THE BOSTON CONSULTING GROUP

Realizing the Promise of Disease Management

PAYER TRENDS AND OPPORTUNITIES IN THE UNITED STATES

BCG | REPORT

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Note to the Reader

At The Boston Consulting Group, we are intimately familiar with disease management (DM), having played an integral role in its conception. Senior Vice President Dave Matheson and his team helped introduce the term to the health care market in 1987, when they outlined the tenets of disease management in "The Next Stage in Managed Care," published in *Best's Review*.[1] With the publication of that article, BCG became the first to advocate that the U.S. health-care system coordinate the full continuum of care throughout the life cycle of health conditions.

In 1995 we followed up on this early work with *The Promise of Disease Management,* a report that has been widely cited as a seminal publication in the field. In the report, we highlighted how a comprehensive DM program focused on proven and early interventions could shift health care dollars to less invasive care and thus meet two seemingly conflicting goals: improving health care quality while also achieving cost savings.

Over the decade since we released *The Promise of Disease Management,* we have remained both committed to disease management and unabashedly enthusiastic about its potential for improving the value delivered by the health care system. Many individuals at BCG, including the authors of this report, have worked over the years with leading payers and other organizations to implement DM programs. For example, two of the authors currently serve on the Strategic Advisory Board of Healthways (formerly American Healthways).

Prompted by a client project in the field, BCG recently undertook a new study, examining in depth just how much disease management has lived up to the promise we envisioned for it in 1995 and assessing what might lie in store for it in the future. The current report presents the results of our review of the sector's progress and prospects, focusing in particular on how payers are integrating DM principles and practices into their business systems. Given this focus, the report includes only limited discussion of the impact of the recent involvement in disease management of the government's Centers for Medicare & Medicaid Services (CMS)—a significant development that will surely shape the future of disease management itself and that has the potential to transform health care as a whole.

Looking back on our 1995 report with the benefit of hindsight and years of experience, we are pleased to find that disease management is, in fact, attaining much of the acceptance we originally forecast—even though the pace and form of this progress have diverged from our earlier expectations. Disease management has taken on substantially different organizational forms than we originally conceived. It has also—and most notably—taken longer than we expected to achieve the acceptance and prevalence it now enjoys. Furthermore, implementing disease management has proved at least as difficult as we initially feared.

Although disease management is currently a pervasive offering among payers in the United States, it is not yet mature and there is still tremendous opportunity for growth and development. Many opportunities remain for disease management to be expanded and adapted so that it covers more lives and diseases and plays a more integral role in

1. David H.M. Matheson, "The Next Stage in Managed Care," *Best's Review,* October 1987.

medical management. For example, as a few companies are already demonstrating, disease management can be extended into wellness programs or it can cover individuals at risk for developing chronic conditions. We are confident that the approach will continue to grow and evolve over the next decade, and we remain committed to understanding and fostering that growth.

As a final note, we recognize that disease management is just one of the medical management tools—albeit a critical one—at payers' disposal. Disease management tackles the critical factors that have the greatest influence on quality of life, health, and health care costs for most populations. Increasingly, medical management must also address a shift toward consumer-driven care, more complex interactions with advancing medical technology, and rising pressures on cost. These trends only underscore the opportunity for disease management and for more comprehensive and integrated medical management.

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Finally, we thank Mary DeVience for editorial assistance, Julie Eleuteri for research assistance, and Barry Adler, Katherine Andrews, Patricia Berrian, Gary Callahan, Kim Friedman, and Gina Goldstein for design, editorial, and production assistance.

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Summary of Key Findings

Today, in its third and latest incarnation, disease management enjoys widespread use among the vast majority of U.S. payers.

- All but 5 of the 120 U.S. payers assessed by our recent benchmarking study have DM programs in place.
- More than 80 percent of the medical and DM program directors we interviewed told us that their plans offered disease management because senior executives viewed it as a competitive necessity.
- Payers and employers have adopted disease management even though no standard methodology yet exists for measuring whether DM programs produce cost savings and how much. If such a methodology did exist, DM penetration would certainly be even higher.

Payers rely on a mix of internal DM programs and outsourced services.

- Overall, payers are about as likely to develop and run DM programs internally as they are to turn to external disease-management organizations (DMOs) to purchase DM services.
- Using an *assembly approach,* some payers combine internal and external resources—such as in-house nurses and purchased software—to execute DM programs.

DMOs have enjoyed rapid growth rates and experienced consolidation.

- Companies that sell DM services have grown rapidly over the last decade. The Disease Management Purchasing Consortium estimates that DMO revenues increased from about $78 million in 1997 to almost $1.2 billion in 2005—a compound annual growth rate (CAGR) of 40 percent.
- The largest companies have grown at faster rates—and many others have been acquired—resulting in a more concentrated industry with clear market leaders.

Among payers and DMOs alike, opportunities for growth in disease management abound.

- Despite disease management's reach across the industry, its penetration among payers and employers still just scratches the surface in terms of *covered lives,* managed conditions, and approaches to patient identification and management.
- Continued growth in the United States will come in the short term through deeper penetration of covered lives, particularly at self-insured employers; coverage of more diseases and conditions; increased sophistication in targeting patients and supporting their care; and expansion into Medicare and Medicaid.
- Disease management will continue to evolve rapidly as payers, providers, employers, DMOs, and consumers all learn and adapt.

Payers that fully integrate disease management into their medical-management efforts will be poised to deliver the most valuable and effective care.

- We believe that disease management will ultimately evolve from an intervention applied on top of existing systems into a central component of medical management.
- An integrated approach will require much deeper involvement from employers, providers, payers, and consumers than has been characteristic in the industry thus far.

Although private U.S. payers are the largest purchasers of disease management today, several other segments are growing rapidly—notably the direct-to-employer segment, Medicare and Medicaid, and the international segment.

- Although the majority of self-insured employers offering disease management access it through payers, direct contracting between employers and DMOs is a rising trend.
- Federal and state governments have been experimenting with the approach for years, but the CMS pilots now under way have raised the profile of disease management.
- Governments abroad are also exhibiting an increased interest in disease management.

A Definition and History of Disease Management

Eleven years ago, BCG first examined disease management in depth.[2] Today the latest incarnation of this coordinated approach to health care delivery has been widely adopted and is growing in importance among the vast majority of U.S. payers.

At BCG, we believe that the popularity of disease management springs from the fact that the proactive management or prevention of chronic conditions represents the single largest opportunity to improve health and contain health care costs. (See Exhibit 1.) Disease management works by drawing on the commitment and self-interest of patients, expert coaching by nurses, and treatment guidelines that are grounded in evidence-based medicine. It deploys these resources to monitor patients' conditions and coordinate proven treatments across physicians, medical settings, and related illnesses.

What Is Disease Management?

According to the Disease Management Association of America (DMAA), a typical DM program

- focuses on preventing hospitalizations and invasive procedures by keeping conditions from worsening and patients from experiencing complications of their illnesses or treatments
- deploys practice guidelines focused on proven treatments
- engages physicians and support-service providers in devising and maintaining a plan of care for the patient
- empowers patients to play a role in their own care by providing them with self-management education—which may address prevention, behavior modification, and compliance
- includes process and outcomes measurements for assessing clinical, quality-of-life, and economic outcomes on an ongoing basis

Given such a complex definition, it is inevitable that organizations throughout the health care industry—each with its own business model and capabilities—emphasize different aspects of disease management. Moreover, as technology grows more sophisticated and DMOs become more experienced and capable, DM tools are increasingly being applied to new conditions and ever-broader patient populations. As a result, the line between *whole population management* and *disease management* has become extremely difficult to discern. All the leading DMOs currently manage patients with multiple comorbidities, and some take on large segments of a payer's population regardless of disease or condition—or whether those members have any chronic conditions at all. In a report of this kind, therefore, it is neither feasible nor desirable to impose a single narrow perspective on which features of disease management are most important. Instead, we aim to describe the ongoing evolution of the industry accurately, without getting bogged down in the details of its taxonomy.

A Brief History of Disease Management

Understanding the current state of disease management—and predicting its future—require some perspective on how the industry has evolved.

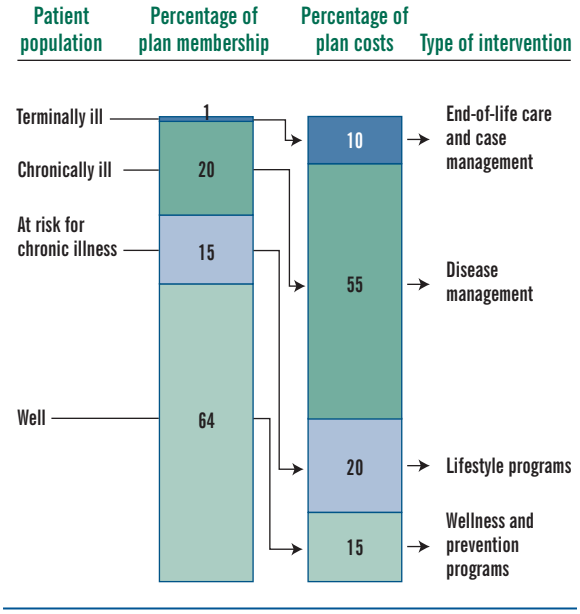
The Seeds of Disease Management. Disease management has many roots and progenitors, making it impossible to pinpoint the precise moment when it came into being. One of the earliest and most prominent developments was the commercial launch of blood glucose monitoring (BGM) systems for diabetics in the early 1980s. From this point, disease management took hold as a trend.

BGM systems were pivotal because before patients could be expected to use the technology effectively, the mindset of physicians and patients alike had to change. Simultaneously, an infrastructure had to be built that would enable patients to take principal responsibility for managing their own care while receiving strong support from the medical system. Investments in marketing, training, and process

2. *The Promise of Disease Management,* BCG report, 1995.

EXHIBIT 1

DISEASE MANAGEMENT ADDRESSES THE MAJORITY OF HEALTH CARE COSTS INCURRED BY AN AVERAGE U.S. HEALTH PLAN



SOURCE: BCG market interviews and analysis.

development were made and ultimately paid off—both literally and figuratively. Over time, physicians became more comfortable guiding patients in the self-management of diabetes. Nurse educators discovered the best ways to provide training in and support for BGM. And patients learned to take much greater control of their care.

Throughout the 1980s, several organizations promoted these developments and began to implement them in new ways. The logic of organizing care on a disease-specific basis was particularly appealing to specialized providers such as the National Jewish Medical and Research Center, which focuses on respiratory diseases; the Texas Heart Institute; and the Menninger Clinic, which focuses on psychiatric disorders. Drawing on the ideas behind disease-specific care and the emerging field of health outcomes, companies such as Value Health also built new businesses concentrated on improving health care delivery, medical system performance, and organizational effectiveness. Furthermore, staff-model health maintenance organizations (HMOs), such as Harvard Community Health Plan and Kaiser Permanente, embraced the general concept quickly. They possessed many of the assets that the emerging approach required in order to succeed—namely, systemwide relationships among all the physicians treating a patient, common procedures and protocols, and a central source of patient data. Although the early adopters had mixed results, they sowed the seeds for the future growth of the industry.

Influenced by these forerunners, several insurance companies, HMOs, and provider organizations waded in to test the waters with disease management in the late 1980s. They shared an enthusiasm for the idea that certain types of care are best organized around the disease-driven needs of patients. As a result, many reforms were implemented. Yet the institutional infrastructure at most payers and providers could not support the new approach. And because the infrastructure was not easy to change—and generally *did not* change—the impact of these early efforts, outside of specific successes such as BGM, was fairly limited.

The First Wave: Pharmaceutical Companies Lead the Charge in the Early 1990s. From these early beginnings, a swell of momentum arose in the 1990s, when pharmaceutical companies were introduced to the concept of disease management and popularized the term.

The link between disease management and pharmaceuticals was an obvious one—and one certainly not lost on pharmaceutical executives. When prescribed appropriately and taken diligently, prescription drugs help keep many diseases in check and help prevent patients from requiring hospitalizations as well as surgeries and other invasive treatments. Particularly when used to treat chronic conditions such as asthma and coronary artery disease (CAD), medications can help all players attain the key goals of disease management.

For much of the decade, pharmaceutical companies invested heavily in the approach, both building and acquiring programs. Many payers, however, were skeptical about pharma-sponsored disease management, perceiving it as an attempt to market and sell more drugs. In our opinion, the vast majority of DM programs sponsored by pharmaceutical companies were solidly grounded in the strong belief that they could improve outcomes—while also driving sales. Nonetheless, by the end of the decade the tide had receded, and many pharma-sponsored DM programs simply dried up.

A number, however, remain today. For example, Eli Lilly recently announced the launch of two DM programs for managed care customers. The programs—in women's health and diabetes—have been certified by the National Committee for Quality Assurance (NCQA). And Pfizer maintains Pfizer Health Solutions (PHS) as a separate organization built on DM principles. PHS has undertaken several innovative initiatives, most notably its foray into disease management with state Medicaid programs.

The Second Wave: DMOs Proliferate in the Mid-1990s. A second wave began to develop in the mid-1990s, when hundreds of entrepreneurs zeroed in on the largely unserved market for disease management and began to work diligently to capture it. These entrepreneurs recognized that successful disease management required expertise in health care processes, technology, and data mining and management, as well as unique relationships across the entire health-care landscape. They rapidly built an entirely new industry: DM services. Serving payers and hospitals, these companies pioneered many concepts in concert with the early adopters of disease management.

The early DMOs generally shared one characteristic: the focus on a single disease, which was the sole criterion for entry into the DM program (although some did support all aspects of care once a patient was enrolled). Many of these companies excelled at improving care and outcomes in one area—CAD, for example—but failed to treat the patient as a whole. Others were unable to scale up their original models to serve larger numbers of patients.

In the face of these shortcomings, many of the early DM-service companies have vanished, been acquired, or evolved. In general, although some specialists remain, the survivors have shifted to a comprehensive model that spans diseases and takes comorbidities into account. Recent entrants to the field, such as Health Dialog, did not begin with a focus on a single disease. The capability to serve patients with comorbidities has proved to be particularly valuable in complex market segments such as Medicare and Medicaid, in which beneficiaries with comorbidities are common. (See the sidebar "Disease Management in Medicare.")

The Third Wave: Payers Take Disease Management to Heart—and to the Next Level—in the Coming Decade. Fueled in part by the second wave, as well as by NCQA accreditation of DM programs, the third and current wave of disease management is well under way. Payers have now widely embraced DM initiatives and largely eliminated disease-specific silos from their programs. In addition, because many payers have experienced relatively strong financial returns in recent years, they possess adequate resources to invest in programs such as disease management.

Although widespread, payer initiatives vary widely, from in-house efforts to outsourced services purchased from DMOs. Many plans offer a hybrid of those two approaches—sometimes called a *combination* or an *assembly approach*. DM programs also range from small initiatives focused on a narrow subset of members to widespread programs targeting almost all chronically ill members across multiple payer products. Today many payers are considering how to extend disease management to members who are at risk for developing a chronic condition, and they are working to integrate this offering with other aspects of medical management, such as wellness programs.

DISEASE MANAGEMENT IN MEDICARE

The Medicare Modernization Act of 2003 (MMA) authorized the Centers for Medicare & Medicaid Services (CMS) to develop and test a voluntary chronic-care improvement program, now called Medicare Health Support (MHS). The stated goal of MHS is to improve the quality of care and quality of life for people living with chronic diseases.

Following the enactment of the MMA, CMS conducted a competitive three-stage contracting process in December 2004 and awarded nine contracts for Phase I pilot programs. The contract awardees were generally large payers or DMOs. (See the exhibit below.)

Each of the pilots aims to serve 20,000 Medicare beneficiaries in a specific region on a free and voluntary basis. Using historical claims data, CMS identified beneficiaries for the program by region and screened them for eligibility. Targeted beneficiaries were randomly assigned to either an intervention group or a control group.

Phase I of the two-phase initiative is a pilot phase that will operate for three years and be evaluated through the randomized control trials. Payments to each awardee will be based on performance and are subject to up to a 100 percent refund if the pilot fails to save at least 5 percent in health care costs (when compared with the performance of the control group) over the three-year pilot period. Phase II may expand Phase I programs or program components that have proved to be successful at improving clinical outcomes, increasing beneficiary satisfaction, and meeting Medicare spending targets for the assigned population.

As of December 2005, seven of the MHS pilots had been launched and were engaging beneficiaries. To date, it appears that engagement efforts have been highly successful, with rates of greater than 90 percent in some cases. Of the two remaining pilot programs, the XLHealth pilot in Tennessee was scheduled to begin on January 1, 2006, and the contract awarded to the Visiting Nurse Service of New York and UnitedHealth Group's Evercare subsidiary was canceled.

We anticipate that the Medicare pilots will yield substantial insights and rich data for comparing a variety of DM interventions. The results should also inform the debate on outcomes and reveal whether or not disease management delivers financial results within the Medicare population.

MEDICARE AWARDED CONTRACTS TO LARGE PAYERS AND DMOs IN 2004

Organization	Regions served
Aetna	Selected counties in and around Chicago
Cigna HealthCare	Northwest Georgia
Health Dialog	Western Pennsylvania
Healthways	Maryland and Washington, D.C.
Humana	Central and South Florida
LifeMasters Supported Selfcare	Oklahoma
McKesson Corporation	Mississippi
Visiting Nurse Service of New York and Evercare[1]	Brooklyn and Queens, New York
XLHealth	Selected counties in Tennessee

Source: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.

[1]This program has been canceled.

The Current State of Disease Management

With nearly every major payer in the United States currently offering disease management in some form, the expansive reach that it enjoys may lead some to wonder whether its glory days are not already over.

In truth, millions of patients and many diseases have yet to be touched by disease management, and much of the industry's territory still remains to be charted and claimed. As a result, the door is wide open for payers to offer DM programs to more individuals and to apply the approach more rigorously and in more innovative ways. Moreover, the availability of improving technology, databases, and diagnostic tools, along with the accumulation of practical management experience, can facilitate the development of new forms of service. Opportunities abound for payers in search of ways to improve members' health, boost value for customers, and contain costs.

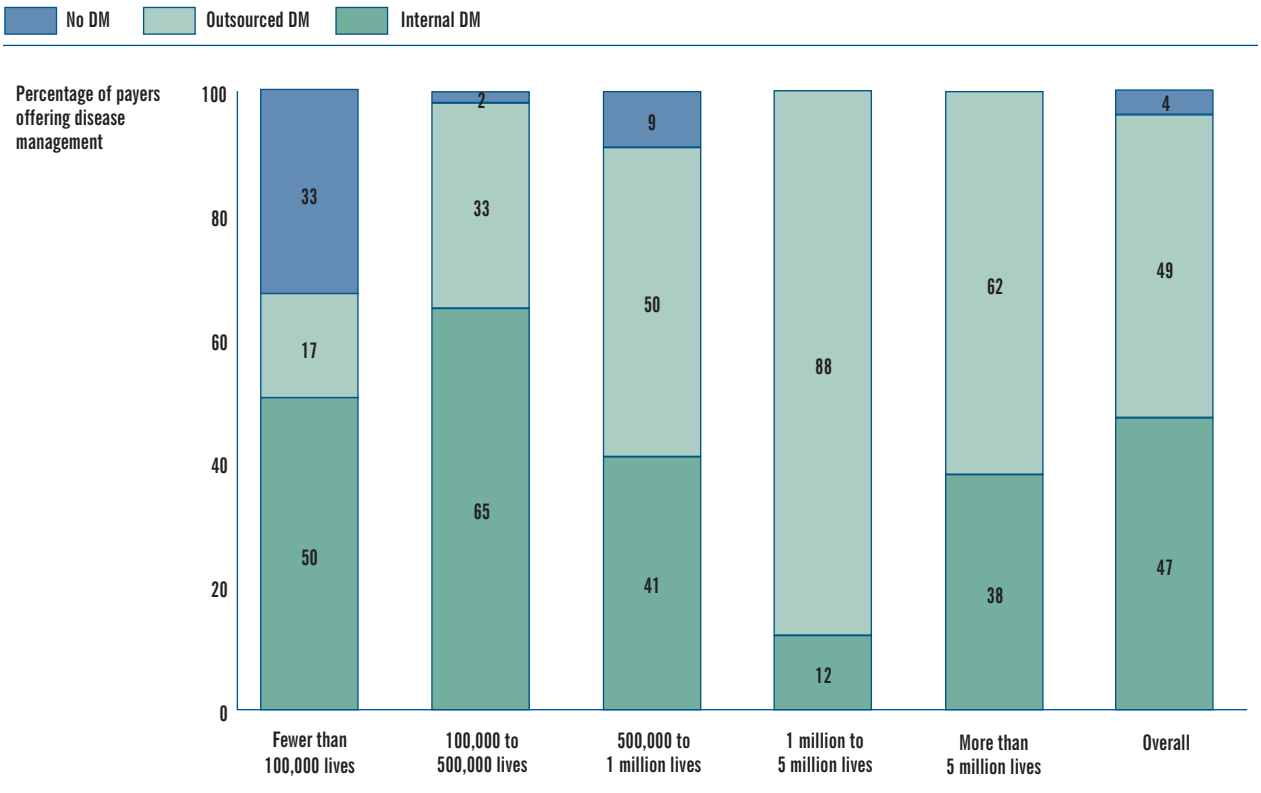
Disease Management's Reach Across the Industry Is Broad

In the last few years, U.S. payers have adopted disease management in droves, and plans offering the service represent an overwhelming 96 percent of the 120 U.S. payers captured in BCG's DM Landscape Database.[3] (See Exhibit 2.)

3. BCG's DM Landscape Database captures DM information for 120 of the 150 largest payers in the United States at the end of 2004 (as measured by the number of commercially insured lives), representing about 96 percent of commercially insured lives. Information at the disease-specific level is available for 111 of these payers. In addition to compiling these data, we conducted interviews with nearly 40 of the payers included in the database. All of this information was gathered during 2005.

EXHIBIT 2

THE MAJORITY OF PAYERS OFFERED SOME FORM OF DISEASE MANAGEMENT IN 2005



Source: BCG's DM Landscape Database.

Note: Payers are 120 of the 150 largest payers in the United States at the end of 2004 (as measured by the number of commercially insured lives), representing about 96 percent of commercially insured lives. Payers were considered to be using the outsourced model if they hired at least one DMO. Data on whether plans offer disease management are from year-end 2004; data on the DM model used are from 2005.

Without a doubt, payers have been driven to disease management by several factors: the rising cost of health care, pressure from employers and employees for enhanced value in health care, and attempts by payers to differentiate themselves from competitors. When we asked representatives from the payers themselves why they had adopted disease management, however, the answers weren't exactly what we had expected. Fewer than 60 percent of the medical directors and DM program directors we interviewed cited health-care cost savings—the much-touted advantage of the approach—as their primary reason for adopting it.

Rather, more than 80 percent of the medical and DM program directors we interviewed told us that their plans offered disease management because senior executives viewed it as a competitive necessity. (See Exhibit 3.) "DM is simply the price of admission—just like NCQA accreditation," one director explained. Another noted that "DM is now part of every request for proposal that we receive." In short, payers have adopted disease management because their customers are demanding it.

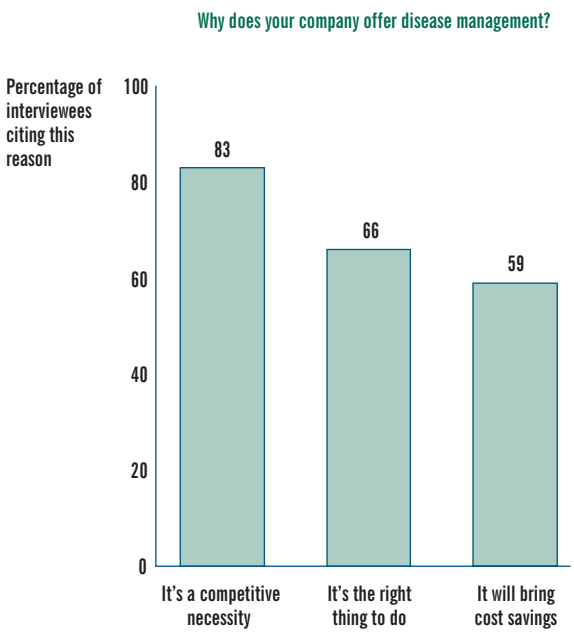
Market expectations aren't the only forces at work. Almost two-thirds of the payers we interviewed said that their plans offered DM because management viewed it as "the right thing to do" in terms of providing the highest-quality care and improving members' health.

Expected savings may fail to top the list of reasons for adopting disease management because a debate still rages in the industry about how best to measure the savings that accrue when well-executed approaches prevent catastrophic health events and more invasive care. Our interviews and analysis indicate that payers and employers alike are clamoring for standardized methods to quantify the financial impact of disease management. A common standard would permit comparisons across programs. (See the sidebar "A Call to Action on Outcomes Measurement," page 14.)

Interestingly, disease management has enjoyed widespread acceptance even though no standard methodology yet exists for measuring how much DM programs produce in cost savings—or whether they produce cost savings at all. The vast majority of payers have adopted the approach because they have a conceptual understanding of its potential and a belief in the results to date. But if savings had been documented with a greater degree of certainty, payers and employers would by now have applied disease management more broadly.

EXHIBIT 3

MOST HEALTH PLANS VIEW DISEASE MANAGEMENT AS A COMPETITIVE IMPERATIVE



SOURCE: BCG market interviews.

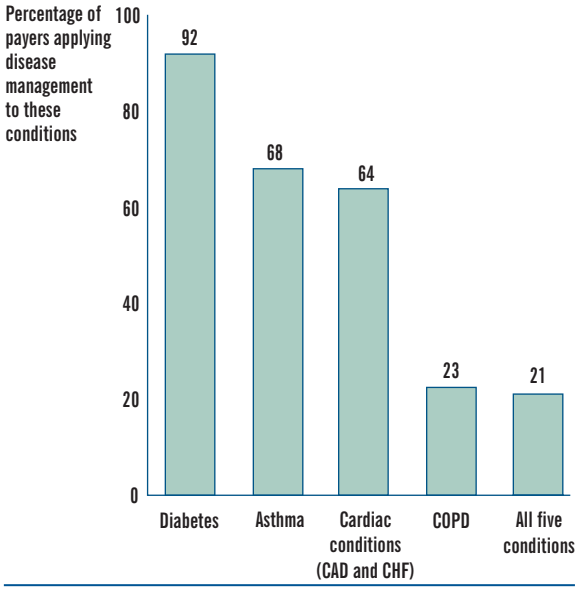
Penetration into Individual Diseases and Covered Lives Is Limited

Disease management's reach across the industry is clearly wide, but its penetration into individual health plans still just scratches the surface. Only a handful of chronic conditions have been clearly identified and widely accepted as suited to the approach: diabetes, asthma, CAD, congestive heart failure (CHF), and chronic obstructive pulmonary disease (COPD)—conditions often referred to as the "five core chronics." Furthermore, even though diabetes and cardiac conditions are common DM targets, only 21 percent of the payers that offer disease management apply the approach to all five of these expensive and debilitating diseases.[4] (See Exhibit 4, page 14.)

4. The conventional wisdom in the industry suggests that although DM programs for asthma yield positive health outcomes, they do not necessarily generate meaningful financial savings.

EXHIBIT 4

MANY PAYERS STILL DON'T APPLY DISEASE MANAGEMENT TO ALL FIVE CORE CHRONIC CONDITIONS



SOURCE: BCG's DM Landscape Database.

NOTE: Payers are 120 of the 150 largest payers in the United States at the end of 2004 (as measured by the number of commercially insured lives), representing about 96 percent of commercially insured lives.

Similarly, few payers bring DM approaches to bear on cancer, end-stage renal disease, low-back pain, and other diseases that result in millions of dollars in health care costs and lost productivity for both payers and employers. Payers also vary substantially in terms of how deep into the risk pool they go when reaching out to members, with some targeting only those at the highest risk. The result of this narrow application of disease management is that, although an overwhelming number of plans offer the approach, only a small fraction of members who could benefit from it are actually targeted or reached by DM initiatives.

The number of covered lives touched by disease management is further limited by the fact that more than half of all commercially insured lives—54 percent in both 2004 and 2005—are self-insured; that is, they are covered by self-insured employers that purchase administrative services only (ASO) products. Although disease management is available today to a large number of self-insured employers—JPMorgan estimates that 77 percent of payers offer disease management to their self-

A CALL TO ACTION ON OUTCOMES MEASUREMENT

Outcomes measurement is a major unknown factor—and a major obstacle—in disease management. No standard industry methodology exists today for measuring savings. Although various industry groups, such as the Disease Management Association of America (DMAA) and the Disease Management Purchasing Consortium, have issued guidelines for measurement methodologies, and although most parties agree that earlier methodologies were seriously flawed, there is no agreement on a shared approach.

Several studies have attempted to determine whether disease management really does deliver cost savings and health improvements, and these have produced quite different results. The DM pilots mandated by the Centers for Medicare & Medicaid Services were designed to determine whether disease management in general—and which DM model in particular—can achieve improvements in health and financial savings for Medicare fee-for-service beneficiaries. Similarly, the DMAA plans to tackle outcomes measurement as a major initiative in 2006. We believe that the success of such an initiative will be greatly enhanced if other constituencies—such as payer, provider, and employer groups—become strongly involved.

Interestingly, our survey found that more than 50 percent of the payers interviewed reported satisfaction with the outcomes they have achieved. The remainder reported that either they did not know the level of outcomes achieved or it was too early to tell. Surprisingly, not one payer professed dissatisfaction with its DM outcomes—a finding that is less likely to reflect sweeping satisfaction with all DM programs than the relative youth of these programs and payers' discomfort with existing measurement methodologies.

In our work with payers, DMOs, and other clients with an interest in disease management, we have seen numerous cases in which the approach has produced positive financial results. However, we recognize that such results depend critically on the quality of the design and implementation of each individual program.

insured customers (compared with 86 percent of payers that offer it to their fully insured customers)—these employers do not always choose to purchase DM programs.[5] Typically, they face a separate fee for incorporating such programs into their ASO products, especially when the payer contracts with a DMO.

Payers Are Embracing Both Internal DM Programs and Outsourced Services

As Exhibit 2 illustrates, payers overall are about as likely to develop and run DM programs internally as they are to turn to external DMOs for purchased services. Our research reveals, however, that larger plans with more covered lives have a slight bias toward using DMOs. Still, a plan's size is not the best predictor of its approach to disease management. Consider, for example, that among the ten largest plans, seven contract with DMOs for at least some aspect of their DM services, whereas five have significant internal programs. (See Exhibit 5.) This mix suggests that it's not the payer's size but the perspective of senior management that largely determines whether the payer develops its own DM approach or turns to the market for external options.

We believe that the very largest payers have significant experience with disease management and thus recognize the capabilities required to implement the approach and the difficulties involved. They may also view disease management as a highly specialized set of skills that are difficult to master or replicate at low cost. As a result, all but one of the ten largest players have partnered with external suppliers to assemble or purchase DM services, or have brought the approach in-house by purchasing a DMO outright. For example, WellPoint and

5. *An In-Depth Look at Disease Management,* JPMorgan North America Equity Research, May 2004.

EXHIBIT 5

SEVEN OF THE TEN LARGEST PAYERS PURCHASE AT LEAST SOME ASPECT OF DISEASE MANAGEMENT FROM DMOs

Health plan	DM model
WellPoint	Internal: Health Management Corporation
UnitedHealth Group	Internal: Optum
Aetna	DMOs: Accordant Health Services and LifeMasters Supported Selfcare Internal: ActiveHealth Management
Health Care Service Corporation	Each local Blue Cross and Blue Shield plan chooses its own vendor DMOs: Health Dialog, Healthways, Landacorp, LifeMasters Supported Selfcare, and Matria Healthcare
Cigna HealthCare	DMO: Healthways
Kaiser Permanente	Internal
Health Net	DMOs: Health Dialog, ParadigmHealth, and Renaissance Health Care
Humana	DMOs: Accordant Health Services, AirLogix Corporation, Alere Medical, CorSolutions, ParadigmHealth, QMed, Quality Oncology, and RMS Disease Management
WellChoice[1]	DMO: Healthways
Blue Cross Blue Shield of Michigan	DMO: Accordant Health Services Internal

SOURCE: BCG's DM Landscape Database.

[1]WellChoice was acquired by WellPoint in December 2005.

UnitedHealth Group have acquired vendors and appear committed to retaining disease management in-house, whereas plans such as Cigna HealthCare and Health Care Service Corporation run aspects of their programs in coordination with DMOs. At the other end of the spectrum, plans such as Kaiser Permanente have built internal programs on the basis of a legacy of striving to improve chronic care in an integrated system.

Many plans actually make the build-or-buy decision on a condition-by-condition basis. Harvard Pilgrim Health Care exemplifies this approach, having built internal programs for some conditions, such as asthma and diabetes, while also contracting with one DMO for a cardiac program and with another for the management of rare diseases. Furthermore, some payers blend in-house resources with external services within the same program—for example, using in-house nurses in coordination with data analytics and software purchased from a vendor. (For case studies of both approaches, see the sidebars "Handling Disease Management Internally at Kaiser Permanente," below, and "Outsourcing Disease Management at Blue Cross and Blue Shield of Minnesota," page 18.)

The Disease-Management-Organization Sector Is Still Growing

The entrepreneurial companies that sell DM services have enjoyed rapid growth over the last decade. Indeed, the Disease Management Purchasing Consortium (DMPC) estimates that DMO revenues grew from about $78 million in 1997 to almost $1.2 billion in 2005—a CAGR of 40 percent. (See Exhibit 6.) Between 2000 and 2005, however,

HANDLING DISEASE MANAGEMENT INTERNALLY AT KAISER PERMANENTE

For Kaiser Permanente, population-based disease management is an absolutely integral component of care for chronically ill members. The DM effort at Kaiser, in contrast to other payers, is led and largely delivered by physicians themselves—an approach that offers critical advantages in establishing and fostering buy-in to standards of care and DM processes. As disease management has matured within Kaiser, the program has expanded to include self-management by members and patient-to-nurse communication between office visits.

Kaiser takes a unique approach to identifying candidate members for its DM program. Rather than relying solely on information technology to mine claims data, it deploys teams that include physicians, nurses, and other care providers to review the records of chronically ill patients and determine the best next steps. Every patient interaction is thus coordinated with the provider and supports the primacy of the central physician-patient relationship.

The Kaiser Health Plan itself is involved in executing disease management in a number of ways. First and foremost, Kaiser Permanente's Care Management Institute (CMI), jointly supported by the Health Plan and Medical Groups, prepares and disseminates care guidelines and utilizes associated measurement tools. CMI works closely with regional operations leaders to ensure that physicians are given decision-making tools for use during office visits that support care in accordance with guidelines. And to supplement their office visits, members receive self-management resources such as community education, nurse outreach, and educational materials.

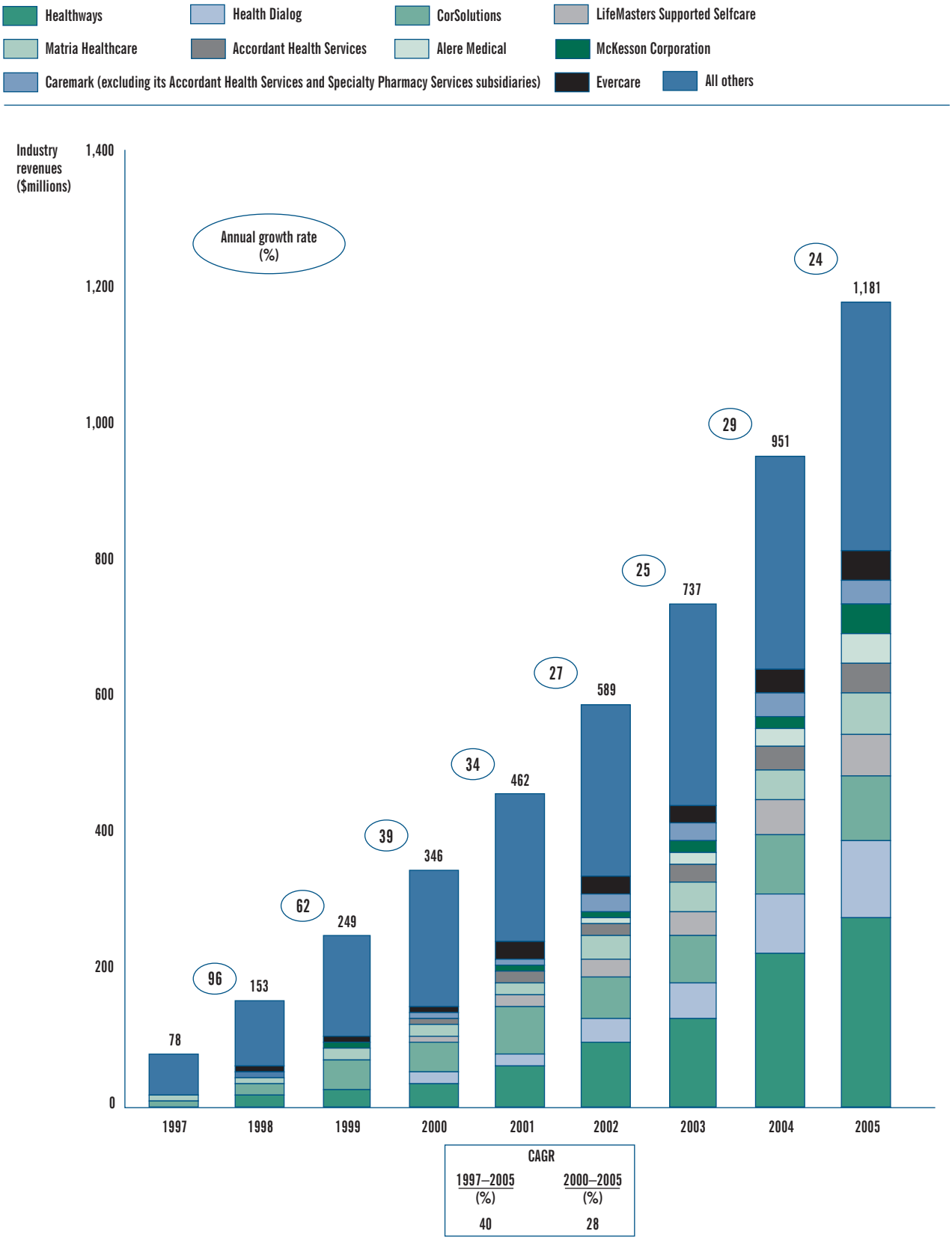
After studying outcomes extensively, Kaiser recently concluded unequivocally that health outcomes improve as a result of disease management. In a 2004 article, representatives from the payer concluded that "the rationale for DM programs, like the rationale for any medical treatments, should rest on their effectiveness and value."[1] However, the authors did not conclude that disease management reduced costs in an absolute sense, although they did highlight an impact on cost trends.

Paul Wallace, director of CMI, explains that Kaiser sees itself as maintaining its commitment to patient care by "sustaining and growing its investments in DM." Recently, Kaiser began offering health coaching to members outside of the Kaiser network.

1. B. Fireman, J. Bartlett, and J. Selby, "Can Disease Management Reduce Health Care Costs by Improving Quality?" *Health Affairs,* Volume 23, Issue 6, November/December 2004.

EXHIBIT 6

THE DM SERVICES INDUSTRY IS STILL GROWING RAPIDLY



Source: Disease Management Purchasing Consortium.

Note: All figures are estimates rather than actual company-reported data.

OUTSOURCING DISEASE MANAGEMENT AT BLUE CROSS AND BLUE SHIELD OF MINNESOTA

Blue Cross and Blue Shield of Minnesota (BCBS-MN) embraced disease management early and remains a pioneer in the field. Beginning in the late 1990s, largely in response to the National Committee for Quality Assurance's accreditation requirements, the payer launched in-house DM programs focusing on a few silos of chronic diseases, such as diabetes and CAD. Early successes with disease management, coupled with a realization of the enormous capabilities that would be required in order to achieve its vision, encouraged BCBS-MN to continue to push forward with leading-edge approaches. In 2001 the payer made what its chief medical officer, Bill Gold, describes as a particularly big bet: shifting to a much larger program run in coordination with a DMO.

Some feared that moving such a critical capability outside of BCBS-MN would put the success of the program—and the payer—at risk. But Gold and others strongly believed that partnering with the right DMO would afford them accelerated access to the highest-quality capabilities in disease management—capabilities that the payer simply lacked the time and resources to develop internally. Gold explains that BCBS-MN selected its partner, Healthways, because the two organizations shared a common vision and committed leadership—factors that Gold says have proved essential to success. BCBS-MN is also using Accordant Health Services to provide disease management for members with rare diseases.

Progress has been impressive. In the early days, BCBS-MN's DM programs touched only about 2 percent of the overall population, but today they engage about 13 to 14 percent. (Note that this is the percentage of BCBS-MN's *entire* membership, not just its chronically ill members.) BCBS-MN has now moved from disease- and medical-management silos to an integrated approach involving dozens of chronic conditions as well as wellness and prevention programs. It also strives to ensure seamless care and smooth back-end processes.

The value of this approach, Gold contends, is revealed in the plan's outcomes. Despite the controversy that rages in outcomes measurement, he remains confident that disease management has delivered legitimate and significant health improvements as well as cost savings at BCBS-MN. The plan's financial results have been certified internally and externally. "We believe we have a unique approach to DM," Gold explains, "and we will continue to innovate and improve our programs."

as the revenue base broadened, growth slowed somewhat to a CAGR of about 28 percent. Still, the largest companies have grown at significantly faster rates—often through mergers and acquisitions—resulting in a more concentrated industry with clear market leaders. (See Exhibit 7.)

Today dozens of businesses continue to offer DM services, with most DMOs having expanded beyond their original focus on a single disease. In other cases, DMOs have retained their ambition to be best of breed in one area, as AirLogix Corporation has done in respiratory diseases.[6] New competitors have also emerged, such as Health Dialog, an organization with roots in eliminating "unwarranted variation in health care" across multiple conditions for chronically ill and other members.

Looking ahead, the DMPC anticipates that DMOs will claim industry revenues of more than $1.8 billion by 2008, with the fastest growth arising from the Medicare, Medicaid, and employer sectors. (See Exhibit 8.) Within the commercial-payer segment alone, BCG's analysis conservatively pegs the industry's maximum potential revenues at $3 billion to $4 billion.

Among DMOs, the top five companies ranked by market revenues are Healthways, Health Dialog, CorSolutions, LifeMasters Supported Selfcare, and Matria Healthcare.[7] In our interviews with medical and DM program directors, respondents most frequently cited the market leaders as Healthways, LifeMasters, Matria, and Health Dialog. (For more details on these market leaders, see the sidebar "DMO Profiles," page 20.)

6. AirLogix was acquired in 2005 by Centene Corporation, a provider of managed care through Medicare- and Medicaid-related programs.

7. In December 2005, Matria announced its agreement to acquire CorSolutions.

EXHIBIT 7

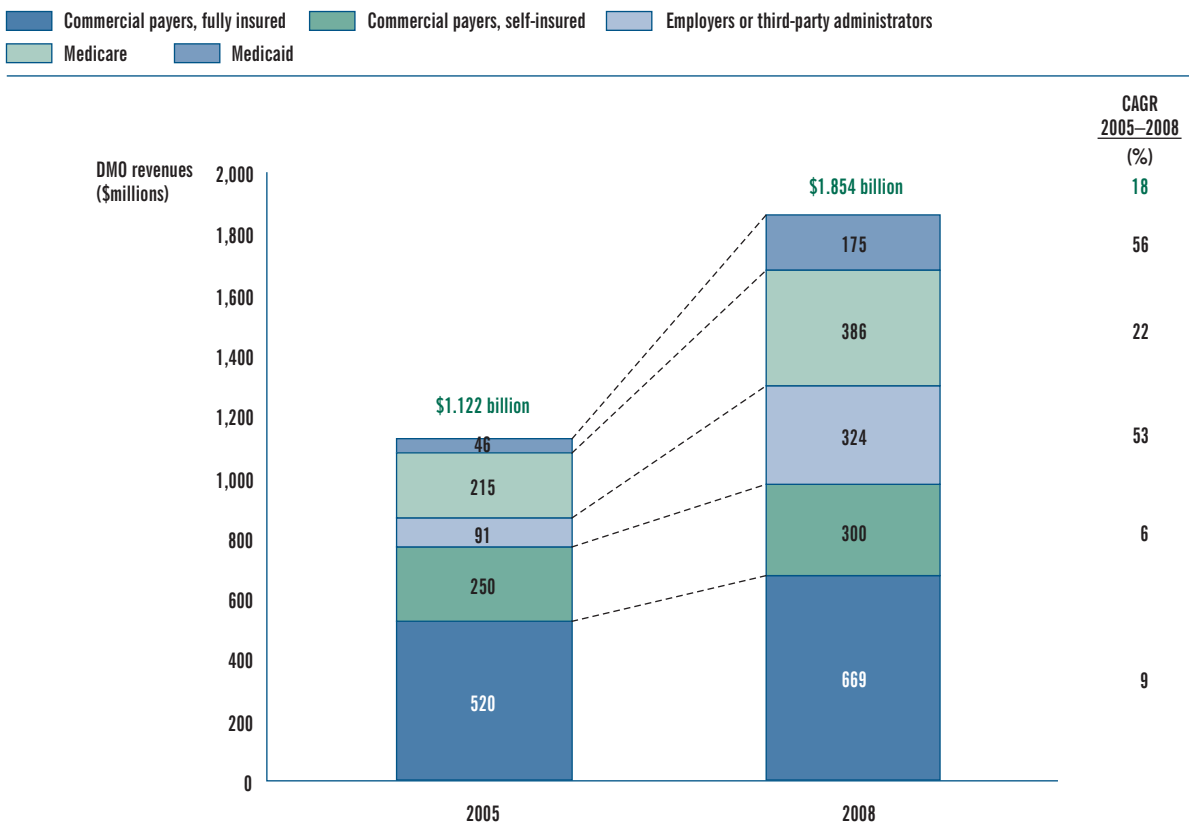
A NUMBER OF MERGERS AND ACQUISITIONS ARE CONSOLIDATING THE DM SERVICES SECTOR

	Acquirer	Acquired DM or wellness company	Year acquired
Health plans	Aetna	ActiveHealth Management	2005
	Anthem Insurance Companies	Health Management Corporation	2002
	BlueCross BlueShield of Tennessee	Gordian Health Solutions	2005
	Centene Corporation	AirLogix Corporation	2005
DMOs	Caremark	Accordant Health Services	2002
	CorSolutions	MyoPoint	2001
	Healthways	Empower Health	2001
		CareSteps	2001
		StatusOne Health Systems	2003
		Health IQ Diagnostics	2005
	LifeMasters Supported Selfcare	Medical Scientists	2004
	Matria Healthcare	Quality Oncology	2002
		Miavita	2005
		Winning Habits	2005
		CorSolutions	announced in 2005
	ParadigmHealth	Paidos Health Management Services	2003
	SHPS Holdings	Landacorp	2004

SOURCE: BCG literature review.

EXHIBIT 8

THE DMPC ANTICIPATES SIGNIFICANT GROWTH IN REVENUES AMONG DMOs



SOURCES: Health Industries Research Companies (2005); data were updated by the Disease Management Purchasing Consortium in November 2005.

DMO PROFILES

Healthways

Healthways is the largest DM vendor in the United States, managing nearly 2 million lives. The company is publicly traded and primarily serves fully insured payers, employers, and—through its involvement in the Centers for Medicare & Medicaid Services (CMS) pilots—the Medicare market. According to the Disease Management Purchasing Consortium (DMPC), Healthways is the market leader, and its share of the DM services sector has been growing over time.

Healthways' roots lie in hospital-based diabetes management. Today the company offers programs for 27 conditions and, through acquisitions, has branched out to bolster its offerings across the entire continuum of care, into both care management for the highest-risk members and wellness programs offered to payers and employers. According to Bob Stone, executive vice president and chief strategy officer, the company's differentiation is grounded primarily in its proven outcomes. He also notes that Healthways has pioneered several concepts that have become standards in the industry—for example, the opt-out model for patient engagement.

According to Stone, Healthways' next big area of focus will be to extend its capabilities beyond members already diagnosed with chronic conditions in order to ensure that those who are healthy or at risk for chronic conditions maintain their health.

LifeMasters Supported Selfcare

LifeMasters, founded in 1994, is a private DMO that focused initially on CHF. As LifeMasters has grown over time, it has expanded to cover other chronic conditions. Today the company offers programs for the five core chronics (diabetes, asthma, CAD, CHF, and COPD), as well as for back pain, hypertension, and hyperlipidemia. It also has three upcoming programs for cancer, metabolic syndrome, and comorbid depression.

LifeMasters' current focus, according to its executive chairman, Chris Selecky, is working with members to modify behavioral risk factors. The company differentiates itself, Selecky says, along three key dimensions: a strong orientation toward engaging physicians, clinical depth, and the degree to which it encourages transparency in its operations to foster integration with customers.

In addition to payers such as Aetna, LifeMasters' customers include employers, retirement systems, and Medicaid (it is also involved in the CMS pilots). Today the DMO has approximately 560,000 lives under contract. In the future, it anticipates adding many new employer contracts, through both payers and direct contracting, and increasing its focus on government. Indeed, approximately half of LifeMasters' $90 million in estimated 2005 revenues was generated through Medicare and Medicaid.

Matria Healthcare

Matria, a company with roots in monitoring technologies and maternity management, offers DM services for multiple conditions including the five core chronics, back and other pain, depression, cancer, and maternity, in addition to wellness programs. Matria has more than 30 million lives under contract and, according to the DMPC, annual DM revenues of $77 million.[1]

Although Matria provides DM and wellness programs for payers as well, its focus over the past few years has been primarily on employers. Employers benefit from working directly with Matria, the company's CFO, Steve Mengert, contends, because many large employers offer multiple health plans and change their health-plan offerings every two to three years. Furthermore, says Mengert, employers represent a highly attractive market for DM services because they can actively engage employees to increase participation in disease management. In December 2005, Matria announced its agreement to acquire CorSolutions, which the company says will result in more balanced revenues across employers and payers.

Matria is among the first vendors to export disease management beyond U.S. borders, according to

1. Matria and the DMPC provided different figures for the company's DM revenues; for the sake of consistency, we have used the DMPC's estimates.

Mengert, who cites the company's collaboration with IBM in Japan. In addition to its international aspirations, a major focus for Matria is its expansion into the business of informatics: selling data and analysis to employers and pharmaceutical companies in order to allow them to assess both employee health and the performance of their health plans and providers in managing employee health.

Health Dialog

Health Dialog, a private company, was founded in 1995 with the goal of improving medical care by addressing unwarranted variation in treatment patterns. The company has evolved into what George Bennett, its cofounder and CEO, describes as an analytics and care management company.

According to Bennett, Health Dialog's strengths are the management of comorbidities in the chronically ill population, an emphasis on behavioral change among patients, and programs that foster patients' self-reliance. Although focusing on the chronically ill through health coaching was and still is a key component of the company's programs, Health Dialog's offerings now extend to other issues, such as treatment decisions in areas as diverse as hysterectomy, knee surgery, and back pain.

Today Health Dialog primarily serves payers, but its customers also include employers and international governments—as well as the U.S. government through the company's involvement in the CMS pilots. Altogether, Bennett reports, approximately 14 million people have access to Health Dialog's programs.

The DMPC lists Health Dialog's 2005 estimated revenues at $110 million, but Bennett told BCG that he expected revenues to reach nearly $136 million for 2005 and to grow to between $230 million and $250 million in 2006. These figures reflect a considerable jump from the $3 million in revenues the company earned in 1999.

Employers Are Driving Acceptance of Disease Management

Large employers are currently taking a more active role in managing and coordinating employee health benefits and wellness programs, and disease management is part of this trend. Disease management is an increasingly well-known concept to most large companies, which frequently request it for particular conditions when contracting for health care service. Today the majority of self-insured employers that offer disease management do so through payers. But large self-insured employers are showing an increased propensity to contract directly for disease management.

Some of the largest U.S. employers are taking this tack, up from just a handful of companies a decade ago. Employers choosing the direct-contracting route typically have multiple health plans and seek a single coordinated DM benefit that they can promote internally and apply to all employees and their dependents.

Fueling this trend is the rise in self-insurance, up from 44 percent in 1999 to approximately 54 percent today—and that trend is even more prevalent among the so-called jumbo employers (those with more than 5,000 employees), 82 percent of which were self-insured in 2005. (See Exhibit 9, page 22.) When they self-insure, employers typically don't receive automatic access to disease management. In most cases, these companies must pay an additional fee to the payer for outsourced DM programs. For some self-insured employers, the extra fee represents a prohibitive barrier to DM adoption.

Still, many payers have found innovative ways to market their DM programs, and one regional payer we interviewed had achieved penetration of 80 percent among *self-insured lives*—even with a fee for the DMO-provided programs. A representative from one regional payer—ranked among the top 20 payers in the nation—told BCG that 40 percent of the payer's self-insured lives were covered by disease management through employers' direct contracting with DMOs. Before the rise of direct contracting, many of these self-insured lives might not have been touched by the approach at all.

Increasing interest among employers is making disease management more pervasive in the market-

place through both direct contracting and the extended reach of payers' own DM efforts. This heightened interest also reinforces promotion of DM services by payers, creates scale economies, and raises the profile and perceived value of the approach among employers, payers, and consumers—and even among payers abroad. (See the sidebar "Disease Management Goes Global.")

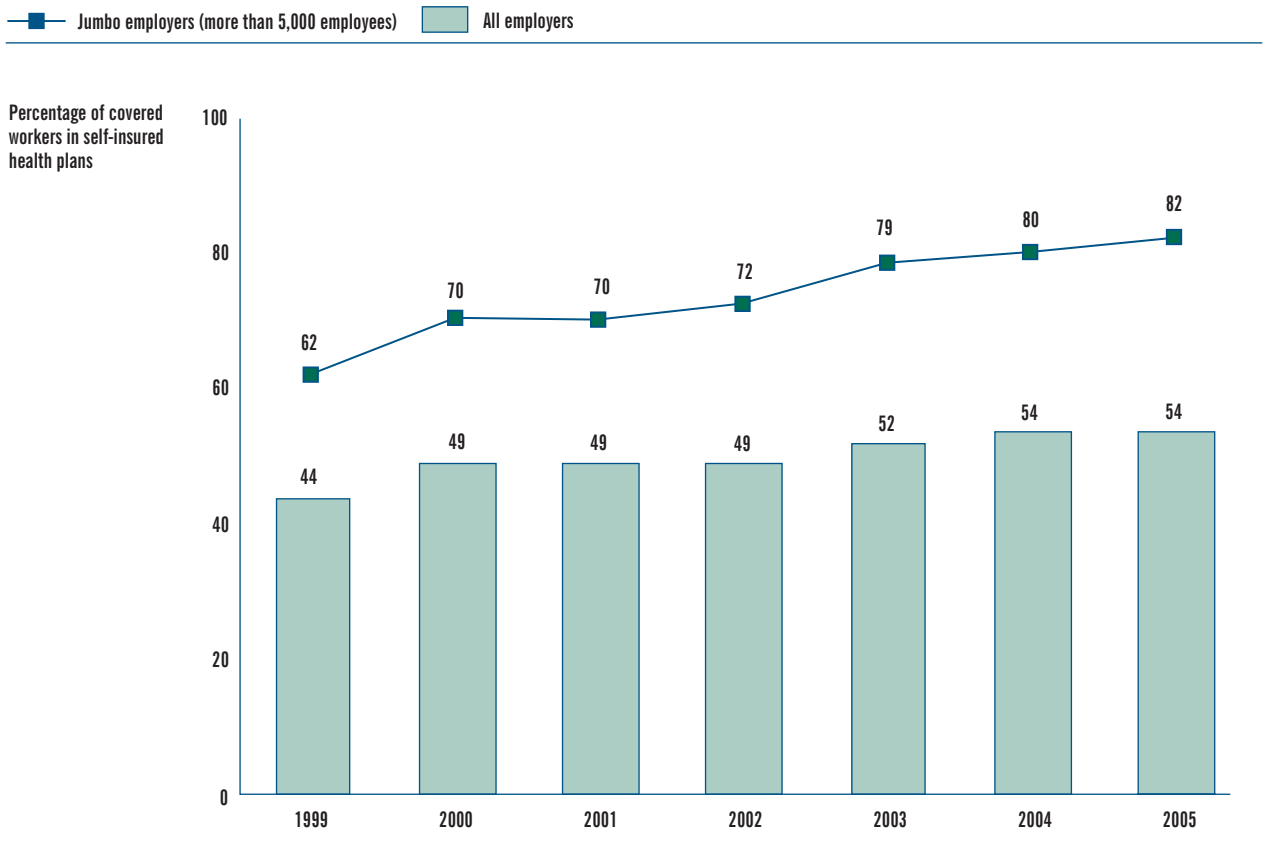
Among the companies that have embraced direct contracting for disease management is American Standard, a large manufacturing company with more than 20,000 U.S.-based employees. American Standard sees a unique role for itself in promoting the well-being of its employees, according to Joe Checkley, global director of employee benefits for the company. To that end, it has contracted with multiple vendors to assemble a single, seamless health and well-being program that is coordinated by Health Dialog.

In an interview with BCG, Checkley explained that American Standard's approach has enabled the company to achieve superior health improvement, cost savings, and employee satisfaction beyond any gains the company could have achieved by relying on multiple DM, wellness, and other programs provided directly through health plans. In some ways, Checkley said, American Standard has actually created its own health plan, since its programs are so highly customized and so closely integrated across its multiple suppliers. The employee benefits that the company offers include disease management, health coaching, decision-making support, health-risk assessments, and on-site wellness screenings and programs.

Many of Checkley's observations were echoed by other employers that have contracted directly for disease management and other health benefits. In contrast, representatives from companies that do not contract for disease management—either

EXHIBIT 9

SELF-INSURANCE, RISING MARGINALLY AMONG EMPLOYERS OVERALL, IS MORE PREVALENT AMONG JUMBO EMPLOYERS



SOURCE: *Employer Health Benefits,* annual surveys for 1999 through 2005, published jointly by the Kaiser Family Foundation and the Health Research and Educational Trust.

DISEASE MANAGEMENT GOES GLOBAL

Because containing health care costs and improving health are goals with appeal worldwide, disease management is expanding internationally. European and Asian interest in the approach is increasing, spurred in part by its growth in the United States and particularly by its expansion into Medicare and Medicaid. In addition, influential groups such as the World Health Organization have voiced support for disease management as they prepare to deal with the burden of chronic diseases. Similarly, associations such as the International Disease Management Association (IDMA) have been working to promote the approach in individual countries throughout the world.

In many cases, disease management abroad differs substantially from the forms it has taken in the United States, in part because overseas efforts are still in their infancy and payers and health care systems differ. According to Warren Todd, executive director of the IDMA, some form of disease management has taken hold on all five continents: "Australia has been very active via many pilots and the recent 'mainstreaming' of DM into the public sector," he explains. "Germany was a relatively early adopter of DM, but it experienced some problems when it attempted to implement a version of 'lite' DM through sick funds. Singapore provides another example of where government has invested significantly in DM, led by the pioneering efforts of the National Healthcare Group in 2000. There are many other examples of DM around the world: Brazil has freestanding DMOs, South Africa has a number of combined wellness and DM programs and is forming a new DM Association, and of course the National Health Service in the United Kingdom and the Calgary Health Region in Canada are organizing important initiatives in DM and prevention."

directly or through payers—generally said that either the demographics of their employees or low expected utilization has prevented them from pursuing the approach.

At least one employer, Delta Air Lines, is bucking the trend toward direct contracting for disease management, reversing its own earlier initiative. Several years ago, Delta contracted directly with two DMOs—Quality Oncology and CorSolutions—for the management of oncology, diabetes, CAD, and CHF. Lynn Zonakis, director of health strategy for the airline, told BCG that Delta had opted for direct contracting because it desired greater detail in plan reporting and in customized outcomes measurement than was available through its payers' DM programs at the time. Although Zonakis reported high levels of satisfaction with Delta's DM programs and their impact on trends in health care costs, she explained that she is now shifting disease management back under the purview of Delta's primary national payer, United Healthcare. This return to payer-provided disease management, she said, is driven in part by improvements in United's offering. More important, she noted that the airline seeks to avoid the complexities of managing multiple "carve-outs" and duplication in services such as online health content.

The Future of Disease Management

We expect disease management's penetration and reach to increase dramatically in the next few years. In particular, the majority of payers we interviewed said they intended to add covered lives to their DM programs. In 2004, JPMorgan's research similarly concluded that plans with more than 1 million covered lives were expecting double-digit growth rates in DM enrollment in coming years. Plans with fewer than 1 million lives were estimating growth rates in the single digits.[8]

Many of the payer representatives whom we interviewed said they were counting on accomplishing such growth by penetrating deeper into the risk pool or by covering more diseases. Others were seeking to make disease management available under new health-plan products for the first time. Frequently, payers cited the opportunity to bring disease management to a larger percentage of self-insured lives.

Applying disease management more broadly is particularly popular among payers, with 83 percent of the medical or DM directors we interviewed reporting that they intended to apply the approach to additional areas in the next year or two. Wellness, obesity, cardiac conditions, and cancer were cited most frequently as new target areas. (See Exhibit 10.)

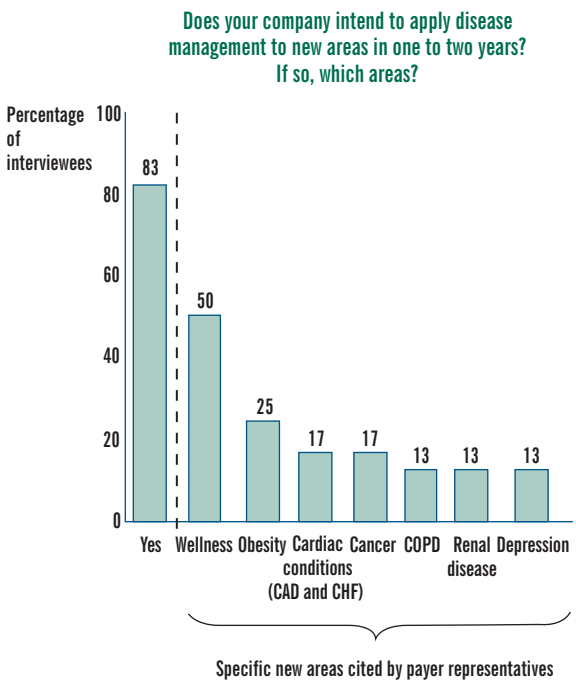
Interestingly, wellness was cited most frequently of all—even though it falls beyond the traditional scope of disease management. Employers, payers, and DMOs alike are turning with increasing interest to wellness initiatives and other health-management programs for healthy or undiagnosed individuals who have not yet generated claims for chronic or other conditions. Indeed, more and more, payers are being called on to offer the full gamut of medical management—of which disease management is a central element.

The medical and DM directors whom we interviewed told us that their reasons for adding new conditions to existing DM efforts included the desire to capture additional financial savings and meet the rising demand for these programs from employers. "We were just recently asked [by one prospective customer] to describe our DM programs for gastroesophageal reflux disease, bladder disease, and low-back pain," the director of one of the top 40 payers noted. The directors who reported that their plans did not intend to apply the approach to additional conditions in the near term said they were waiting to assess returns from current programs before proceeding with new efforts.

The planned expansion into more covered lives and conditions is a key factor in our assessment that disease management still has significant potential for growth among commercial payers. Our research shows that industry leaders and outside analysts alike tend to view disease management as being in its adolescence rather than its middle age, in particular because of the growth opportunities available among self-insured customers. Indeed, the vast

EXHIBIT 10

MORE THAN 80 PERCENT OF PAYER REPRESENTATIVES ANTICIPATE APPLYING DISEASE MANAGEMENT TO NEW AREAS



SOURCE: BCG market interviews.

8. *An In-Depth Look at Disease Management,* JPMorgan North America Equity Research, May 2004.

majority—93 percent—of the medical and DM directors we interviewed perceived disease management to be still in the growth phase of the product life cycle. (See Exhibit 11.) Likewise, analysts predicted that the DM-based revenues earned by DMOs will rise about 18 percent annually over the next few years, with some specific segments—such as DM programs provided directly to employers—growing by more than 50 percent annually. A number of DMOs anticipate even faster growth.

Experience and Results Will Drive the Demand for Additional DM Services

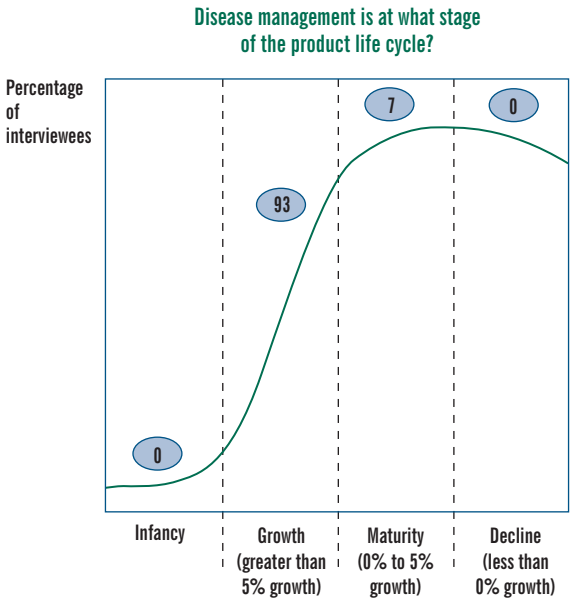
BCG's research indicates that the in-house and outsourced approaches to disease management are likely to continue to coexist for some time, with neither approach winning out entirely. About two-thirds of the medical and DM program directors we interviewed said they planned to continue with their current approach; the remaining one-third told us that they planned to reevaluate their approach in the near term—and their vendors, if applicable—as outcomes data become available.

Some payers may view disease management as so central to their business that they will make every effort to keep or bring the approach in-house. Others may feel that they cannot afford the fees associated with outsourcing or that they can best limit their expenditures by relying on an internal or assembly program. At the same time, we expect still other payers to find disease management so resource intensive and difficult to manage effectively that they will turn to DMOs when their service-delivery or internal outcomes prove unsatisfactory. We also anticipate that the trend toward assembly offerings will increase as customer demand for seamless offerings grows.

In the near term, several factors may influence whether particular payers opt for largely in-house or largely outsourced disease management. One key factor will be how successfully DMOs can differentiate their offerings and market them to employers. A second will be how sophisticated the employer base becomes in selecting DM services and distinguishing among particular providers. A third factor will be how effectively internal programs compete with outsourced programs in targeting and communicating to employer groups. A fourth and final factor will be the preferences of benefits consultants and third-party administrators, which also play a role in DM-sourcing decisions.

EXHIBIT 11

INDUSTRY LEADERS PERCEIVE DISEASE MANAGEMENT TO BE IN THE GROWTH STAGE OF ITS LIFE CYCLE



SOURCE: BCG market interviews.

In the long run, we expect a turning point to come as employers gain even more experience with disease management. Already employers are beginning to request customized reporting on the outcomes of DM programs—including detailed evidence of savings and health improvements. The greater the availability and credibility of data of this kind, the clearer the path forward will be. In addition, disease management's fortunes will surely rise or fall as a result of the CMS pilots now under way.

To the extent that employers realize measurable cost savings or enhanced worker productivity, we believe that they—and their payers and DMOs—will trumpet their findings at conferences and in publications. Such results will only fuel the demand for more disease management as part of a nationwide effort to reduce health care costs and improve corporate bottom lines. Those disappointed with their results will either switch to other payers or DMOs or withdraw their support for disease management altogether. As with any innovation, the proof will be found in customer experience and outcomes. We anticipate positive results.

Disease Management Will Play an Integral—and Integrated—Role in Medical Management

For some payers, disease management will serve as the cornerstone of their strategy; for others, it will be a component of their strategy but not a point of differentiation. Some payers are beginning to integrate disease management into care delivery—in a few cases, to such a degree that it can't be extracted from the overall offering. Other payers are maintaining it as a distinct intervention focused on a narrow segment of members. Which approach will win out?

The precise form that disease management takes in the future will hinge on the care management systems that payers deploy, the management philosophies that employers embrace, and the capabilities that payers and DMOs master. Some attributes of the industry's future are already becoming clear. For example, many payers are working diligently to incorporate disease management into their responses to the most pressing issues facing senior management in health care: quality of care, the rise of consumer-directed care and of pay-for-performance programs, and the increasing interoperability among all the various information systems used by payers, providers, and hospitals.

Payers in the vanguard are finding ways to overcome the complex organizational challenges inherent in addressing all these issues with a single integrated offering. However, for most companies, although they can envision this type of integration, implementing and achieving it are extremely difficult from an operational perspective.

The fact that integrated medical management is lacking at some of even the largest payers reflects just how substantial the opportunity is to enhance members' health, improve provider quality, and contain growth in health care costs. Today this largely represents a lost opportunity. Tomorrow it will likely serve as the basis for intense competition.

What Should Payers Do?

In our view, payers should address four key areas with respect to disease management. These areas are of utmost importance to payers and are thus CEO-level agenda items.

- **Deploy disease management to build competitive advantage.** In general, payers can attain competitive advantage through three central elements: excellence in customer (including channel) segmentation and management, excellence in medical management, and excellence in the management of administrative and information technology costs. Disease management addresses medical management—often payers' largest cost category—by improving quality and provider relationships and by containing costs. Given its importance, we were surprised that so many of the industry leaders we interviewed have not yet made innovation in disease management a priority; few told us that they were trying to use disease and medical management strategically.

- **Push the organization to climb three successive rungs of the integration ladder in medical management.** The first rung involves ensuring that all member-facing interactions are coordinated and appear seamless to the member. The second involves ensuring that all the data available on members—not just claims data but also demographic data and data on a specific member's evaluated readiness to change—are effectively analyzed so that members can be specifically targeted and appropriately engaged. The third rung involves breaking down silos between disease management and the rest of the payer organization. An integrated strategy that spans disease management, product design, network management, contracting, and initiatives such as pay-for-performance programs will enable payers to realize maximum benefits in the cost and quality of care.

- **Actively engage consumers in preventing and managing chronic conditions.** Payers that determine the best ways to engage members as consumers while also tackling cost and quality issues across the delivery system will emerge as winners. Simply providing high-deductible plans is not enough. Indeed, the jury is still out on the impact of consumer-directed plans for those with or at risk for developing chronic conditions.

- **Treat the public sector as a learning laboratory.** The power of the federal government to shape health care delivery in the United States is undisputed, and its involvement in disease management through the CMS pilots is no exception.

The sheer number of Medicare and Medicaid beneficiaries, their higher rates of chronic illness and comorbidities, and their higher health-care costs compared with the general population make the CMS pilots the most important development in disease management of the last decade. Astute payers that can quickly absorb the lessons of the pilots will find opportunities to roll out innovations in their commercial products and improve their offerings to employers interested in managing the health benefits of retirees.

We believe that within a few years, the bar will have been raised to such a level that few payers will be able to deploy token DM programs as a way to merely "check the box" on medical management offerings for competitive purposes. Still, no single strategy will suffice, and disease management will be far from a monolithic approach. Each payer will need to examine a variety of issues, such as the retention and penetration of self-insured lives by its DM programs and the magnitude and reliability of its savings measurements. Each payer will also need to tailor its offerings according to member mix, employer mix, and turnover, as well as the relative emphasis on wellness, consumer involvement, customer service, health care quality, and cost management.

Given all the possible variations in medical management and the degree of potential integration, we believe that payers face a tremendous opportunity to innovate, develop unique capabilities, and rationalize disparate and uncoordinated initiatives. The approach that ultimately emerges isn't likely to be called disease management, particularly since it will be far more comprehensive than traditional disease management has been. Still, the capabilities that make up the traditional approach will be essential to delivering high-quality and customized care to an increasingly activist and engaged population. The DMOs that have been pioneers in the field will surely continue to help drive innovation and collaborate with payers to provide new means of capturing value. And payers themselves will continue to invest heavily to achieve their objectives in medical management. No doubt, it will be an interesting few years.

Methodology

In 2005, BCG conducted a study to assess the state of the disease management industry.

BCG's DM Landscape Database

BCG compiled the DM Landscape Database by culling publicly available information from payers, newspapers and periodicals, industry conferences, and industry associations. We supplemented this benchmarking information by conducting interviews with representatives from selected payers.

BCG's DM Landscape Database captures DM information for 120 of the 150 largest payers in the United States at the end of 2004 (as measured by the number of commercially insured lives), representing about 96 percent of commercially insured lives. The database includes all of the 30 largest payers and 92 of the largest 100.

For each of the 120 plans detailed in the database, BCG assessed whether the plan provides disease management by drawing on in-house resources, sourcing it externally, or both. For 111 of these plans, the DM Landscape Database also captures information on which specific diseases are managed by the plan and which DMO, if applicable, is used.

Interviews with Industry Leaders

To augment this database, BCG conducted interviews during 2005 with representatives from nearly 40 payers. To ensure that the most accurate and consistent picture possible would emerge, we spoke with executives holding similar positions in their companies, focusing specifically on medical directors or program directors responsible for the payers' DM programs.

We also took steps to ensure that our interviews spanned the full spectrum of payers: national, regional, and small local payers, as well as payers with in-house DM programs and those that use DMOs. We supplemented the payer interviews with several discussions with benefits officers and representatives from large employers and DMOs.

As a condition of participation in the study, BCG agreed not to disclose the names of the interviewees or their companies. In this report, therefore, we provide only aggregated industry data. We have included information and quotations that reveal individual companies or their competitive positions only when we have received explicit permission to do so.

Disclosure

Our assessment of the DM industry and its promise for payers is based entirely on our objective research and independent analysis. For the sake of disclosure, we note the following:

- BCG counts among its clients companies across the health care spectrum that have an interest in the DM phenomenon
- BCG projects have touched on DM issues for clients that have included payers, pharmaceutical companies, equipment manufacturers, and disease management organizations themselves
- Two of the authors of this report, Dave Matheson and Anne Wilkins, currently serve on the Strategic Advisory Board of Healthways, a disease management organization

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