providers in

any given market. Although there are cost-sharing provisions in the FFS program that require Medicare beneficiaries to pay a significant deductible for inpatient care and a portion of the total costs, most seniors purchase supplemental plans to offset these out-of-pocket costs. In fact, most Medicare beneficiaries are enrolled in three or four different plans: Medicare A for inpatient services, Medicare B for physician and outpatient services, Part D for take-home drugs, and supplemental policies to cover out-of-pocket costs. That means the FFS program, taken together with the supplemental plans, is a virtual blank check, and beneficiaries have little reason to factor cost and quality into their health care decisions.

CMS should address this situation with greater emphasis on demand-side incentives. It has taken steps with pilots for Medicare medical savings accounts (MSAs), which resemble consumer-directed health plans (CDHPs) in the private sector. Enrollees get a catastrophic insurance policy and a health savings account for first-dollar coverage. They own the funds that Medicare deposits into their savings accounts each year, are responsible for evaluating treatment options and costs, and can roll over balances left in their accounts at year's end for future use. The hope is that if beneficiaries control their MSAs — and have better decision tools at their disposal — they'll pay more attention to how, when, and where they spend that money. This program is being introduced nationally in 2008, but enrollment to date has been very limited. Congress should consider additional incentives to prompt beneficiaries to set up their own health care savings accounts.

More change is afoot. The Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 authorized a "comparative cost adjustment" demonstration project, to start in 2010, that would have the fee-for-service program compete with Medicare Advantage plans on the basis of benefits, quality, and cost. CMS will set a benchmark based on bids of private plans and the

fees for each service. Enrollees who choose a plan that costs less than the benchmark will receive 75 percent of the difference; those enrolling in an option that costs more than the benchmark will have to pay the difference.

CMS is also considering using the Federal Employees Health Benefits Program (FEHBP), which covers federal workers and retirees, as a model for Medicare FFS reform. The FEHBP's FFS options include the traditional model, the PPO model, and combinations of the two. In the traditional FFS program, the enrollee uses the provider of his or her choice and FEHBP either pays the provider directly or reimburses the enrollee. In the PPO model, enrollees get a discount for seeing a provider from within the network. This approach has proved effective in helping FEHBP rein in costs.

Drive consensus on cost and quality measures. As the market evolves, the government should continue to catalyze the development and broad acceptance of appropriate cost and quality measures, a prerequisite for a more competitive health care market. Without such measures, consumers have no basis for comparing treatment and provider options. "The market doesn't work when consumers have no information," says former CMS administrator Scully.

Washington could probably create these measures unilaterally, given that it purchases almost half of the health care in the United States. But it's much more preferable to gain a broad consensus on metrics, and the private sector has already shown itself eager to have its say. When Congress demanded in 2006 that CMS launch a program to link physician payment to performance, the American Medical Association was an active participant in shaping a program. It is currently voluntary, which seems appropriate given the early stage of physician measurement and persistent attribution issues, especially the question of which physician among a team of doctors is responsible for making sure a patient gets the proper care. However, to ensure impact and drive performance, reporting must

be compulsory and there must be mandatory use of core metrics across payors. Most observers agree that full provider participation in any metrics program cannot happen without Washington's involvement. "Government has to have a role in making reporting mandatory," says Suzanne Delbanco, former CEO of the Leapfrog Group, an organization that promotes improvement of health care quality.

Spur payment reform. The prevalent fee-for-service model rewards providers for giving more care, but not necessarily better care. "On the provider side, the payment incentives don't make sense," says Webber. Payment reform, spurred by CMS, can reshape the dynamics of the industry to emphasize quality over quantity. (See "The Future of Provider Payment," by Joyjit Choudhury, Kristine Martin Anderson, and Karl Kellner, page 59.) Given that private-sector fees are often based on Medicare fee schedules, the private sector would probably follow Medicare's lead in developing new payment models that support innovation in care delivery geared to promoting high quality and better care integration. For example, Medicare could use its market power to remedy the current shortage of primary-care physicians by setting higher rates that would draw more physicians into primary care.

CMS has submitted a plan to Congress for a value-based purchasing program aimed at aligning financial incentives with the quality of care. It has already established that starting in October 2008 it will no longer pay for treatment resulting from eight specific avoidable complications, such as patient falls and pressure ulcers — a move that should cut down on these complications. But any dramatic shift in CMS's payment mechanisms will take Congressional approval, which can be a long and arduous process.

Encouraging Cooperation and Competition

In addition to leading change, government can smooth the way for the private sector to drive the transformation of the health care mar-

ket. For free-market advocates, this is Washington's ideal role and one in which it has demonstrated some success with such programs as Medicare Part D. There are a number of arenas in which the federal government can prod the market toward greater efficiency.

Health IT. The government continues to take steps toward a nationwide health information network of networks by setting priorities, recognizing specific technology standards, harmonizing state-level security and privacy policies, certifying electronic health record products, and funding pilot implementations of secure interoperable health information exchanges. The American Health Information Community (AHIC), chartered by the Department of Health and Human Services in 2005, is one of several government funded public–private efforts intended to accelerate the development and adoption of health IT.

But the way forward remains a maze of conflicting interests. It's government's job, says Gingrich, to drive consensus, even if that takes a heavy hand. "The problem with setting standards is that it's all political," he says. As the current administration nears its end, the AHIC is working toward establishing a successor organization that can bring together the best of private industry and government in a decisive, effective organization to expedite formation of an interoperable nationwide health information system. But without strong government incentives for true collaboration, conflicting interests and political agendas will continue to threaten progress.

Security. Government must continue to monitor the industry to ensure that it operates with integrity, protects personal information, and serves all its stakeholders. The government has to protect consumers as they grapple with more choices, possibly by creating new policies and other types of safeguards that address the challenges presented by new products. For example, as Medicare expands its offerings, it opens the door wider to exploitation and fraud, which ultimately hurt both taxpayers and beneficiaries. And will new care

models need different oversight, such as laws to prevent kickbacks? In addition, CMS must not only ensure that Medicare Advantage plans and Part D prescription drug plans comply with requirements, but also take the lead in advancing coordinated program integrity efforts across Medicare and Medicaid programs to recover overpayments and identify fraud.

Enforcement or clarification of mandates can also serve to boost innovation and competition. A reconsideration of the Health Insurance Portability and Accountability Act (HIPAA), for example, would likely lead to rules that are more in line with the current technology. Right now, HIPAA's definitions of covered entities are too narrow and do not explicitly include some third parties, such as health record banks or consumer-based software companies that patients may choose when they want to aggregate their personal health information. HIPAA rules were written for a paper-based environment and need to be adjusted to fit the demands and capabilities of the electronic age so that new entrants can offer innovative approaches to providing electronic medical records and personal health records.

Experimenting with New Approaches

Although the government has made a number of important strides, opportunities remain for it to continue guiding the health care industry toward greater transparency, more competition, and, most important, higher-quality care.

Mine data to identify evidence-based guidelines. The government has access to vast repositories of health care data at CMS, the Veterans Administration, and the Military Health System, to name a few sources. Today, it mines this data primarily to ferret out fraud within each program or for specific government-directed research efforts. And, via CMS's Better Quality Information for Medicare Beneficiaries (BQIMB) initiative, CMS, the Agency for Healthcare

Research and Quality (AHRQ), and others have begun to investigate ways to leverage all public and private data sources to identify high-quality providers.

The government could also pool claims and other data to identify which health care approaches do and do not work and which are most appropriate in any given circumstance. Its analysis would be invaluable in developing and testing evidence-based medicine (EBM) guidelines, the approach that seeks to factor high-quality data into decisions about medical care. Bolstering the development of EBM is critical to enabling the industry to move beyond the current fee-for-service model into approaches that encourage quality rather than quantity. AHRQ has already begun mining its research into health care quality and coordinates all such work across the federal government to compile comprehensive guidelines for all federal agencies as well as for consumers and providers. It's still a tiny operation, and many in the industry would like to see its role expanded.

One touchy question is whether the government should seek to pool its data with that of the private sector in order to gain a more holistic and longitudinal understanding of the efficacy of various treatments and drugs. But many in the private sector — health plans and pharmaceutical companies, for example — are leery of sharing their data because they don't want government to become the de facto arbiter of efficacy. But there are certain areas where the private sector will share data with the government. Many payors are embracing BQIMB, for example, in an effort to provide consumers with comprehensive quality data on physicians and other providers, and are eager to find ways to contribute their own data while maintaining control over patient records.

The government, for its part, is cautious in granting access to its data on the grounds that it must protect its beneficiaries from inappropriate use of their personal information for private-sector cover-

age decisions, marketing efforts, and other commercial uses. In the short term, the public sector, notably CMS, has enough data at its disposal to devise an initial set of hypotheses on which treatments are most efficient and effective, and it could use that data to drive a research agenda. At the same time, the government should work to identify reasonable business rules to govern the private sector's use of its data, including use agreements, penalties for misuse, and mandatory reports on findings.

Encourage cross-industry product innovation. The government should enable the development of new products in the health insurance and financial-services industries that better meet consumers' needs and budgets. The MMA and subsequent IRS rulings paved the way for CDHPs by creating tax-advantaged HSAs. Although CDHPs have gotten a mixed reception, we view them as an important early step in the effort to grapple with cost and quality issues. More innovation is needed in the intersection of health and wealth to motivate consumers to take an active interest in their health and to enable them to plan for their medical needs the way they plan for their retirement.

In the near term, the government could provide more flexibility to employers experimenting with CDHPs and other innovative benefit designs. Employers need to be able to contribute more to the HSAs of chronically ill employees. The list of preventive drugs and services that are exempt from the deductible should be expanded to cover treatments associated with chronic illnesses, such as diabetes and depression. And the list of products and services that can be covered by HSA funds should be expanded to include such offerings as concierge care for the chronically ill. By limiting creativity in treatment decisions, the government may be preempting beneficiaries from taking better care of themselves and, in the process, lowering their health care expenses.

Serve as a "market maker." As the industry evolves, the government

may want to expand its role as a market maker — a trusted source for unbiased cost and quality data on health care products and services. This is a tricky proposition: Our research shows that younger consumers don't trust government on such matters; yet CMS's own research shows that seniors do trust Medicare. There is broad consensus that CMS should help define the measures, but disagreement on government's role in reporting or analyzing data beyond the Medicare and Medicaid programs. CMS is in many ways ahead of the private sector in reporting quality data for hospitals and nursing homes, and it is putting together such data now on physicians who volunteer it, though that may change. And CMS provided its beneficiaries with the trusted data and tools to help them choose among the dozens of Medicare Part D drug plans in a given market.

How far the federal government can and should go in this regard is still open to debate, and the roles of state government and private-sector players need to be clarified. In truth, the market maker role belongs to both the public and the private sectors. The government must encourage consensus on appropriate cost and quality measures, and lead in the reporting of quality measures for Medicare and Medicaid providers. And because private plans often have the best local and regional databases, the private sector needs to provide more robust regional cost data, based on reasonable, usual, and customary charges and actual reimbursement levels.

Government Must Play

Just about everyone who wants to ensure a free market in health care agrees that it cannot be done without the government's help. One overarching fact is clear: In order to achieve an integrated model of health care delivery — one that contains costs and delivers high quality — collaboration between public and private sectors is paramount. And with competition and innovation as the linchpins of the retail health care model, the government must play a variety

of roles — from the developer of regulatory mandates to a market influencer, facilitator, and innovator — to fulfill the vision of consumer-centric health care. In other words, we cannot have a true retail health care market without the intervention and oversight of government. +

About the Authors

GARY AHLQUIST
(ahlquist_gary@bah.com) is a senior vice president with Booz Allen Hamilton based in Chicago. He specializes in strategy and organization development for insurance companies, health plans, and health providers.

KRISTINE MARTIN ANDERSON
(anderson_kristine_m@bah.com) is a principal with Booz Allen based in the Washington, D.C., area. She specializes in quality measurement and improvement, payment reform, and health information technology planning.

CHARLEY BEEVER
(beever_charley@bah.com) is a vice president with Booz Allen based in New York. He works with pharmaceutical, biotechnology, diagnostic, and medical device companies to address strategic, organizational, and operational performance improvement issues.

JONI BESSLER
(bessler_joni@bah.com) is a vice president with Booz Allen based in San Francisco. She specializes in strategy and operational effectiveness for financial-services and health care companies.

JOYJIT SAHA CHOUDHURY
(saha_choudhury_joyjit@bah.com) is a principal in Booz Allen's New York office. He advises health-services clients on corporate and business unit strategies, and on capability-building and transformation programs, specializing in medical and network management functions.

BRENDA ECKEN
(ecken_brenda@bah.com) is a senior associate with Booz Allen in Rockville, Md. She has more than 20 years of health care experience and specializes in leveraging technology for improved performance, reduced costs, and improved market penetration.

RICK EDMUNDS
(edmunds_rick@bah.com) is a vice president in Booz Allen's McLean, Va., office. He leads the firm's work in life sciences in North America and focuses primarily on the commercial side of the pharmaceutical business.

GIL IRWIN
(irwin_gil@bah.com) is a senior vice president with Booz Allen based in New York. He specializes in strategy development, IT transformation, and operational transformation of insurance companies, health plans, pharmacy benefit managers and other specialty health-related suppliers.

KARL KELLNER
(kellner_karl@bah.com) is a vice president in Booz Allen's New York office. He focuses on strategy development for health-services companies, including health plans, pharmacy benefit managers, and provider organizations.

DAVID G. KNOTT, PH.D.
(knott_david@bah.com), is a senior vice president with Booz Allen based in New York. Dr. Knott is the managing partner of the firm's Global Health practice. He works with health-services clients on corporate and business unit strategies and transformation programs.

SUSANNE LEISY
was formerly a principal in Booz Allen's San Francisco office. She specialized in strategy development for wealth management and capital markets clients.

KIMBERLY MICHIENZI
(michienzi_kimberly@bah.com) is a principal with Booz Allen in Rockville, Md. She focuses on public-sector program design and implementation and has experience in public-sector payor programs.

SUSAN PENFIELD
(penfield_susan@bah.com) is a vice president with Booz Allen in Rockville, Md., with more than 20 years of strategy development and technology delivery experience. She specializes in the management and strategic use of information technology within the global, U.S. federal, and commercial health industries. She leads Booz Allen's public-sector health team.

ROBIN PORTMAN
(portman_robin@bah.com) is a vice president with Booz Allen based in Rockville, Md. She specializes in health planning and strategies, operational effectiveness, and collaborative research.

TRICIA PURDY
(purdy_tricia@bah.com) is a senior associate with Booz Allen in Rockville, Md. She specializes in legislative and regulatory impact analyses and public- and private-sector reimbursement strategies.

GIRI RAO
(rao_giridhar@bah.com) is a vice president with Booz Allen based in New York. He focuses on strategy development, business simplification, and operational improvements within the insurance and health care industries.

MARK RATTRAY, M.D.
(rattray_mark@bah.com), is an executive advisor with Booz Allen working from Seattle, Wash., and Washington, D.C. He is an expert in health care informatics with a focus on clinical quality and cost measurement and improvement. Dr. Rattray was formerly the national medical director of United Healthcare Group.

DANIELLE ROLLMANN
(rollmann_danielle@bah.com) is a vice president with Booz Allen based in New York. She specializes in business growth and sales and marketing strategies for life sciences companies.

RAHUL ROSHA
(rosha_rahul@bah.com) is a principal based in Booz Allen's New York office. He focuses on developing corporate and business unit strategies for health services companies.

SANJAY SAXENA, M.D.
(saxena_sanjay@bah.com), is a physician and principal with Booz Allen based in San Francisco, focusing on strategy development and transformation for health care organizations. He specializes in health plan middle-office functions and innovative care model collaborations.

KEVIN VIGILANTE, M.D.
(vigilante_kevin@bah.com), is a physician and principal with Booz Allen in Rockville, Md. Dr. Vigilante leads health-related programs associated with biomedical informatics, preparedness, health safety and quality, and strategic planning.

What Booz Allen Brings

BOOZ ALLEN HAMILTON has been at the forefront of management consulting for businesses and governments for more than 90 years. Providing consulting services in strategy, operations, organization and change, and information technology, Booz Allen is the one firm that helps clients solve their toughest problems, working by their side to help them achieve their missions. Booz Allen is committed to delivering results that endure.

With 19,000 employees on six continents, the firm generates annual sales of $4 billion. Booz Allen has been recognized as a consultant and an employer of choice. In 2007, for the third consecutive year, *Fortune* magazine named Booz Allen one of "The 100 Best Companies to Work For," and for the past eight years, *Working Mother* has ranked the firm among its "100 Best Companies for Working Mothers."

To learn more about the firm, visit the Booz Allen Web site at www.boozallen.com. To learn more about the best ideas in business, visit www.strategy-business.com, the Web site for *strategy+business,* a quarterly journal sponsored by Booz Allen.

Booz Allen Hamilton
Worldwide Offices

Asia, Australia, New Zealand
Bangkok
Beijing
Brisbane
Canberra
Hong Kong
Jakarta
Melbourne
Seoul*
Shanghai
Sydney
Taipei
Tokyo
Wellington

Europe
Amsterdam
Berlin
Copenhagen
Dublin
Düsseldorf
Frankfurt
Helsinki
Istanbul*
London
Madrid
Milan
Moscow
Munich
Oslo
Paris
Rome
Stockholm
Vienna
Warsaw
Zurich

North America
Annapolis Junction, MD
Arlington, VA
Atlanta
Boston
Chantilly, VA
Charleston, SC
Chicago
Cleveland
Colorado Springs
Dallas
Dayton, OH
Detroit
Eatontown, NJ
Falls Church, VA
Herndon, VA
Honolulu
Houston
Huntsville, AL
Leavenworth, KS
Lexington Park, MD
Linthicum, MD
Los Angeles
McLean, VA
Newark
New York City
Norfolk, VA
Omaha
Parsippany, NJ
Philadelphia
Rockville, MD
Salt Lake City
San Antonio
San Diego
San Francisco
Stafford, VA
Tampa, FL
Washington, D.C.

Latin America
Bogotá
Buenos Aires
Caracas
Mexico City
Rio de Janeiro
Santiago
São Paulo

Middle East
Abu Dhabi
Beirut
Cairo
Dubai
Riyadh

* An associated firm

The most recent list of our office addresses and telephone numbers can be found by clicking the Worldwide Offices link under About Booz Allen on **www.boozallen.com.**

Booz | Allen | Hamilton