

A Pragmatic Approach for Employers to Improve Measurement in Workforce Health and Productivity

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NEW FORCES ARE AT PLAY that will invariably change how employers manage the health of their employee populations and how employers work with their supplier partners to provide health-related benefits and associated programs. For employers, health care reform necessitates a “stay in” or “get out” decision and may change the design of the health-related benefit packages provided to employees. In order to make an informed choice, employers will need to understand more fully the value of health (moving well beyond simply the cost of health care) in all its dimensions. This necessity is particularly difficult because so many employers have carved out many of their health-related programs from traditional health benefits and now are overwhelmed with divergent data and reporting from their plethora of partners.

Health as Value

To move from a claims cost management perspective to a population health management approach, employers will need to: (1) focus their measurement efforts using a total workforce and total population-health-management lens, rather than focusing on a limited set of disease-specific strategies; (2) include health dimensions that cut across all health-related benefits programs, including sick leave, disability, and workers’ compensation; (3) include business-relevant monetized outcomes; (4) communicate results with sufficient operational metrics to guide action; and (5) specify a limited set of dashboard metrics to provide a broad overview and effectively communicate population health status and trends, both within their organizations and with their external partners. This outcome-driven, performance-based approach will more fully articulate the business value of better health and transition employers into the full value of investment in health.¹⁻⁴

Here we lay out the health dimensions, dashboard metrics, and key contributing operational measures to foster the new, mutually advantageous conversations between employers and their partners concerning the broader view of health and its business impact. We present an employee-centric view of health—because employees are the productive engine of the employer’s business. In doing so, however, we recognize that health care cost, delivery, and quality dimensions are important to other individuals for whom employers also provide health coverage (ie, spouses, de-

pendents, retirees). Thus, the dimensions we discuss that do not include additional business-relevant outcomes, such as lost work time and productivity, can be applied to these other populations as well. We do suggest, however, that the employer’s overall strategy for spouses and dependents likely will be different because these key lost time and lost productivity outcomes are not directly relevant.

Key Health Dimensions and their Measures

We conceptualize employee population health dimensions in 3 broad classes: health (including domains such as health care cost, health status, well-being, prevention, health management, medical treatment, and clinical outcomes); lost work time (including days absent and time lost at work resulting from health-related performance decrements); and lost financial business productivity (defined as the financial burden of wage replacement payments made to absent employees and the additional financial consequences—such as extra staffing, overtime, temporary help, and lost revenue—borne by the employer in response to absent employees and to employees who do not perform fully while at work because of their health conditions). These classes can be usefully operationalized into 10 key employee population health dimensions that will help employers better develop their overall health management strategy. Each employer will want to address the time period reflected for each metric and then repeat the measures over time in order to understand the direction of trends.

When developing population health metrics, it also is critical to start at the broadest level and become more specific so that employers do not become “lost” in the overwhelming amount of information that might be available at the most granular level of measurement. This approach allows employers and their partners to ensure that the granular metrics support the higher level measures that are important to their companies, and supports the ability to communicate efficiently about population health status and outcomes. The 10 key health dimensions, their definitions, and key metrics for employees are summarized in Table 1.

Employers traditionally have focused their health management strategies on medical and pharmacy claims costs, particularly through changing plan designs or shifting risk to employees or their benefits partners. As employers recognize

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TABLE 1. A FRAMEWORK OF HEALTH DIMENSIONS, DEFINITIONS, AND KEY METRICS FOR EMPLOYERS TO MORE EFFECTIVELY MEASURE AND MANAGE WORKFORCE HEALTH AND PRODUCTIVITY

<i>Health Dimension</i>	<i>Definition</i>	<i>Key Metric</i>
Financial	Expenditures for all health-related benefits programs	Total health-related program costs per employee
Program participation	Degree to which employees are enrolled and taking part in available health-related programs	Participating employees as a percent of eligible employees
Biometric screening	The biometric profile of the workforce	Employees meeting clinical targets as a percent of all employees
Health risks	The profile of risk factors existing in the workforce	Number of health risks per employee
Utilization	The amount of care delivered and the health care setting in which it occurs.	Employees receiving medical care as a percent of all employees
Preventive care	The degree to which employees are being screened for age- and gender-appropriate health conditions	Employees receiving appropriate screening as a percent of all eligible employees
Chronic conditions	The prevalence and distribution of employee chronic health conditions	Employees with chronic conditions as a percent of all employees
Lost time from work	The number of health-related lost workdays, both from absence and reduced performance.	Number of lost workday equivalents per employee from health-related conditions
Lost productivity	The financial opportunity costs borne by the employer in responding to lost work time by employees	Lost productivity costs per employee
Employee engagement	The degree to which employees are engaged in managing their health	Average health engagement survey score per employee

that managing population health is a more effective strategy to meet their goals, it is useful to organize these 10 health dimensions into leading indicators (demonstrating health status), care indicators (demonstrating health activities), and lagging indicators of health (demonstrating health outcomes). When so grouped, these indicators provide a relative time frame for anticipated change in values. Leading indicators provide a basis for health management strategy development. Intermediate indicators typically reflect early outcomes of strategic plan implementation, and lagging indicators generally are the last of the groups to change. For example, the prevalence of diabetes within the population may help to prioritize implementation of a diabetes condition management program. Intermediate indicators would include individual participation and engagement in the program, along with clinical values reflecting improved condition management. Lagging indicators would include health care cost and absence and presenteeism reductions following effective and sustained diabetes management. This approach can help the employer better understand the “cause and effect” of interventions:

Leading indicators: health risks, biometric screening, chronic condition prevalence.

Care indicators: preventive care, program participation, employee engagement, health care utilization

Lagging indicators: financial, time lost from work, productivity.

Constituent Metrics

Employers, however, cannot be satisfied with simply knowing the health status of their population. They will want to intervene to improve key metrics in health and productivity problem areas. Thus, they will require sufficient information to understand the key components that contribute to these high-level metrics. It also is important that

these key contributors are related to the benefits programs employers manage. Table 2 shows how a set of constituent metrics is related to dashboard metrics for each health dimension. This list is not meant to be exhaustive, but to provide a set of constituent metrics key to developing health management strategies and understanding resulting impacts.

Of course, other layers of metrics for employers are useful to guide action. For example, if an employer found that short-term disability total lost days were excessive compared to a benchmark, the company would want to examine both incidence and duration metrics to better understand which component would be key in driving improvements. Using the proposed structure, an employer can focus on areas that are problematic for further drill-down analysis and can work with its internal and external partners to identify and address the primary drivers for the issues identified.

At the same time, employers may want more causal analysis when they identify areas of concern. Because employers and their partners have limited time and financial resources, the proposed structure will help them focus on the issues that are most important in order to identify and implement effective interventions and track detailed outcomes. We cannot stress enough the importance of employee-centric, fully integrated, longitudinal databases for this kind of focused work.

Concerns about Incomplete Data

In an ideal world, employers and their partners would be able to capture data from a variety of databases to calculate these metrics. However, employers find themselves with far too much data in some areas and virtually none in others. One viable solution is for employers to access existing benchmarking data sets and models that can help them estimate reasonable values for missing data—particularly for

TABLE 2. HEALTH DIMENSIONS, SUMMARY METRICS, AND DETAILED CONSTITUENT METRICS FOR EFFECTIVE EMPLOYER MEASUREMENT OF WORKFORCE HEALTH AND PRODUCTIVITY

<i>Health Dimension</i>	<i>Summary Metric</i>	<i>Constituent Metrics</i>
1. Financial	Total program costs/EE	1) Medical cost/EE 2) Pharmacy cost/EE 3) Incidental absence cost/EE 4) Disability cost/EE 5) WC medical cost/EE 6) WC indemnity cost/EE
2. Program participation	Participating EEs as a % of eligible EEs	1) % EEs participating in wellness programs/ All eligible EEs 2) % EEs participating in disease management programs/All eligible EEs 3) % EEs participating in disability management programs/All eligible EEs
3. Biometric screening	EEs at or below targets as a % of all EEs	1) % EEs with fasting glucose <125 2) % EEs with LDL cholesterol <130 3) % EEs with systolic blood pressure <130 4) % EEs with BMI <25 5) % EEs meeting all 4 goals
4. Health risks	# of health risks per EE	1) % EEs with 0 to 1 health risk 2) % EEs with 2 to 3 health risks 3) % EEs with 4 to 5 health risks 4) % EEs with >5 health risks
5. Utilization of services	EEs receiving medical care as a % of all EEs	1) % EEs with inpatient hospitalizations 2) Average inpatient hospital days 3) % EEs with emergency department visits 4) % EEs with primary care visits 5) Average number of primary care visits 6) % EEs with specialist visits 7) Average number of physician visits/EE 8) % EEs with chronic conditions having a medication adherence rate of >80% 9) Cost of preventive care as a % of the cost of all medical care 10) Rates of hospital readmission
6. Preventive care	EEs receiving appropriate screening as a % of all eligible EEs	1) % of eligible EEs having breast cancer screening 2) % of eligible EEs having colon cancer screening 3) % of eligible EEs having prostate cancer screening 4) % of eligible EEs having cervical cancer screening
7. Chronic conditions	EEs with chronic conditions as a % of all EEs	1) % EEs with 0–1 chronic condition 2) % EEs with 2–3 chronic conditions 3) % EEs with 4–5 chronic conditions 4) % EEs with >5 chronic conditions 5) Prevalence of top 5 chronic conditions
8. Lost work time	# of lost workday equivalents per EE	1) Incidental absence days/EE 2) STD days/EE 3) LTD days/EE 4) WC days/EE 5) Noncontiguous FML days/EE 6) Intermittent FML leave days/EE 7) Lost performance days/EE
9. Lost productivity	Lost productivity \$/EE	1) Lost productivity \$ from absence/EE 2) Lost productivity \$ from performance/EE
10. Employee health engagement	Average health engagement score/EE	1) % EEs with low engagement score 2) % EEs with moderate engagement score 3) % EEs with high engagement score

BMI, body mass index; EE, employee; FML, family medical leave; LDL, low-density lipoprotein; LTD, long-term disability; STD, short-term disability; WC, workers' compensation.

absence, performance lost time, and health-related lost productivity from validated self-report tools. Additional data sets also are available to provide population health estimates of health risks. This strategy gives employers a starting point to understand the potential magnitude of these metrics and to help build a business case—internally and externally—to direct investments to minimize the impact of poor health and lost productivity.

Employers can access a variety of sources for those benchmarks that are important to them. Many employers receive benchmark information from their supplier partners—health plans, pharmacy benefit managers, disability management and disease management companies, among others—based on “book-of-business” claims data from that supplier’s clients’ experience. Employers working with data warehouse firms—particularly those that integrate data across health and lost-time benefits programs—can obtain benchmarks for multiple benefits from a single source. The not-for-profit Integrated Benefits Institute has a disability/lost time benchmarking database based on tens of thousands of employers, as well as employer-based modeling tools to estimate lost time and lost productivity for chronic health conditions and for an employer’s total costs of health. The message to employers is to ask supplier partners what they have available for comparative benchmarks for client use. It is critical, however, that the employer understand the population from which the benchmarks are derived to ensure that the benchmark information is put to effective use.

Employers often make a distinction between “direct” costs and “indirect” costs of health. Because this distinction tends to reflect a benefit program focus (“costs in the program I manage are direct costs, everything else is indirect”), a better distinction is “measured” vs. “modeled.”

An Opportunity for Collaboration

Employers typically have organized their benefits programs into separate silos, with unique supplier partners, leading to fragmentation of health and productivity data. Through more effective alignment of health management goals using metrics directly relevant to employer objectives, actionable information can be generated that better promotes strategies to manage population health within the employer organization and between employers and the plethora of their benefits partners.

Summary

Enlightened employers now are beginning to build their corporate health strategies around leveraging and measuring the value of investment in workforce health rather than trying to manage the costs of health benefits for their employees.

Effective use of this measurement framework will help maximize the value of employer investments in health and represent a meaningful way for all to transition away from a solely cost-based approach to health care delivery and to embrace a more comprehensive and meaningful value-based performance and outcomes strategy.

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