

Do Employers Know the Quality of Health Care Benefits They Provide? Use of HEDIS Depression Scores for Health Plans

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Objective: Dissemination of health quality measures is a necessary ingredient of efforts to harness market-based forces, such as value-based purchasing by employers, to improve health care quality. This study examined reporting of Healthcare Effectiveness Data and Information Set (HEDIS) measures for depression to firms interested in improving depression care. **Methods:** During surveys conducted between 2009 and 2011, a sample of 325 employers that were interested in improving depression treatment were asked whether their primary health plan reports HEDIS scores for depression to the National Committee for Quality Assurance (NCQA) and if so, whether they knew the scores. Data about HEDIS reporting by the health plans were collected from the NCQA. **Results:** HEDIS depression scores were reported by the primary health plans of 154 (47%) employers, but only 7% of employers knew their plan's HEDIS scores. Because larger employers were more likely to report knowing the scores, 53% of all employees worked for employers who reported knowing the scores. A number of structural, health benefit, and need characteristics predicted knowledge of HEDIS depression scores by employers. **Conclusions:** The study demonstrated that motivated employers did not know their depression HEDIS scores even when their plan publicly reported them. Measures of health care quality are not reaching the buyers of insurance products; however, larger employers were more likely to know the HEDIS scores for their health plan, suggesting that value-based purchasing may have some ability to affect health care quality. (*Psychiatric Services* 64:1134–1139, 2013; doi: 10.1176/appi.ps.201200534)

Employers play a critical role in efforts to promote value-based health care because 88% of workers are insured through the workplace and 82% of the employers providing coverage offer only one plan (1). Value-based purchasing strategies, including the use of quality measures, can promote health plan quality, but there is considerable

debate about whether employers use them when deciding which health plans to offer (2,3). The Healthcare Effectiveness Data and Information Set (HEDIS) contains the measures used most widely by employers to judge health plan quality. The measures, originally known as the Health Maintenance Organization [HMO] Employer Data and Information Set,

were developed in 1991 to measure plan performance (4).

This study examined the dissemination of HEDIS measures for depression to a national sample of employers interested in improving depression treatment for their employees. We selected depression because the disorder is prevalent, costly to the employer, poorly treated in the course of usual care, and potentially modifiable by the employer's own efforts. Prevalence studies have documented that 7% of employees suffer an episode of depression (major depression or dysthymia) each year (5). Depression is costly to the employer, given that depressed workers use four times more medical care than nondepressed workers (6) and have higher absenteeism and diminished productivity (7).

Studies have documented that health plans do not provide high-quality care for depression, nor do they indicate that quality is improving. HEDIS measures for outpatient depression treatment indicate that 60% of privately insured persons diagnosed as having depression receive a minimum course (three or more months) of acute antidepressant medication (8). Even plans that rank in the 90th percentile for providing a minimum course of outpatient treatment for depression reach only 66% of privately insured persons. Despite efforts to increase these rates, HEDIS scores for acute antidepressant medication have not improved. According to average HEDIS scores, the percentage of persons enrolled in

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commercial HMOs who received a minimum course of antidepressant medication rose from 61% in 2005 to 65% in 2010. However, during that same period, rates of minimum antidepressant treatment among commercial preferred provider organization plans declined, from 66% to 64% (9). Although health plans have difficulty providing the type, intensity, and duration of care that has been shown to improve workplace outcomes (10), employers can improve the care depressed employees receive by negotiating with their health plans or purchasing high-quality disease management. In fact, selected disease-management vendors market depression care management that provides evidence-based care directly to employees (11).

The dissemination of HEDIS measures for depression was examined with three objectives. First, in order for employers to review HEDIS measures for depression care, health plans must calculate and publicly report scores to the National Committee for Quality Assurance (NCQA), which sells them to employers. Thus the first objective was to characterize the proportion of employers whose primary health plans report HEDIS depression scores to NCQA as well as the proportion of workers covered by health plans that publicly report HEDIS scores. However, reporting of HEDIS scores is only the first step because employers may be unaware of the scores even if they are available. Thus the second objective was to characterize the proportion of employers whose primary health plan publicly reports HEDIS scores who were knowledgeable about the HEDIS depression scores and the proportion of covered workers whose employers were knowledgeable about the HEDIS scores. The third objective was to understand the multiple factors related to employer-reported knowledge of HEDIS depression scores.

Methods

Data

The data were collected during an intervention study to encourage employers to improve depression

treatment among the workforce (12). The study recruited employers from the 58 regional coalitions in the National Business Coalition on Health and 12 related professional associations. Both groups invited employers that provide health benefits to at least 100 employees to participate. Some groups invited their entire membership and some invited selected members. A total of 419 employers were interested in participating in the study, 16 of whom failed to meet eligibility criteria. Of the 403 interested and eligible employers, 325 (81%) participated in the study. Baseline data were collected by a computerized survey between April 2009 and May 2011. Participating employers were requested to authorize the human resource professional most knowledgeable about their company's health benefit decisions to participate in the intervention.

Measures

There were two primary outcome variables: public reporting of HEDIS depression scores and reported knowledge of HEDIS depression scores. NCQA reports were used to determine whether the primary health plan publicly reported HEDIS scores to the NCQA.

To increase the probability that respondents would recognize that their plan provided HEDIS scores to their companies, the survey defined HEDIS as a method employers use to evaluate health plan performance for a wide range of health issues, including depression. The survey also explained that acute HEDIS depression scores are defined as the proportion of depressed patients remaining on antidepressants for at least 12 weeks. Respondents were then asked: "In the past 12 months, did your most subscribed health plan/network provide your organization its HEDIS scores for depression?" Possible responses were yes; no, they have not released their HEDIS scores to us or reported them to the NCQA; no, they don't calculate their HEDIS scores; and don't know. The two "no" responses were combined because respondents may not have known whether the plan computes HEDIS scores.

Predictor variables included characteristics that we expected to be associated with employer motivation to actively manage health care. Although many employers do not feel it is their responsibility to improve care (13), others view the active management of employee health as a business decision that can improve worker productivity, given that health-related lost productivity is greater than medical and pharmacy costs (14). The predictor variables were placed into three categories: structural, health benefit, and need characteristics.

Structural characteristics were indicator variables tapping motivation to actively manage value in worker productivity and benefits. Motivation to actively manage worker productivity was operationalized as monitoring for absenteeism and productivity at work. Motivation to actively manage benefits was operationalized as the number of benefits offered and paid by employers (retirement, professional development, short-term disability, and long-term disability) and the use of organizational risk aversion among the employers' human resource practices. Organizational risk aversion was measured as the mean response to five questions: whether the employer's health benefits philosophy is to play it slow, safe, and sure; whether the health benefits program takes calculated risks; whether the employer is too cautious; whether health benefits managers are willing to take a chance on a good idea; and whether big risks are necessary to keep health benefits ahead of competition. Possible responses range from 1 to 4, with 1 indicating strongly agree; 2, agree; 3, disagree; and 4, strongly disagree. Responses to questions 1 and 3 are reordered, such that higher scores for each question indicate a greater willingness to innovate and take risks. Additional structural characteristics included the number of full-time employees, for-profit status (versus nonprofit or public status), company or organization age, and geographic spread (number of sites with 100 or more employees).

Health benefit characteristics included how health benefits are managed and financed. Factors associated

with more active employer management of employee health included use of mental health carve-outs, number of health plans offered, number of health programs offered and paid by employers, financial resources for additional health benefit programs, insurance risk (fully insured, fully self-insured, or a combination), and expected increase in health premiums in the next year. Health programs included employee assistance, return-to-work, disease management, stress reduction, smoking cessation, obesity, prenatal wellness, grief recovery, fitness membership, on-site flu vaccine, and health risk appraisal programs.

Need characteristics included the perceived prevalence of depression in the organization, cost of depression to employer, and cost of depression to employee. Cost of depression to the employer was measured as the mean response to four questions: whether the depressed worker is unable to meet responsibilities to the firm in the short run and in the long run (two questions), whether friction develops between depressed worker and other workers, and whether treatment costs contribute to increased premiums. Similarly, cost of depression to the worker was measured as the mean response to questions about whether the depressed worker is unable to meet responsibilities at home in the short run and in the long run (two questions), whether friction develops between the depressed worker and family or friends, and whether treatment costs contribute to financial problems. Possible responses for each question range from 1 to 4, with 1 indicating never; 2, sometimes; 3, often; and 4, always.

The protocol and informed consent that employers signed were approved by the institutional review boards at Florida State University and the University of South Florida.

Statistical analysis

Descriptive statistics were used to address the first two objectives of the study. Unweighted means were used to describe the proportion of employers whose primary health plan publicly reports HEDIS scores to the NCQA and the proportion of employers that reported knowing the HEDIS

depression scores for the primary health plan. Weighted means (observations were weighted by the number of covered employees) were used to describe proportions of employees whose employers met these benchmarks. To address the third objective, generalized estimating equations (GEEs) were used to estimate associations between employer characteristics and knowledge of plan HEDIS scores. The analyses were conducted by using the SAS GENMOD procedure. GEEs were appropriate because they can accommodate a logistic distribution. In addition, the model recognizes that employers covered by the same health plan were not truly independent observations. Thus, empirical (robust) standard errors were calculated to account for repeated observations for the same health plan (15). The regression analysis included only employers with health plans that publicly reported HEDIS depression scores and only observations by respondents who reported knowing whether the employer had the HEDIS scores.

Results

Most respondents were female (N=227, 70%), and 44 (14%) were African American, Hispanic, or Asian; the median age was 41–50 years. They had been in their current position for 7.4 ± 6.5 years. The structural, health benefit, and need characteristics of the 325 employers are provided in Table 1.

HEDIS scores were publicly reported to the NCQA by the primary health plan of 154 (47%) employers (Table 2). Respondents (N=39, 25%) who did not know whether the employer knew the HEDIS scores were excluded from the remainder of the analysis. Only 23 of the remaining 115 respondents (20%) reported that the employer had knowledge of the HEDIS depression score for their health plan. Thus, overall, 7% of the 325 employers had health plans that publicly reported scores and knew the plan's score. Because large organizations were more likely to offer plans that publicly reported HEDIS depression scores, 53% of all covered employees worked at companies that reported knowledge of the HEDIS

depression scores for their primary health plan.

Table 3 contains the regression results that examined characteristics associated with knowing the HEDIS score. Among the significant structural factors were the number of full-time workers (odds ratio [OR]=1.02, 95% confidence interval [CI]=1.00–1.04), productivity monitoring (OR=.41, CI=.27–.62), for-profit (OR=.23, CI=.15–.35) or nonprofit (OR=.27, CI=.17–.42) versus public status, and organizational risk aversion (OR=.34, CI=.12–.97). Health benefit characteristics associated with knowledge of HEDIS scores included whether mental health benefits were carved out (OR=4.69, CI=2.69–8.20), the number of health plans (OR=.90, CI=.84–.96), and whether health coverage was fully insured (OR=.38, CI=.17–.83) or partially self-insured (OR=2.29, CI=1.43–3.68) versus fully self-insured.

Only one need characteristic was associated with knowledge of the HEDIS scores at the $p < .05$ level. Employers that perceived higher costs to the worker from depression were more likely to report knowledge of their HEDIS scores (OR=2.33, CI=1.02–5.29). Three factors—monitoring of absenteeism, employer age, and the expected premium increase—had large p values and were removed from the final specification. Results for the final specification were not sensitive to their inclusion or exclusion.

Discussion

This study examined whether HEDIS depression measures were disseminated to employers interested in improving the depression treatment their workers receive. Despite the long history of these measures, the results suggest that they were not widely disseminated to this employer group. Only 7% of employers in the sample reported knowledge of this measure for their most subscribed health plan, but 53% of covered employees worked for employers who reported knowledge of the HEDIS scores.

Employers that more actively manage employee mental health were expected to be more likely to know

the HEDIS depression scores. Some of our findings supported this conclusion, but others did not. Among the results for structural characteristics, our finding that larger employers were more likely to know their HEDIS scores reflects previous research suggesting smaller employers may be more likely to learn about health plan quality through experience instead of by reviewing objective indicators before the purchase (16). Employers that offer more health benefit programs are more active in managing employee mental health and thus are more likely to invest in knowledge about the quality of care provided by the primary health plan.

Firms that fully or partially self-insure face greater financial risk than firms that fully insure, and hence take an active role in employee health (17,18). Employers that partially self-insure by purchasing stopless coverage were most likely to know the HEDIS scores, perhaps indicating knowledge of the insurance market and a desire to avoid state regulations while undertaking little additional financial risk (19). Risk-averse employers appeared less likely to take active roles in quality monitoring, similar to their reticence in undertaking other innovative initiatives (20–23).

Among the health benefit characteristics, carve-outs are often used by employers that desire active management of benefits in order to control costs associated with high-cost enrollees (24). Employers that make more health plans available to employees may feel employees are responsible for screening plan quality. Firms with the financial resources to purchase additional health benefits have more opportunities to actively manage employee health. Finally, among the need characteristics, employers that perceive greater prevalence and costs associated with depression are expected to more actively manage health benefits. Even though organizational costs to the employer were not associated with knowing the HEDIS scores, employers that reported high costs for employees appeared to understand the link between employee's personal and professional welfare.

Table 1

Characteristics of 325 employers that provide health benefits to at least 100 employees

Characteristic	N	%
Structural		
Geographic spread (M±SD sites with ≥100 employees)	22.7±109	
Age (M±SD years)	74.8±47.1	
Full-time employees, in hundreds (M±SD)	73.7±213	
Absenteeism monitoring	238	73
Productivity monitoring	182	56
General benefits (M±SD) ^a	3.08±1.06	
Type		
For-profit	183	56
Public	66	20
Nonprofit	76	24
Organizational risk aversion ^b	2.33±.5	
Health benefit		
Health programs (M±SD) ^c	6.23±3.06	
Mental health benefit carve-outs	59	18
Insurance risk		
Fully self-insured	153	46
Partly self-insured	95	30
Fully insured	77	24
Financial resources to offer additional benefits	162	50
Health plans offered (M±SD)	2.44±2.92	
Anticipated premium increase next year (%)	8.00±5.40	
Need		
Perceived depression prevalence (median)	11%–15%	
Cost of depression to employer (M±SD) ^d	2.43±.54	
Cost of depression to worker (M±SD) ^e	2.74±.63	

^a Includes up to four benefits offered and paid for by employers (retirement, professional development, short-term disability, and long-term disability benefits)

^b Mean response to five questions: whether the employer's health benefits philosophy is to play it slow, safe, and sure; whether the health benefits program takes calculated risks; whether the employer is too cautious; whether health benefits managers are willing to take a chance on a good idea; and whether big risks are necessary to keep health benefits ahead of competition. Possible responses range from 1 to 4, with 1 indicating strongly agree; 2, agree; 3, disagree; and 4, strongly disagree. Responses to questions 1 and 3 are reordered, such that higher scores indicate a greater willingness to innovate and take risks.

^c Includes up to 11 programs offered and paid for by employers (employee assistance, return-to-work, disease management, stress reduction, smoking cessation, obesity, prenatal wellness, grief recovery, fitness membership, on-site flu vaccine, and health risk appraisal programs)

^d Mean response to four questions about whether the depressed worker is unable to meet responsibilities to the firm in the short run and in the long run (two questions), whether friction develops between the depressed worker and other workers, and whether treatment costs contribute to increased premiums. Possible responses range from 1 to 4, with 1 indicating never; 2, sometimes; 3, often; and 4, always.

^e Mean response to four questions about whether the depressed worker is unable to meet responsibilities at home in the short run and in the long run (two questions), whether friction develops between the depressed worker and family or friends, and whether treatment costs contribute to financial problems. Possible responses range from 1 to 4, with 1 indicating never; 2, sometimes; 3, often; and 4, always.

The results related to employee productivity monitoring did not support our expectation that firms that actively manage employee health would be more likely to know their HEDIS scores. Employers who have a concrete way of measuring worker productivity were less likely to know the HEDIS depression scores. In retrospect, we suspect that our measure of productivity monitoring inadvertently

miscategorized innovative employers who support work relationships, such as working from home, job sharing, and flexible hours, that do not readily allow for conventional productivity monitoring. Close worker monitoring has been shown to have mixed effects on productivity (25), and as a result innovative firms tend to use more inclusive and interactive workplace organizations that rely less on

Table 2

Survey results for 419 employers that expressed interest in a study to improve depression treatment in the workforce

Employers	N
Eligible to participate	403
Completed baseline survey	325
Primary health plan reported HEDIS scores ^a	154
Knew whether the health plan reported HEDIS scores	115

^a HEDIS, Healthcare Effectiveness Data and Information Set

monitoring (26). We were surprised that we did not find a significant relationship between geographic spread and knowledge of HEDIS scores, given that among large employees, those purchasing a plan (or plans) in more markets were less likely to use HEDIS data (27).

The finding that many health plans did not publicly report HEDIS scores replicates earlier research indicating that 43% of health plans do not

publicly report HEDIS scores (28). The large percentage of nonreporting health plans causes concern because HEDIS scores are higher among health plans that publicly report them (29–31). Our study extends this literature by demonstrating that motivated employers did not know their depression HEDIS scores even when their plan publicly reported them. This finding is consistent with prior research that found that only 5% of employers indicated HEDIS data were important to their selection of a health plan (32). Indeed, a higher percentage of employers reported that geographic distribution, premiums, design flexibility, and customer service were more important than health plan quality when choosing a health plan (3). Future research should examine how to incent employers to request HEDIS indicators from plans that do not currently report them as part of contract negotiations and to utilize these scores to request specific quality improvement initiatives as part of contract negotiations.

Prior research has suggested that one reason employers fail to request or health plans fail to offer quality indicators is that neither employers nor health plans feel a responsibility to improve care. Employers report looking to health plans to initiate improvements, and health plans report they are more likely to initiate improvements if requested by employers but that employers make little effort to influence quality of care (13,33). Intriguingly, respondents in this study felt that working with health plans to improve HEDIS outcomes would have beneficial effects on employee productivity. For example, 67% of respondents felt that employees would benefit from such efforts.

The implications of the results for value-based purchasing by employers are mixed. If employer decisions about the health benefits they offer are made without information about the quality of care offered by specific health plans, then health plans will compete for business on the basis of price instead of quality of care. At the same time, over half of covered employees worked at larger employers that knew the HEDIS scores for the primary health plan and that also offered multiple health plans (data available on request), increasing the potential effectiveness of value-based purchasing.

Although the survey data provide insight into a little-researched topic, there were several limitations to this study. First, the cross-sectional nature of the data limited causal conclusions that can be drawn from the analysis. In this vein, our findings about structural predictors of HEDIS knowledge are likely to be more robust than our findings about attitudinal predictors. Second, survey responses are subject to a number of biases and misreporting. Although respondents reported knowing their depression HEDIS scores, it is not a given that they participated in plan selection. However, reported knowledge of HEDIS scores did not differ between respondents who were or were not involved in health benefit design (N=16 of 80, 20%, and N=7 of 35, 20%, respectively).

Third, although the sample of employers was national in scope, it was not a random sample, limiting the

Table 3

Logistic regression results for associations between characteristics of 115 employers and knowledge of HEDIS scores^a

Parameter	Estimate	SE	z	Pr> z
Intercept	.649	1.484	.44	.662
Structural characteristic				
Geographic spread	-.001	.001	-.96	.335
Number of full-time employees	.020	.008	2.54	.011
Productivity monitoring (% of employers)	-.900	.217	-4.15	<.001
Number of benefits	-.175	.113	-1.55	.121
Organization type (reference: public)				
For-profit	-1.452	.202	-7.20	<.001
Nonprofit	-1.309	.223	-5.86	<.001
Organizational risk aversion	-1.075	.533	-2.02	.044
Health benefit characteristic				
Number of health programs	.122	.069	1.76	.078
Mental health carve-out	1.547	.284	5.44	<.001
Insurance status (reference: self-insured)				
Fully insured	-.977	.405	-2.41	.016
Mixed	.829	.241	3.44	.001
Number of health plan carriers	-.106	.033	-3.23	.001
Financial resources to offer additional benefits (reference: no)	.275	.158	1.75	.081
Need characteristic				
Perceived depression prevalence	.448	.233	1.92	.055
Cost of depression to employer	-.882	.523	-1.69	.092
Cost of depression to worker	.845	.419	2.02	.044

^a HEDIS, Healthcare Effectiveness Data and Information Set. Includes only employers that offered health plans that reported HEDIS scores and that reported knowing whether the plan reported scores. Quasilikelihood under the independence model criterion=95.1. The regression used generalized estimating equations.

generalizability of the findings. It is possible that employers in our sample were more knowledgeable about HEDIS depression scores than the “average” employer because many participants in our study were seeking information about how to improve depression care. Fourth, we focused on depression in this study. Although depression is an important and costly disease, employers that do not know the HEDIS scores for depression may know the overall quality of the health plan or the HEDIS scores for other diseases. Last, although HEDIS is a widely used measure of health, other measures, such as the Consumer Assessment of Healthcare Providers and Systems, were not examined, and future research should address whether firms use other measures of quality.

Conclusions

This article examined whether employers knew the HEDIS depression scores for their health plan and the employer characteristics associated with knowing the scores. A majority of employers did not know the HEDIS scores for their health plan, indicating the measures of quality of care are not reaching the buyers of insurance products. However, larger employers were more likely to know the HEDIS scores for their health plan, suggesting that value-based purchasing may still have an impact on health care quality.

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