

# Issue Brief

## Findings from HSC



### DISEASE MANAGEMENT: A LEAP OF FAITH TO LOWER-COST, HIGHER- QUALITY HEALTH CARE

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*With managed care's promise to reduce costs and improve quality waning, employers and health plans are exploring more targeted ways to control rapidly rising health costs. Disease management programs, which focus on patients with chronic conditions such as asthma and diabetes, are growing in popularity, according to findings from the Center for Studying Health System Change's (HSC) 2002-03 site visits to 12 nationally representative communities. In addition to condition-based disease management programs, some health plans and employers are using intensive case management services to coordinate care for high-risk patients with potentially costly and complex medical conditions. Despite high expectations, evidence of both disease management and case management programs' success in controlling costs and improving quality remains limited.*

### Rising Costs Set Stage for Disease Management

**I**n response to employers' requests to slow rapidly rising health care costs in the early 1990s, many managed care plans limited patients' choice of physicians and hospitals and required prior approval for certain high-cost services. But consumers and physicians rebelled against tightly managed care, prompting a powerful backlash. Faced with a tight labor market in a booming economy, many employers moved away from tightly managed care and directed health plans to expand provider networks and ease restrictions on care. Due in part to these changes, health spending and insurance costs began rising rapidly again in the late 1990s.

The retreat of tightly managed care, coupled with the economic downturn,

has left employers with few tools to rein in costs other than increased patient cost sharing. Many employers admit that shifting health care costs to workers is a temporary fix at best, and they are seeking other options. As a result, more employers and health plans are exploring disease management and intensive case management as potential tools to help control costs and improve quality.

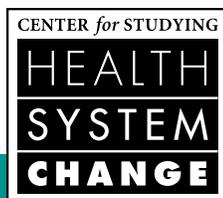
#### Targeted Care Improvement

In the U.S. health care system, about 10 percent of patients—typically those with chronic or complex medical conditions—account for about 70 percent of overall health care spending.<sup>1</sup> At the same time, research shows significant gaps between

best medical practices that follow evidence-based treatment guidelines and the care many patients—especially those with chronic conditions—actually receive.<sup>2</sup>

The lines between disease management and intensive case management programs sometimes overlap, and both target individual patients for interventions with a goal of ensuring they receive appropriate care. While the two approaches share this feature, they also differ markedly.

Disease management programs typically identify a population of patients with a specific chronic condition, particularly those such as asthma and diabetes, where well-established, evidence-based treatment guidelines exist, and patient self-care and compliance are important factors in managing





## Data Source

Every two years, HSC researchers visit 12 nationally representative metropolitan communities to track changes in local health care markets. The 12 communities are Boston; Cleveland; Greenville, S.C.; Indianapolis; Lansing, Mich.; Little Rock, Ark.; Miami; northern New Jersey; Orange County, Calif.; Phoenix; Seattle; and Syracuse, N.Y. HSC researchers interviewed key individuals in each community, including representatives of health plans, employers and other stakeholders. This Issue Brief is based on analysis of these individuals' assessments of disease management and intensive case management activities in the 12 markets.

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the condition. Disease management interventions include sending patients educational materials about their condition and reminding them to adhere to prescribed medications or seek a preventive screening. Interventions also often include educational efforts, treatment guidelines and reminders aimed at physicians and other providers.

In contrast, intensive case management programs are typically highly individualized and focus on coordinating the care of high-risk patients with multiple or complex medical conditions—typically patients most at risk for hospitalizations and other potentially costly care. These patients might be treated by multiple physicians and have complex drug regimens, putting them at risk of adverse medical events if care is not coordinated well among different providers.

## Many Players in the Field

Hospitals and medical groups sometimes develop disease management programs for patients, particularly if the providers bear financial risk for patient care through capitation, or fixed per member, per month payments. As capitation has declined, development of disease management programs has fallen more frequently to health plans, third-party administrators (TPAs) who administer self-insured employers' benefit plans and, increasingly, specialty disease management vendors.

Employers that purchase fully insured products typically rely on health plans to decide whether to offer disease management programs and the range and nature of the programs. Health plans, in turn, choose whether to develop these programs in-house or to contract with vendors that specialize in disease management services. By contrast, self-insured employers decide directly which disease management programs, if any, to offer their employees and dependents. Self-insured employers can purchase disease management programs from health plans, TPAs or specialty vendors, allowing these employers to avoid purchasing programs unsuited to their particular workforces.

## Disease Management Trends

Continuing the trend noted in the last round of HSC site visits,<sup>3</sup> health plans in 2002-03 expanded their array of targeted, disease-

specific programs (see Data Source). Plans in at least half of the 12 sites have added new disease management programs in the last two years or are preparing to do so. Several plans have increased outreach activities to boost participation by eligible members—a problem area noted by health plans two years ago. In Seattle and Greenville, two plans that already offered disease management in their health maintenance organizations have added the service to other managed care products.

Increasingly, many large employers have concluded that the traditional array of disease management programs may not address the most prevalent and costly conditions in their specific workforces. For example, two large private employers reported that their health plans' standard disease management targets, such as congestive heart failure, were a poor fit for their younger workers' needs. These two employers have now identified employees' most prevalent conditions and negotiated with plans to offer programs targeted at these conditions, such as high-risk pregnancies.

Other public and private employers in at least four sites are examining their health claims experience to identify and target high-cost conditions unique to their workforces. One large New Jersey employer provides workers with evidence-based clinical management for about 40 serious conditions, resulting in one in five patients moving to more effective treatment plans. In pursuit of more customized programs, a few large, self-insured employers are purchasing programs directly from specialty disease management vendors. For employers, this arrangement has the added advantage of providing access for all of their employees, regardless of each employee's individual health plan or location.

## New Focus on Intensive Case Management Services

Uncertain about the yield from conventional disease management programs, some plans and employers are looking at intensive case management programs that focus on the individual health care needs of high-risk patients, often with multiple or complex conditions, such as lupus or cystic fibrosis. Increasingly, plans and a sophisticated subset of employers are identifying candidates prospectively for case management programs through predictive

modeling applications that use health care claims data or surveys to identify patients who are likely to generate significant health care costs.

By identifying high-risk patients prospectively, plans and employers hope to lower future health care costs by avoiding delays in needed care, improving care coordination, eliminating redundant care and encouraging self-management of health conditions. Most health plans and employers have begun to experiment only recently with intensive case management and predictive modeling, and their approaches vary widely.

In northern New Jersey, one program focuses specifically on identifying and managing members who are at increased risk for hospitalization, while a plan in Cleveland identifies high-risk patients based on their expected future health care costs. Several health plans also actively encourage physicians to refer patients with complex health conditions to case management programs, particularly patients who have difficulty complying with treatment recommendations and self-care protocols. In some markets, such as Seattle and Syracuse, TPAs have implemented mandatory case management programs for self-insured employers that are triggered when a patient's health care claims exceed a specified cost threshold. In some cases, reinsurers have encouraged or required self-insured employers to use case management programs to reduce the cost of stop-loss coverage for high-cost patients.

In most cases, health plans have introduced intensive case management and predictive modeling applications alongside traditional disease management programs. These plans view individually focused case management programs as “filling in the gaps” of their disease management offerings and improving service for patients with health care needs beyond existing treatment protocols.

In some cases, however, health plans have adopted intensive case management as an alternative to or replacement for traditional disease management programs regarded as ineffective or benefiting only limited numbers of patients. A Seattle health plan that discontinued most disease management programs, including ones for diabetes, asthma and cardiovascular disease, replaced them with an intensive case management program linked to predictive modeling. One Miami health

plan chose to emphasize intensive case management rather than disease management in its Medicare+Choice product because of the large number of elderly patients with multiple health conditions who potentially could benefit from more coordinated care.

Still other plans are moving to more flexible care management strategies that allow even fully insured employers to choose specific types of interventions for their workers. For example, one Seattle plan recently introduced a new line of products that allows employers to select from a range of disease management, case management and wellness education options.

### Evidence of Cost Savings, Improved Quality Limited

Although interest in targeted, condition-specific disease management programs is growing, evidence of their clinical and cost effectiveness remains limited. Like other innovations in health care delivery and management, disease management programs are difficult to evaluate systematically because they are rarely implemented consistently across health plans and vendors and often evolve over time. Much of the research evaluating disease management programs has focused on programs targeting three conditions—diabetes, asthma and congestive heart failure. Several studies have demonstrated that specific disease management programs can improve patient care and reduce service utilization, but the evidence varies widely across health conditions and types of interventions.<sup>4</sup>

There are many challenges in evaluating the cost effectiveness of disease management. Most health plans are interested in programs that can produce relatively short-term reductions in health care utilization and costs, because high membership turnover makes it difficult for plans to capture longer-term savings. Employers, however, may value longer-term results beyond those of interest to health plans, such as reductions in absenteeism and work-related injuries and improvements in worker productivity and satisfaction. As a result, employers and health plans may reach different conclusions about the value of offering disease management programs.<sup>5</sup>

Many health plans' current experience with disease management programs is still too preliminary to assess how well they work, while plans that have made such assessments report varying results. The Seattle plan that jettisoned most of its programs in 2002 found that only one initiative—a prenatal care program for high-risk pregnancies—produced a positive return on investment and improved patient outcomes. The plan's other programs reportedly were expensive to administer and served only limited numbers of members. Other plans in Seattle, Greenville and Miami have found that some disease management programs can improve clinical performance or patient outcomes, though some still lack clear evidence of an economic return on investment. One insurer—convinced of the cost effectiveness—began offering lower premiums to fully insured employers that include disease and/or case management programs in their health plans. These assessments suggest that disease management programs are achieving desired results in some, but not all, health plan settings.

Like health plans, employers have difficulty evaluating disease management effectiveness. A few large employers initiating disease management programs independently of health plans have found evidence of program achievements. One employer that offered an evidence-based program to manage workers' serious medical conditions found that one in 16 patients was misdiagnosed, creating meaningful opportunities to improve care. This employer also reported saving more than \$2 in health care costs for every \$1 spent on disease management.<sup>6</sup>

Overall, however, relatively few employers have been able to assess the performance of disease management programs for their specific employee populations. In part, this is because health plans often do not have enough participants from any single employer to support employer-specific assessments, and many employers have not attempted to model systematically the health or economic effects of disease management activities on their workforce. Lack of consistent evidence of improved quality and reduced costs has prevented more rapid acceptance of disease management programs, according to some employers.

Like disease management, the effectiveness of intensive case management programs

## Notes

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remains to be seen. Even if plans and employers can identify high-risk patients prospectively and enroll them in case management programs, there is no guarantee they will be able to offer interventions that reduce costs or improve care. Moreover, if plans and employers do find ways to manage high-risk patients successfully, targeted case management faces some of the same pitfalls that more traditional disease management programs do—namely, that competing objectives and member turnover could undermine the business case for investment.

## Implications

In theory, disease management and intensive case management programs offer health plans and employers opportunities to reduce health care costs and improve quality without resorting to restrictive utilization management or benefit reductions. In practice, disease management programs must demonstrate cost savings if they are to help slow rapidly rising health costs.

As former Congressional Budget Office Director Dan Crippen told Congress in 2002, "By helping diabetics manage their own care and by detecting problems earlier, those interventions could prevent much more costly treatments such as hospitalization or surgery. If the total savings from avoided hospitalizations exceeded the costs of additional screening tests plus the administrative costs of the disease management services themselves, then total health care costs would be reduced."<sup>7</sup>

The potential for both reducing costs and improving care helps explain why so many health plans and employers have invested in disease management despite relatively limited evidence of effectiveness. The disease management industry is growing rapidly, with specialty disease management companies' annual revenues increasing from \$85 million in 1997 to more than \$600 million in 2002.<sup>8</sup>

Without many attractive alternative mechanisms to control costs, many employers are adopting disease management despite the lack of evidence. With their resources on the line, employers will make judgments about the effectiveness of these programs, no matter how limited the data. Recognizing this fact, the

Disease Management Association of America has identified ongoing evaluation of clinical and economic outcomes as a core component of disease management programs. Moreover, the National Committee for Quality Assurance and the Utilization Review Accreditation Commission, both of which accredit disease management programs, have set standards for measuring and improving the quality of these programs.

The growing enthusiasm for disease management has encouraged policy makers to examine whether these programs can control costs and improve care in public programs, including Medicare and Medicaid. A number of state Medicaid programs are experimenting with various disease management approaches, while the federal government has several Medicare disease management demonstrations underway. The limited amount of evidence on effectiveness is likely to make public programs more hesitant to move beyond demonstrations than is the case for private employers. But public payers may be more inclined to invest in research needed to evaluate effectiveness.

Disease management and intensive case management may prove to be especially beneficial in Medicare, given the prevalence of multiple chronic health conditions among beneficiaries who use the most health care services. In addition, traditional fee-for-service Medicare would encounter little of the membership turnover that challenges commercial health plans.

A key question yet to be answered is whether disease management is best delivered through the traditional Medicare fee-for-service program or through competing private plans. Indeed, this issue has become prominent in the current debate over Medicare reform, where some advocates of a larger role for private plans in Medicare cite the opportunity to make better use of disease management tools as a key argument in favor of this approach. ●