Standpoint

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Determining the Economic Value of Disease Management Programs for Employers

A report issued by the Congressional Budget Office (CBO) on October 13, 2004 set in motion a national debate on the economic value of disease management (DM) programs and sent shock waves through the industry with the statement that "there was insufficient evidence to conclude that disease management programs can generally reduce overall health spending."[1] The Congressional Budget Office left little doubt, however, that positive and credible evidence exists in the peer-reviewed literature regarding the clinical health benefits of such programs.

These "mixed messages" from a respected independent source (CBO) raise a question for private sector purchasers: How should employers proceed with implementation of DM or similar proactive health interventions for their employees, retirees, and family beneficiaries? This position paper addresses that question.

RESPONSES FROM THE DISEASE MANAGEMENT INDUSTRY

Several interested parties have issued public responses to the CBO report, including the Disease Management Association of America (DMAA)[2,3] and America's Health Insurance Plans (AHIP), both headquartered in Washington, DC.[4] Their statements are summarized below:

- Disease management has clinical value for patients, as the CBO report concluded
- Customers are very satisfied with DM services
- Use of DM is growing at a consistent, even accelerating rate

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- The CBO report did not reference all studies (published and unpublished) on DM value, especially more recent peer-reviewed reports showing that DM does have economic value[5]

Many articles and presentations that could have been included in the CBO report were not, which could affect the findings.

REVIEW OF RECENT REPORTS

The articles cited by AHIP and DMAA represent a selected subset of peer-reviewed articles published in the last few years. To serve all interested parties (particularly our members who are private sector purchasers of DM services), the Institute for Health and Productivity Management (IHPM) examined 10 articles on DM that were published in the peer-reviewed literature during the last year[6–15] and one report to the U.S. Congress on the first-year experience of Medicare's DM demonstration programs.[16]

The findings from these observational, quasiexperimental, and experimental studies regarding the value of DM lead to two conclusions: (1) evidence for the clinical influence of DM is generally positive and (2) evidence for the economic effects of DM is contradictory and, at present, inconclusive. The IHPM concurs with the conclusion in the CBO report that there is "insufficient evidence" for the economic value of DM in reducing overall health spending at this time, and cannot, therefore, provide a clear recommendation to those who require a demonstration of such value before purchasing DM services.

In this assessment of recent literature, IHPM discovered that studies finding positive economic value were generally observational (with statistical adjustments), whereas findings of weak or negative results came from randomized, controlled trials. The authors of these studies are from DM companies, health plans, and academic research institutions; academic researchers were

more likely to have conducted randomized controlled—experimental—studies.

For employers seeking clinical value and improved coordination of health care services for people with chronic medical conditions, the literature and observations from many IHPM member companies lead to a recommendation to adopt DM, or at least some of its key elements—such as patient education, integration of provider services, clinical practice guidelines, and supported self-care.

The CBO report, the DM industry's responses to it, and IHPM's review all have one thing in common: They do not assess the strength and quality of the evidence in the studies they cite. Without a systematic, qualitative assessment of the reported data or the applied analysis, one cannot be confident about published evaluations, regardless of whether they appear in peer-reviewed journals or are conducted by academic researchers, DM vendors, or health plans.

A similar conclusion was reached by Goetzel and colleagues[17] in an August 2005 summary of return-on-investment (ROI) results in 44 DM studies, both published and unpublished. The ROI results varied considerably by disease and type of study design, and the authors cited numerous limitations. One limitation was that "many studies lack sufficient rigor in evaluating the financial impact of their programs."[17] They concluded that "more information should be published about existing programs, and ideally the financial results should be subject to the same level of statistical rigor applied to studies focused on health outcomes."

RECOMMENDATIONS

The IHPM makes the following four recommendations to help employers better understand the total cost of employee health conditions and the full value of DM in managing services for these conditions: (1) expand the definition of economic value beyond medical claims cost reductions to include health and functional status and associated worksite productivity improvements, which add to the DM value proposition; (2) measure DM in real-world settings, using observational studies and multiple methods to cross-check results; (3) assure purchasers that the findings are reliable, by using independent sources that employ credible and "transparent" methods of evaluation; and (4) benchmark results across multiple employer settings and populations using transparent methods so results can be validated and replicated.

The private marketplace must demand that the evaluation bar be raised to properly assess the economic value of DM and other defined-population health improvement programs. Employers want to protect and increase the value of both their financial and human capital. To most effectively manage both kinds of corporate assets, employers must be able to measure health and productivity as carefully as they measure, manage, and publicly report on their financial "health"—which is done through independent audit processes using generally accepted accounting principles. The IHPM is, therefore, calling for higher standards of performance evaluation for the health care industry, including evidence on the full value of improvements in employee health and productivity. The public pronouncements of DMAA and AHIP naturally reflect their advocacy of DM. These organizations and others would best serve the DM industry by acknowledging the present lack of scientific evidence for a consistent claim that DM reduces overall health spending. The IHPM encourages them to join in support of an impartial, transparent, and scientific approach that will provide strong and credible evidence of the economic value of DM in reducing total health-related costs.

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To help advance valid health and productivity research, IHPM is committed to the adoption and active promotion of minimum standards of transparency and objectivity in the often-confusing and politically charged environment surrounding the value claims of DM products and services offered and sold to purchasers.

To this end, IHPM hereby endorses the ethical evaluation principles established by the newly formed, nonprofit Population Health Impact (PHI) Institute (Loveland, OH). Specifically, IHPM believes that adherence to the PHI Institute's Code of Evaluation Ethics—objectivity, transparency of methods, and disclosure of interests—and its evaluation principles (data quality, equivalence, statistical quality, causality, and generalizability) will help assure independence and impartiality in future DM evaluations. The PHI Institute is conducting employer-based research aimed at helping IHPM members better understand how to determine the value from investments in health improvement and health and productivity management programs.

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