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.” 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
• The CBO report did not reference all studies (published and unpublished) on DM value, especially more recent peer-reviewed reports showing that DM does have economic value5

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 year6–15 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 observa-
tions 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 jour-
nals or are conducted by academic researchers, DM
vendors, or health plans.

A similar conclusion was reached by Goetzel and
colleagues17 in an August 2005 summary of return-on-
investment (ROI) results in 44 DM studies, both pub-
lished and unpublished. The ROI results varied con-
siderably 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 exist-
ing 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 “trans-
parent” methods of evaluation; and (4) benchmark
results across multiple employer settings and popula-
tions using transparent methods so results can be
validated and replicated.

The private marketplace must demand that the evalu-
ation 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 cor-
porate 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 princi-
pies. The IHPM is, therefore, calling for higher stan-
dards of performance evaluation for the health care
industry, including evidence on the full value of im-
provements 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 acknowl-
edging the present lack of scientific evidence for a
consistent claim that DM reduces overall health spend-
ing. 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.

To help advance valid health and productivity re-
search, 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 prod-
ucts 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 adher-
ence 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 gener-
alizability) will help assure independence and imparti-
ality 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.
REFERENCES


3. DM advocates to CBO: The outcomes are there: Industry leaders find fault with new report on savings from DM. Disease Management Advisor 2004;3(11):124.


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