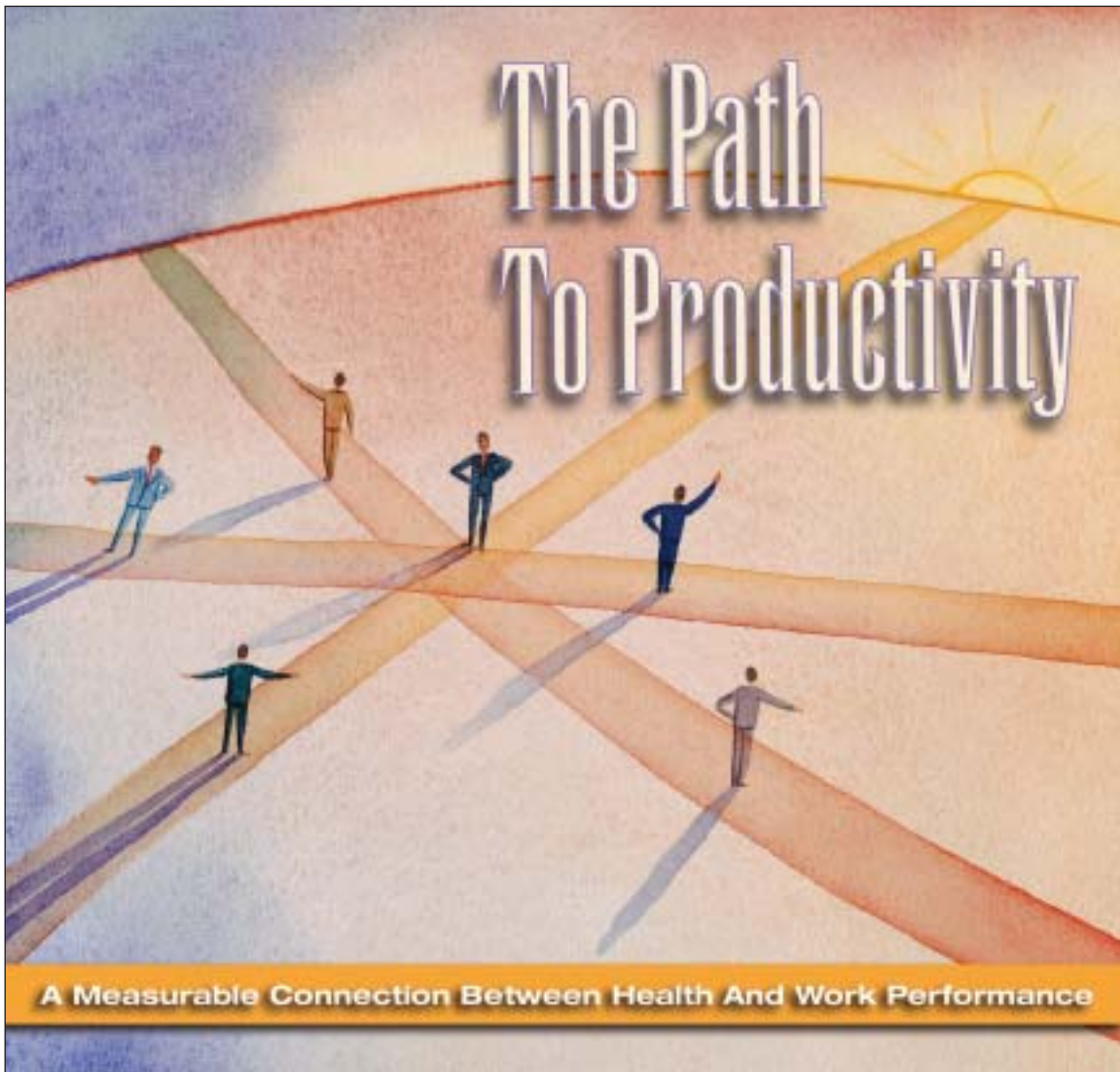


Absolute ADVANTAGE

VOLUME 2, NUMBER 8

THE WORKPLACE WELLNESS MAGAZINE



IN THIS ISSUE:

The Academy for Health and Productivity Measurement, a pioneer in the area of organizational health and productivity measurement, believes very strongly in the power of health and productivity management as a means to business success in the 21st Century. In this issue of Absolute Advantage, the experts at the AHPM have constructed a compelling case for the connection between health and work performance.



Each month you can learn more about the articles in Absolute Advantage. Simply log on to WELCOA's members only website to get more in-depth coverage of the topics that matter most to you. Find full-length interviews, expert insight, and links to additional information that will help you do your job better!

THE WELLNESS COUNCILS OF AMERICA

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A Letter from the Executive Editor



Wellness Councils of America



David Hunnicutt, PhD



Sean Sullivan, JD

Dear Colleague,

Over the course of the past quarter century, the field of health promotion has demonstrated its ability to produce concrete results for many who have employed its numerous strategies and various models. Indeed, there are nearly 400 studies demonstrating health promotion's ability to affect employee health positively, and almost 200 more linking health promotion to reduced health care costs. But what about health promotion's impact on employee productivity and organizational performance?

This issue of *Absolute Advantage* confronts this elusive question head on. It not only seeks to address the relationship that exists between health and productivity, but contends that health and productivity is the only viable model for the future of employer-based health benefits.

We are grateful to Sean Sullivan, President and CEO of the Institute for Health and Productivity Management, Cathy Baase, MD, Wendy Lynch, PhD, Barbara Pelletier, MS, RD, and John Riedel, MBA, MPH for their willingness to share their expertise on the topic of health and productivity measurement. In the pages of this magazine, they explore the power of productivity, present a model for managing productivity, share some of the tools of the trade, illustrate productivity in practice, and look to the future of health and productivity management.

I believe that you'll find the issues addressed in this edition of *Absolute Advantage* to be both intriguing and thought provoking. And furthermore, it is my hope that you'll be able to implement strategies for health and productivity management within your organization in the years to come. Enjoy the issue.

Yours in good health,

David Hunnicutt, PhD
President

Absolute ADVANTAGE

THE WORKPLACE WELLNESS MAGAZINE

VOLUME 2, NUMBER 8

Organizational Founder, William Kizer, Sr.

Welcome

Absolute Advantage is the interactive workplace wellness magazine that helps large and small employers link health and well-being to business outcomes. *Absolute Advantage* arms business leaders and wellness practitioners with leading-edge workplace wellness information straight from the field's most respected business and health experts.

With its online component, *Absolute Advantage* provides the industry's most current and accurate information. By logging on to the magazine's interactive website, you can access a whole new world of health promotion—including in-depth interviews with national health promotion experts and insider's information about industry products.

Subscription Information

For information about subscribing to *Absolute Advantage*, contact the Wellness Councils of America at (402) 827-3590 or via e-mail at wellworkplace@welcoa.org.

Ab•sol•ute Ad•van•tage:

When a company can produce more than its competitors—even though they have the same amount of resources—it has an absolute advantage. We believe wellness is that advantage.



Executive Editor

David Hunnicutt, PhD

Dr. Hunnicutt is President of the Wellness Councils of America. As a leader in the field of health promotion, his vision has led to the creation of numerous publications designed to link health promotion objectives to business outcomes.



Managing Editor

Brittanie Leffelman

Brittanie is the Assistant to the President and manages major writing projects at WELCOA. With a Master's Degree in Health Promotion, she regularly coordinates national health forums, major grants and state and local wellness initiatives.



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With over 15 years experience in magazine, book and catalog design, David oversees all publications produced by WELCOA including *The Well Workplace* newsletter, *Absolute Advantage* magazine, brochures, books and communications materials.



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Ethan A. Deas

Ethan acts as liaison with the WELCOA Medical Advisory Board, Board of Directors, and with national media. He is responsible for coordinating national events and developing communications materials for corporate partnership initiatives.

Information in this publication is carefully reviewed for accuracy. Questions, comments, or ideas are welcome. Please direct to Dr. David Hunnicutt, Executive Editor, at the address below.

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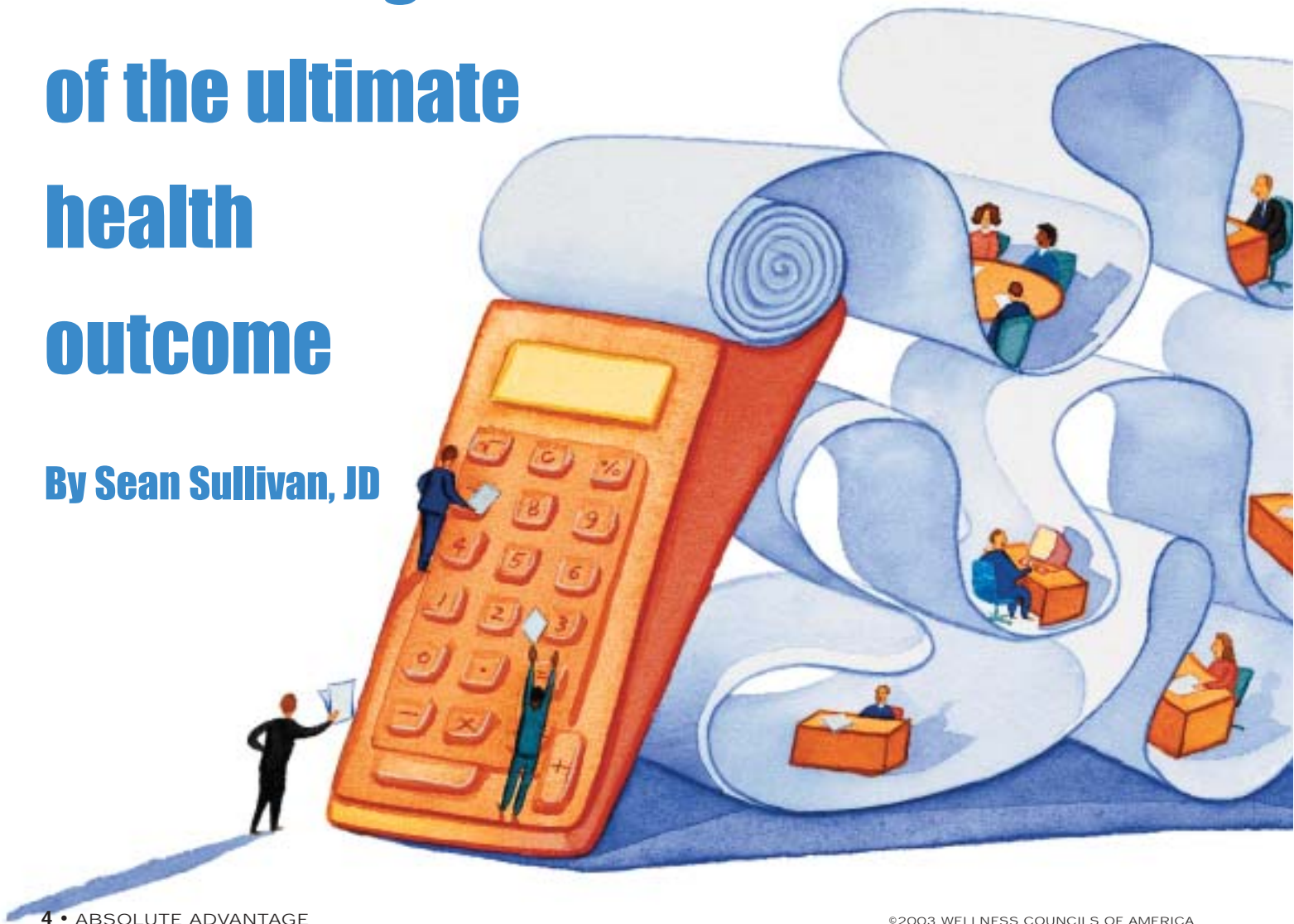
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The Power of

Calculating the value of the ultimate health outcome

By Sean Sullivan, JD

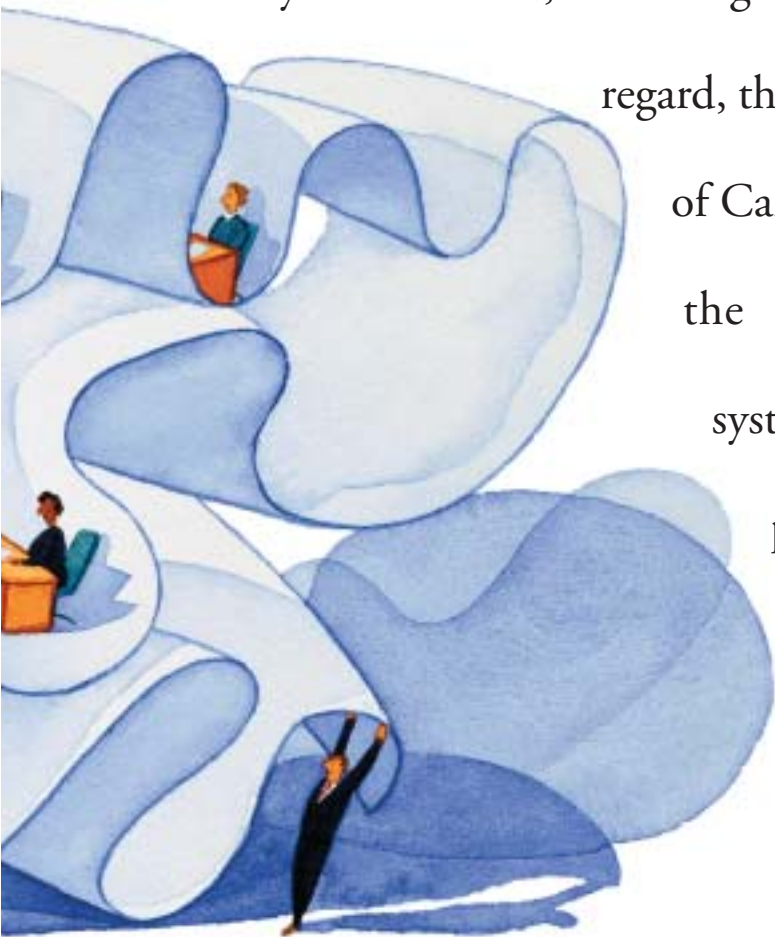


Productivity

Health care systems everywhere in the industrialized world, however they are financed, are facing the same intense cost pressures. In this

regard, the publicly-financed single-payer systems of Canada and the U.K. are no different than the uniquely employer-based American system—or the hybrid German system of payroll taxes and “sickness” funds.

Aging populations, the march of medical progress, and unhealthy behaviors add up to inexorably rising costs in all the wealthy countries.



“In reality, health and productivity is the only viable model for the future of employer-based health benefits. The medical cost model that still predominates in the thinking of most corporate benefit and human resource managers simply is too expensive for employers to sustain—and its outcomes are inadequate, as well.”

Some employers in the U.S. are grumbling about health care not being their business, and letting rising health benefit costs push them toward handing the problem over to their employees. At the same time, however, other employers are realizing that the health of their employees is actually a vital part of their “human capital” and a largely untapped source of productivity gains that can improve business performance.

In reality, health and productivity is the only viable model for the future of employer-based health benefits. The medical cost model that still predominates in the thinking of most corporate benefit and human resource managers simply is too expensive for employers to sustain—and its outcomes are inadequate, as well. If all they can think to do is try to control or contain medical costs, they are fighting a losing battle against relentless demographic and technological trends.

The “cost crunch” either will drive employers out of health care—or into health and productivity. But disengaging from active involvement in health care will not only not solve the problem of rising medical costs, which they will continue to pay for indirectly if Uncle Sam becomes a single payer, but will increase the amount of performance lost because of health problems not being managed. The performance gains to be realized from active population health management are causing forward-thinking employers to seek higher-value outcomes measured in workplace productivity gains.

Macro-trends favor adoption of the health and productivity model—indeed, make its adoption critical to the success, if not the survival—of globally competitive enterprises. There are several reasons for this, which can be summed up thus: “We’re entering a new era of human capital, in which the slogan “our people are our most important asset”—mouthed by nearly every company in its advertising—actually will be true!”

Demography Is Destiny

The rapid aging of the population and of the work force holds huge consequences for all industrialized nations. As the baby boomers exit the labor force in growing numbers, they will be followed—but only partially replaced—by the “birth dearth” generation they produced. The implications of this are just now being grasped by many business leaders—an actual drop in the absolute number of workers between the ages of 35 and 45 over the next decade or more! Ken Dychtwald predicted all of this long ago in *The Age Wave*, but like all demographic truths it has lain unobserved until suddenly and dramatically apparent—we will be running out of skilled workers in the immediate future.

Like demography, economics also presents ineluctable truths that call to mind Aldous Huxley’s statement “Facts do not cease to exist

just because they are ignored!” Basic laws of supply and demand cannot be repealed: if labor will be the factor of production in short supply going forward, it will become more valuable. In short, the industrialized nations will need every able-bodied worker they can muster to maintain the growth of their economies—and they will need to make these workers as productive as they can be. Investments in physical capital were the key to productivity in the Boomer Age of labor surpluses; investments in human capital will be the key in the imminent age of labor shortages.

Dematerialization Of Production

Accompanying this significant demographic shift is another trend that is changing the workplace fundamentally. Thirty or forty years ago, the majority of workers produced “things” that could be measured according to the Bureau of Labor Statistics’ definition of productivity—as “output per hour worked.” This is no longer true. Harvard economist Zvi Grilich, the dean of expertise in this domain, estimates that the Labor Department definition of productivity now applies to, at most, a quarter of the work force. Most of us are what Peter Drucker first called “knowledge workers”—producers and suppliers of ideas rather than objects. In this rapidly “dematerializing” economy of knowledge work, “intangible” capital is supplanting physical capital as the critical asset. Financial thought-leaders like Baruch Lev at New York University and Bob Howell at Dartmouth’s Amos Tuck Business School are pointing out that the financial valuation of Corporate America now depends much more on intangibles than it does on the traditional categories displayed on a balance sheet.

As Kent Peterson and I argued in an earlier issue of *Health and Productivity Management* magazine, employees themselves are “assets”—are human capital that produces returns on the investments made in it. In the new business age of warp-speed changes in market demands, knowledge increasingly is viewed as capital. But the translation of knowledge into performance depends heavily on peoples’ capacity and functionality—which is to say, their health! Health is being seen, at last, as a critical component of human capital, which—if not maintained or improved, has a huge negative impact on the performance of knowledge workers.

Larger Definition Of Health As Human Capital

The wellness community has long argued for a definition of health that leads to this idea of human capital—by seeing it as a positive rather than a neutral state of well-being. The narrow medical concept of health as the mere absence of disease—the neutral state—has trapped the entire health care enterprise in a box canyon of rising “costs” from which there is no escape—because of those demographic trends as well as the technological advance of

medicine itself. Wellness is more than the mere absence of illness—it includes the absence or reduction of health risk factors that are likely to result in costly disease if not reduced or eliminated. The absence or improvement of these risks, then, is an essential part of the definition of health.

But the definition is even larger for employers providing health benefits and wellness programs to their workers. If they are to gain the true value from doing these things, they must be able to measure an improvement in the overall capacity of their employees to be productive—in their functionality that should translate into productivity (all other things, such as good management, being equal, as economists would say!).

So the logical progression in the definition of health is from (a) the absence of disease to (b) the presence of wellness, which also means a lower risk of disease, to (c) enhanced functionality, which means an increase in the value of employees' "human capital." This is the value trail down which employers must go to justify the dollars spent on their employees' health care and their wellness.

Implementing the New Value Model of Health and Productivity Management

As an anonymous consultant remarked, "knowledge is not power, no matter how often that statement is repeated; implementation is power!"

This is absolutely correct—we already know a lot of what has been stated in this article, but few employers have acted on it. No one disagrees with the proposition that healthy employees are more productive—but they still require proof! So to make the case for health and productivity management as the model for employer-based health benefits, we must provide that proof.

The process begins with asking the right question, because the right answer to the wrong question is worse than useless—it's harmful. The question is NOT "What does it cost to make employees well—or not ill?" The answer to this question is "too much," and that's what driving employers toward the exits. The right question is this: "What's it cost NOT to keep employees well in the first place?" This is almost the opposite question from the first one, and the answer to it is much bigger and more important to employers. Asking this question shifts the focus from disease to health—from illness to wellness—and the answer to this question finally recognizes the true value to employers of having healthy employees, which is enabling them to do their work better and contribute more to the success of the business.

Adding up the costs of not keeping or having healthy employees requires more than just integrating data on risk factors and medical claims and disability—it also means measuring things that have not been measured in the past, such as lost productivity on the job because of health problems. But again, even an integrated database—or knowledge—is just a starting point: the critical next step, or steps, is integrated action. This means doing all the right things at the same time.

The right things can be sorted into three categories: (1) population health management, or using risk profiles and behavioral change initiatives to keep the majority of employees who are mostly healthy most of the time in that status—or even improving their health; (2) disease management, or managing the increasing incidence of chronic conditions in an aging workforce through

targeted programs that minimize the total costs of these workers (NOT just their medical costs) by keeping them as functional as possible; and (3) demand management, or engaging employees (and their families) in more active management of their own health through tailored behavior change programs and instruction in self-care techniques. These "interlocking circles" of health management, disease management, and demand management must all be rolling in the same direction—toward functional health outcomes—at the same speed to keep the health and productivity management (HPM) model on track.

Redefining Employee Health

Getting back to definitions, which always are the starting point for taking right actions, employee health benefits and programs should no longer be considered merely expenses to be controlled. On the contrary, they are investments in the health of employees, which is an asset of the business—a critical element of its human capital. In truth, it may be the most critical element because without it, much of the knowledge and motivation of the work force—the other key elements of human capital—cannot be translated into optimal performance. All the desire and training in the world cannot be productive if their possessor is ailing. This is the bottom line for health professionals—helping to translate the full skills and motivation of workers into job performance that contributes to business success. Programs to maximize health are investments in human capital assets, which produce returns fully competitive with investments in new computer systems or training programs and, without which, the returns on those other investments will not be fully realized. ★

ABOUT THE EXPERT: Sean Sullivan, JD

Sean Sullivan is co-founder, President and CEO of the Institute for Health and Productivity Management. The Institute works with all the major stakeholders in health care—purchasers, providers, and health plans—to create greater value for employers as measured by improved employee health and performance in the workplace.

Mr. Sullivan previously was President and CEO of The National Business Coalition on Health for five years. During that time, the National Coalition's membership grew to more than 100 employer coalitions in 40 states representing 8000 employers and became the leader of the employer-driven movement toward a value-based health care system.

Mr. Sullivan is on the editorial boards of *Managed Health Care* and *Disease Management* magazines, and is himself the Editor of the Institute's own quarterly publication, *Health & Productivity Management*. He also serves on the board of American Century Employee Benefit Services, and on the Advisory Board of the Center for Practical Health Reform. Mr. Sullivan speaks nationally and internationally on the emergence of the health and productivity model as a key to human capital management for employers in the 21st Century.

He holds degrees in economics from Harvard, and law from Stanford.





H & P

By Wendy Lynch, PhD

*Questions abound in the arena of health
and productivity measurement.*

What exactly is productivity?

How is it measured?

*And how can we address the skepticism people
have in regard to achieving outcomes?*

*This H&P Q&A will
put your questions to rest.*

Q & A

Widgets, hours, defects, sales, goals achieved, tasks completed, revenue earned per employee—the term productivity may mean all of these things (and more) in different settings and circumstances. Its meaning is almost as complex and multifaceted as the term health—for which our definitions and measures have evolved extensively over time. Just as health has multiple dimensions and a wide array of general and specific indicators, productivity means different things in different cases.

For the purposes of this issue of *Absolute Advantage*, the concept of productivity will be defined specifically in relationship to health. Our discussions will focus on specific aspects of work performance rather than on macro indications of productivity. A brief context helps to describe other perspectives about productivity and refute some myths about our ability to measure it.

A Context For Productivity Measurement

The term productivity has a variety of connotations and definitions across professions and disciplines. Each provides a different

perspective that may or may not have direct relevance to health. Economists use the term productivity to describe corporate performance, often in terms of average net revenue earned per employee. It is a financial expression of what value was produced. Productivity indicators are reported at the national level to help assess how the economy is performing. Because it is a company (or national) average, this type of productivity indicator is highly related to external influences, such as economic trend, seasonal variation, availability of labor and other factors. When an economist hears productivity, he or she thinks about the broader economy.

Manufacturing organizations may think of productivity as gross levels of output, or production. How many barrels of beer, microprocessors or t-shirts were produced this week? What was the volume of non-defective items generated on that shift? Jobs with countable items have a clear metric for measuring production. Such metrics represent output of a plant, or a team—which may depend on the availability of raw materials, dependability of machinery, and other external factors.

The rapid growth of knowledge workers presents an entirely different output challenge because their level of effort stays mostly invisible. One does not see or tally the number of thoughts or ideas a worker has in a week, nor is the value of a day's contribution as easy to calculate as a physical job making products or delivering services. Their "production" does not have a straightforward definition, leaving managers fewer direct options for assessing employee accomplishments.

Because of all these preconceptions about what "productivity" means, and concern about the ability to define and detect it, many respond to the notion of measuring productivity with strong skepticism. Many dismiss productivity as unmeasurable for most workers. Further, when told about self-reported productivity information, these skeptics often reject such information as "soft"—which really means not believable. These reactions are based on a lack of knowledge about the evidence supporting the validity of productivity measurement. Let's address some of the myths on which this skepticism is based.

MYTH 1

PRODUCTIVITY IS A MACROECONOMIC PHENOMENON THAT MOSTLY REFLECTS EXTERNAL FACTORS OR LARGE ORGANIZATIONAL INFLUENCES, NOT EMPLOYEE HEALTH STATUS.

From a global perspective, this definition of productivity is accurate—it has traditionally been viewed as a macroeconomic phenomenon. For example, one would not expect that improvements in employee health could have changed the course of Enron's demise (unless we can find a connection between good health and good ethics). What is important to remember, though, is that the leading researchers and practitioners in the health and productivity field are focusing on health-related productivity at the person and team level. The goal is to discover the contribution health factors can make to business success, not to insist that health is the most important factor.

MYTH 2

JOBS THAT CONSIST OF VISIBLE, COUNTABLE TASKS PROVIDE THE ONLY LEGITIMATE "HARD" MEASURES OF PRODUCTIVITY.

Jobs that provide numeric information about production do provide wonderful sources of data about the connection between health and productivity. They also provide opportunities to validate self-report data against "the real thing." However, a broad assumption about the validity of these "real" metrics should be questioned. For example, employer respondents rated company-collected absenteeism reports for salaried workers a 5 (1= not reliable, 10= very reliable).

One also must consider inherent difficulties—and potential misinterpretation—analyzing and reporting hard productivity data. For example, if you are looking at data for workers who deliver packages, you might think a simple count would tell you which workers are more productive. But one has to control for the population density in the delivery area (two houses in a mile versus 20,000 apartments in a mile), the time of year (Christmas for instance), tenure of the worker (long learning curve), and many other factors, just to level the playing field for comparison. Otherwise one may conclude incorrectly that all workers in New York City are more productive, or the employees hired in December are more productive. "Hard" data will need statistical control and informed interpretation.

MYTH 3

DECISION-MAKERS DON'T BELIEVE "SOFT" DATA.

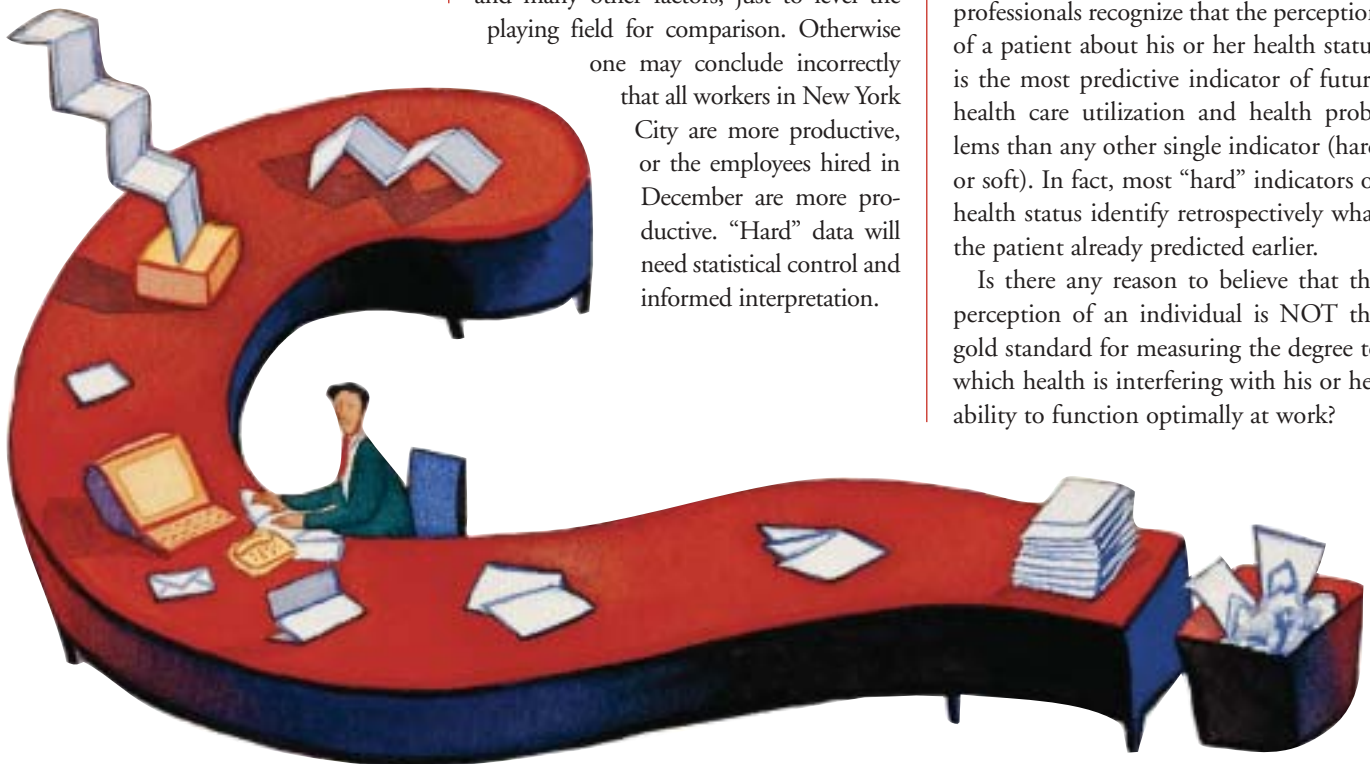
Companies use self-reported data to make important decisions all the time. Consumer confidence ratings influence Wall Street. Fortune 100 employers use employee satisfaction and customer satisfaction data to create corporate strategy. Hiring decisions may depend on responses to "job fit" assessments that are usually self report. Personnel decisions—about promotions, merit pay, hiring and firing—are based mostly on human interpretations about achievement (ratings of productivity). Not only do companies use surveys to make significant decisions, they depend on people to rate levels of productivity—on which those decisions will be based.

MYTH 4

THE CONCEPT WILL NEVER BE CREDIBLE USING SELF-REPORTED DATA.

Skeptics probably also had doubts about the SF-36 as a gold standard for measuring health status. But now medical professionals recognize that the perception of a patient about his or her health status is the most predictive indicator of future health care utilization and health problems than any other single indicator (hard or soft). In fact, most "hard" indicators of health status identify retrospectively what the patient already predicted earlier.

Is there any reason to believe that the perception of an individual is NOT the gold standard for measuring the degree to which health is interfering with his or her ability to function optimally at work?



A Logical Connection Between Health And Work Performance

Anyone who has ever tried to concentrate at work with a serious head cold, sat at a computer while experiencing back spasms, or conducted meetings while living with depression knows that performance often suffers when they have disruptive symptoms. Surgery may leave us unable to get out of bed or think clearly for days or weeks. Even relatively minor issues, such as symptoms of allergies or poison ivy, can interfere with our ability to work as effectively as usual. The more dramatic the symptoms, the more disruptive they can be. We will get detailed about these connections in the next section.

Thinking through the obvious connections, health professionals should avoid the temptation to over generalize. Not all symptoms and illnesses affect all jobs.

Our responsibility will be to understand and quantify where relationships exist and where they do not. A simple example might be that, after an initial trip to get a cast, a typist may be just as productive with a broken ankle as without one. Individuals who have diabetes or depression that is very well managed may perform as well or better than employees with neither illness. Arthritis may affect day laborers more than receptionists. We do not know all the answers yet, but efforts to combine health and productivity measures will help us find them.

Types Of Productivity Measures

As a reminder, we are talking about health-related productivity, not macro-level productivity addressed by national economists. Maybe a more apt term would be worker performance measures.

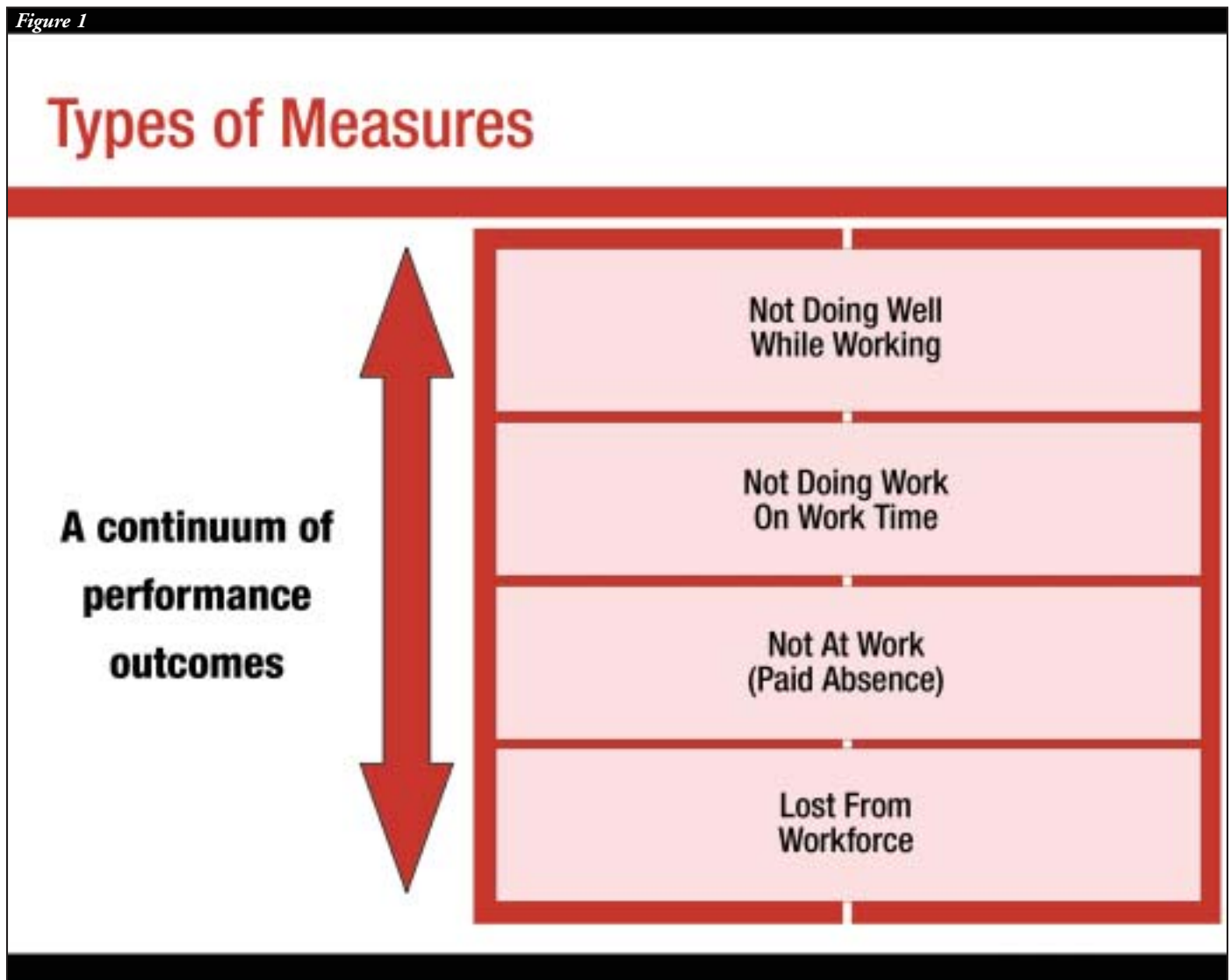
One way we have described productivity

outcomes in Academy training sessions is to separate metrics into four levels, each of which gets more detailed and job specific. These levels are shown in **Figure 1**. In each level, metrics are provided to indicate both what would correlate with better outcomes in that level, and what would correlate with worse outcomes (shown in **Figures 2, 3, 4 and 5**). The first two levels (starting at the bottom) deal with situations where the employee does not report to work. The other two levels deal with situations where the individual is at work, but not performing at usual levels (sometimes referred to as “presenteeism”) Let’s take a look at these levels in more detail.

Level 1: Lost From The Workforce

The most permanent loss of productivity from an employee occurs when the person is lost from the workforce completely. They may be lost from the workforce because they died, became permanently disabled,

Figure 1



retired early, or left the company due to health reasons. For example, research indicates that smokers have a higher likelihood of permanent disability than non-smokers. If an employer loses a key worker to sudden, premature death, there are business consequences. When that happens, the team is disrupted, intellectual capital is lost, work is delayed or slowed as others assume new responsibilities, and time is spent finding and training a new employee.

Indicators of lost productivity at this level include increased turnover, earlier-than-expected retirement age, cases of permanent disability, number of unanticipated job searches, or declines in team production.

Level 2: Not At Work (Paid Absence)

Another form of productivity loss occurs when workers are absent for a period of time but will return. Absence, in this sense, refers to time not at work—when employees do not report to their “usual” place or mode of work. A person who feels ill may miss work. This level refers to non-holiday paid time, such as sick days, personal days, and wage replacement from disability or workers’ compensation. Workers are being paid despite an absence of their contribution. Technically, either the company loses the employee’s contribution for the duration of the absence or the company pays the absent person and another person to make sure the work gets done (more cost for the same productivity). In jobs that require a specified number of staff, e.g. teachers or police, absences require over-staffing or replacement workers. If replacements are not necessary, absence produces a variety of delays, disruptions and lost opportunities.

Indicators of lost productivity at this level include basic rates of absence, and duration of absence episode. Rates of disability and workers’ compensation claims, and their duration and costs also are indicators of lost productivity. As with permanent loss of a worker, absences cause disruptions in team responsibilities, delays in work completion, and—depending on uniqueness of skills—lack of needed expertise. Indications of improvement at this level include reductions in absence rates, high levels of unused sick time, higher proportion of time fully staffed, and greater team continuity.

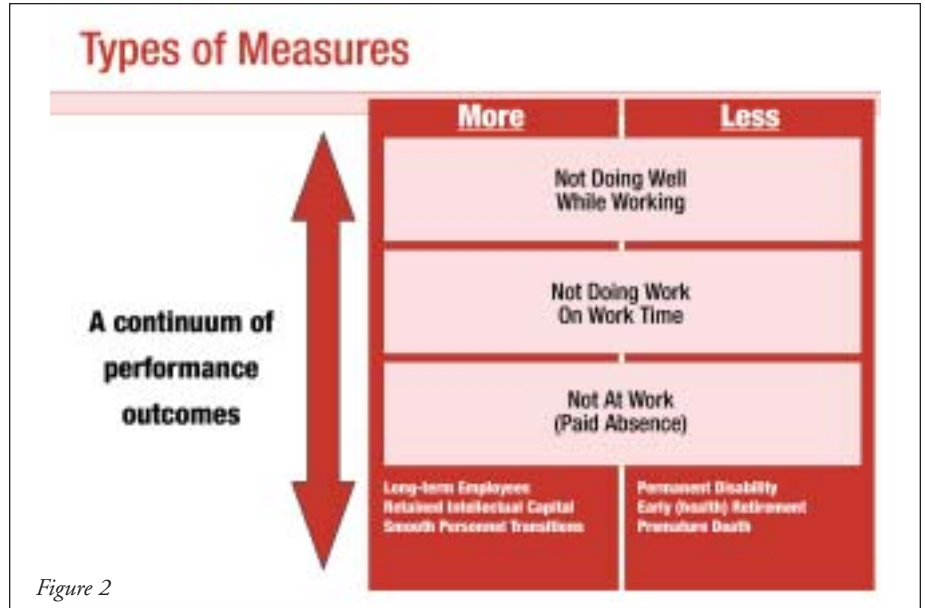


Figure 2

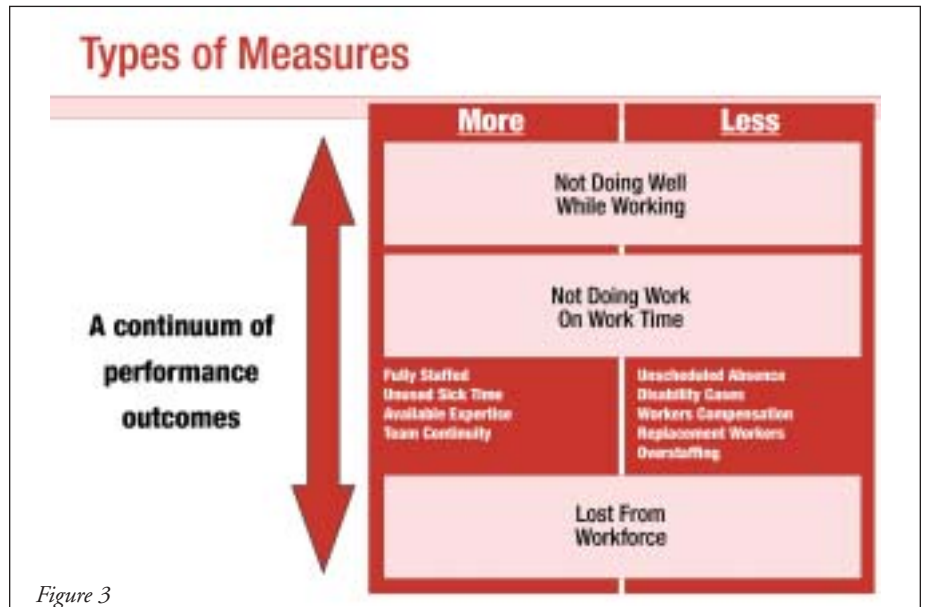


Figure 3

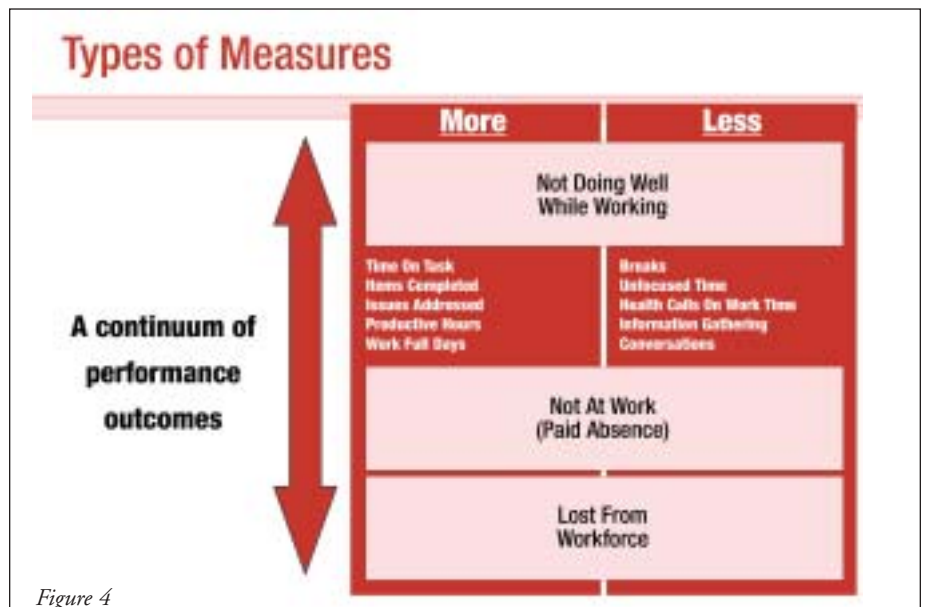
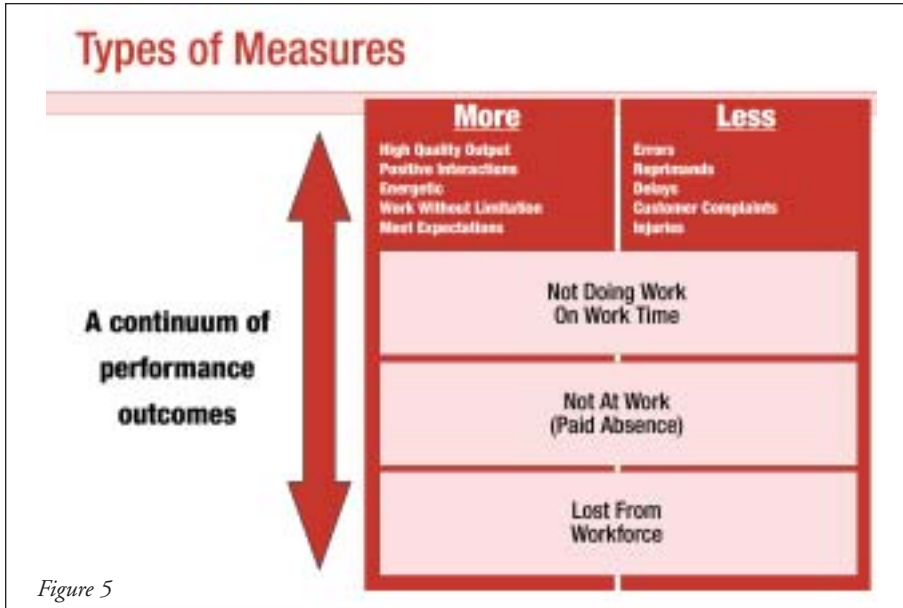


Figure 4



The impact of absences will be very specific to a job, skill level, team orientation, staffing requirement, and other factors. It is possible to have absences with virtually no impact on productivity and absences with catastrophic consequences.

Level 3: Not Doing Work On Work Time

Productivity can be lost when an employee is at work, but doing unrelated tasks. A person dealing with illness may have issues or symptoms that distract them during work time. They may take longer breaks for a medical appointment, take more frequent rest breaks, spend time doing non-work related activities, spend time in non-work related conversations, or otherwise not stay on task. This level refers specifically to the time element of not working on work time. An eight-hour workday becomes a six-hour workday when two hours are spent on the phone talking with a health plan or gathering information about an illness. Although the person is not officially absent, their work effort is equivalent to absence.

The consequences of this level are similar to other absences, but much less obvious. Indicators include tasks completed, work delays, team continuity and other consequences of not accomplishing the usual volume of work.

Level 4: Not Doing Well While Working

This level of productivity loss—or value loss—deals with potential consequences while working. While the previous category described a situation when work doesn't get done, this level describes how well the work is done. An employee who works while not feeling well might have a greater likelihood

of making a mistake, or doing low quality work. Examples include product defect rates, accidents, reprimands, omissions, rework, and other types of errors. Conversely, a worker feeling alert and well, may stay focused, make fewer errors, have more useful ideas, and interact more positively with coworkers and customers.

As readers will see in the section describing assessments, this area is the most complex. The other levels mostly focus on QUANTITY (such as amount of time, number of lost days and percent of total work completed), where this level involves aspects of QUALITY (mistakes made, or care taken). Some assessments differentiate between mental limitations and physical limitations to better define the type of impairment experienced due to health issues. Others identify whether the indi-

vidual had an especially good or bad work outcome recently. The complexity of these measures should not discourage practitioners from including presenteeism outcomes in their measurement strategy. The value lost on work time appears to be equal to or higher than productivity value loss to absence. So this set of outcomes is certainly worth considering.

Where To Start

First, ask your various vendors (disease management, PBM, health plan, behavioral health, nurselines) to provide information about how their services impact productivity outcomes. They can help you take a first step in quantifying the health and productivity connection.

Then, anyone intending to measure work performance or health-related productivity should consider the types of workers whose performance will be measured. Review the levels of measurement described here and look for indicators that are already available, like disability, absences, workers' compensation and turnover. Getting a handle on lost time is a solid starting point. To complete the picture, think through the consequences of productivity loss on work time in your organization (which outcomes matter most: accidents, delays, customer dissatisfaction, replacement workers, lost expertise?).

Also, identify what surveys you already do in your organization. Productivity assessments can be added to HRAs, employee satisfaction surveys, patient satisfaction surveys, medical questionnaires, and health status surveys. Further, they can be administered by phone, e-mail or regular mail. Take the easy steps first, then build from there. ★

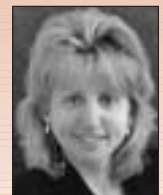
ABOUT THE **EXPERT: Wendy Lynch, PhD**

For over 15 years, Dr. Wendy Lynch has been making the connection between health attributes and business outcomes. Her career has included roles ranging from Assistant Professor at the University of Colorado Health Sciences Center, to Senior Scientist at Health Decisions International, to Principal and senior consultant at Mercer Human Resource Consulting. Currently, Dr. Lynch is continuing her work as a thought leader in health and productivity management; running her own independent consulting practice.

Educated at the University of Colorado at Boulder, Dr. Lynch earned a Doctorate in Research and Evaluation Methodology. She is a widely published author, and a speaker with over 60 public appearances.

Recently co-director of IHPM's Academy for Health and Productivity Measurement, Wendy focuses much of her work on education and training in the area of absences and performance assessment.

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THE LOGIC CHAIN



Linking together a conceptual framework to

The Basic Question:

Are You Able To Do What You Need To Do?

The intersection between health and work performance is functionality. Can the worker do what she needs to do to get her job done? Anything that impairs human function has the potential to impair or diminish performance at work. But we can't ask business executives or scientists to believe that the wrong allergy medicine leads to more accidents, or better depression treatment will reduce absences, without a strong, believable body of evidence.

How Good Measurement Will Move Us Forward

To build a knowledge base that demonstrates clear connections between health and business outcomes,

including productivity, researchers must substantiate a logical, verifiable series of suppositions. The connection must evolve from the blurry, hopeful observations we reported originally, e.g., ("this group seems to be absent less") to controlled, specific comparisons we can stand behind. This section proposes a conceptual framework for thinking through a causal pathway and defining what types of metrics will support a causal argument.

For a reader who is just starting to think about health and productivity, this framework represents one approach to understanding the fundamental connection between the two. Despite its many components, this conceptual overview does not suggest that every measurement project must measure every aspect of the sequence in every instance.



CHAIN

BY WENDY LYNCH, PHD

measure productivity among your employees

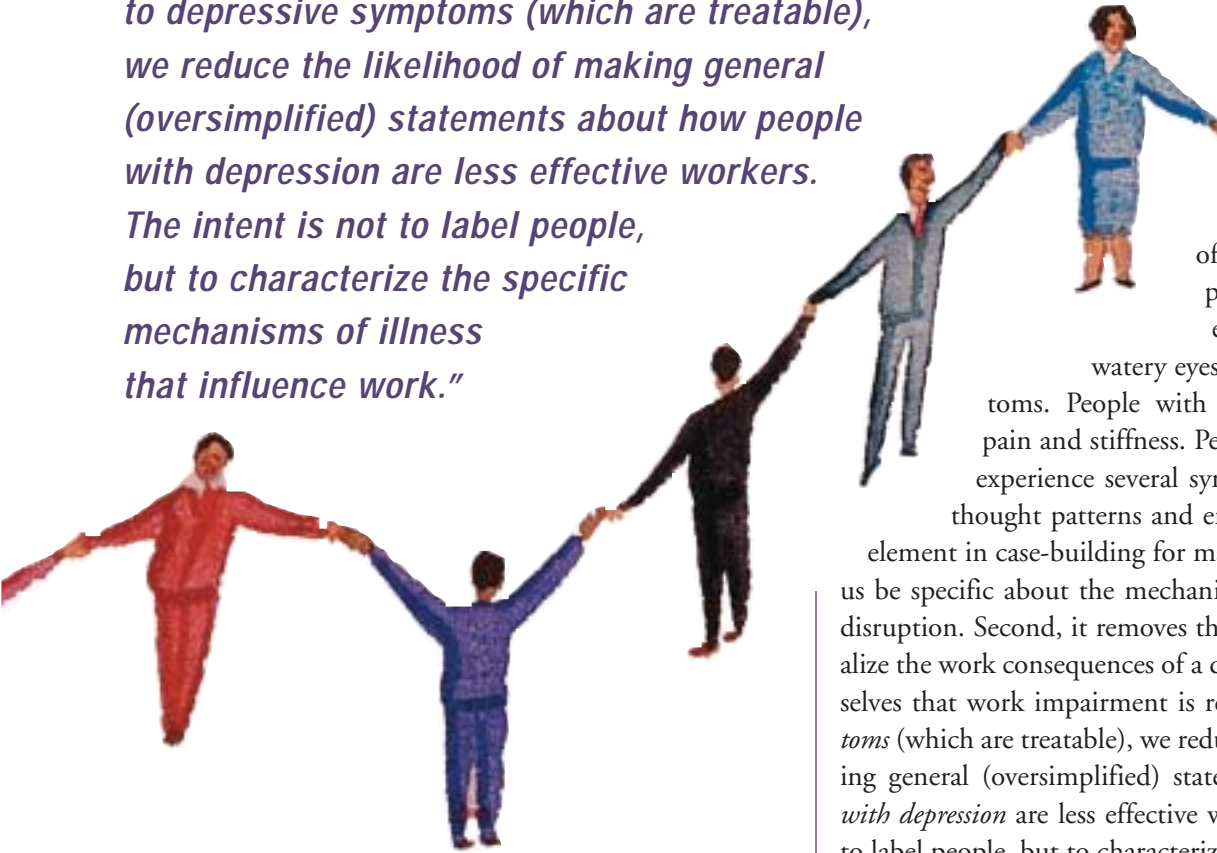
It would benefit every project to *think through* every aspect informally and construct a pathway of underlying assumptions. But some projects may require only a simple subset of the overall list described in this article.

On the other hand, experienced researchers and policy-makers will advance the field more quickly and credibly if they make efforts to demonstrate each link in the logic chain. For example, many studies have shown a connection between chronic illness and increased absence from work, without providing great detail about the implied causal connection.

Stating that diabetics miss more work than other employees doesn't help diabetics or employers. Perhaps diabetics are absent more because they go to

more medical appointments. Perhaps diabetics are absent more because they experience fatigue. These two possibilities have very different implications for health and policy interventions. Pronouncements about diabetics missing work—without understanding why—prompts concern, possible blame, and no useful course of action. It serves everyone better if we address the *why*, e.g. demonstrate that the likelihood of missed work is affected by both severity of symptoms and adequacy of clinical management. Or that improvements in clinical management correlate with better mental and physical function. THAT is the kind of evidence we need. With this in mind, let's take a closer look at the five links that make up the productivity logic chain.

“As we remind ourselves that work impairment is related to depressive symptoms (which are treatable), we reduce the likelihood of making general (oversimplified) statements about how people with depression are less effective workers. The intent is not to label people, but to characterize the specific mechanisms of illness that influence work.”



The Logic Chain

Link #1: The Condition

The link between a health issue and a business consequence has five elements. As shown in **Figure 1**, the sequence begins with identification of a health issue. This may be as specific as a diagnosis of Parkinson’s disease, or as ambiguous as a rating of poor health status. Whatever the “issue” being studied in connection with productivity—even dissatisfaction with work—could be considered the health-related issue. The key aspect of measurement here is to establish a clear definition of what problem is being investigated. Is the condition (medical or otherwise) present or absent?

Link #2: Symptoms, somatic response

The next step in the sequence is describing the somatic experience—symptoms and feelings—one has as a result of the issue. For example, people with allergies may experience runny nose, watery eyes, itching and other symptoms. People with arthritis may experience pain and stiffness. People with depression may experience several symptoms related to mood, thought patterns and energy level. This is a vital element in case-building for many reasons. First, it helps us be specific about the mechanism of physical or mental disruption. Second, it removes the tendency to over-generalize the work consequences of a disease. As we remind ourselves that work impairment is related to depressive *symptoms* (which are treatable), we reduce the likelihood of making general (oversimplified) statements about how *people with depression* are less effective workers. The intent is not to label people, but to characterize the specific mechanisms of illness that influence work.

A key measurement issue is gathering information about the presence and severity of relevant symptoms. For people with the condition, what symptoms do they experience? How often and how severe are the symptoms? Can they get relief from symptoms with treatment? If so, how much do symptoms improve? Such information can be gathered using standard symptom checklists (**See Figure 2**) or illness-specific tools (such as those for migraine or depression). Some productivity surveys include symptom checklists (like the World Health Organization’s Health and Work Performance Questionnaire, HPQ). Other surveys add symptom questions to a set of productivity measures.



Figure 1

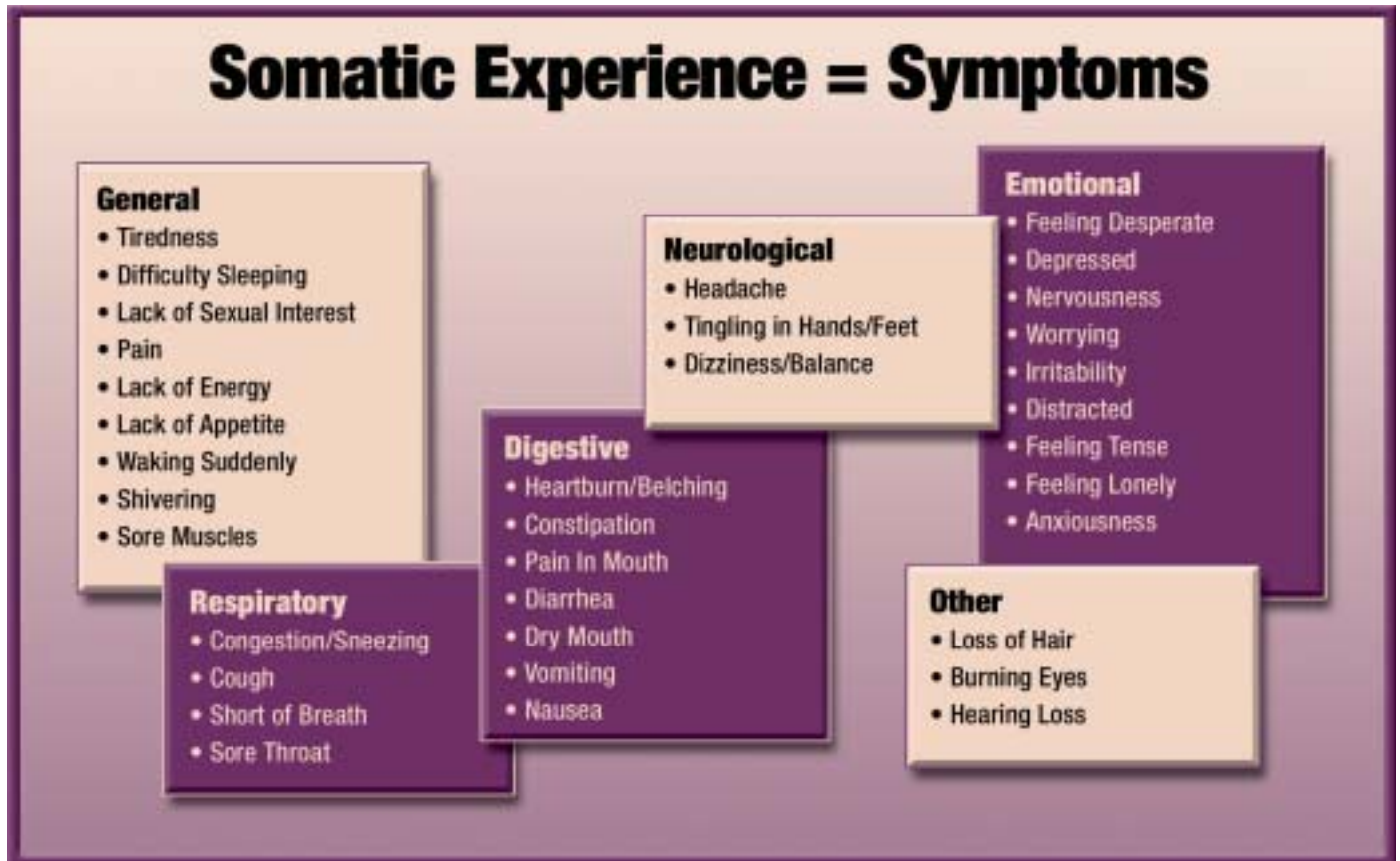


Figure 2

The purpose is to describe the somatic experience of the worker *as a result of the condition* such that further connections can be drawn to functionality.

One illustration of the value of symptom information comes from data collected by the Harvard Health at Work study, which included indicators of diagnosed depression, depression symptoms, and productivity outcomes. Analysts looked at whether the diagnosis of depression added significant predictive value in predicting productivity loss (days needing to cut back) over and above depressive symptoms. It did not. What that means is that the diagnosis is less important than current symptoms. If you have diagnosed depression—with symptoms under control—you will be similar in productivity to someone with no depression diagnosis. If you haven't been diagnosed yet, but have symptoms, you will have productivity similar to a person with uncontrolled, diagnosed depression. The label matters much less than the experience.

Link #3: Functional impairment

Health researchers have investigated functional status for decades—most often in studies of the elderly and seriously ill. The measurement tool addressing Activities of Daily Living (ADL), or the International Classification of Functioning, Disability and Health (ICF) help to quantify the degree of impairment in performing normal daily tasks.

Here we might think more specifically of functionality in terms of the normal daily tasks of working adults.

At the most general level, functional impairment has been defined in domains (sometimes called role functioning). For example, the SF-36 asks about interference in the physical and emotional domains and about interference in social activities. The Work Limitation Questionnaire (WLQ) asks questions to distinguish between limitations in physical function, mental and social function, and other work management functions. Understanding how different functional domains are impaired improves the specificity with which we understand and quantify the effects of a health condition, and how we design effective solutions.

It may be sufficient in many cases to simply define the suspected functional limitation in terms of a general domain. Perhaps anxiety influences mental function and social function, but not physical function. A broken leg may influence physical function only. But we are learning that some effects are not obvious. Thanks to work by Debra Lerner, PhD on the WLQ, we know that while main effects follow logical patterns (headaches affect mental and organizational abilities more than physical; arthritis affects physical function more than mental), it appears that less intuitive effects also exist. Musculoskeletal issues influence mental function, though not as dramatically as physical function.

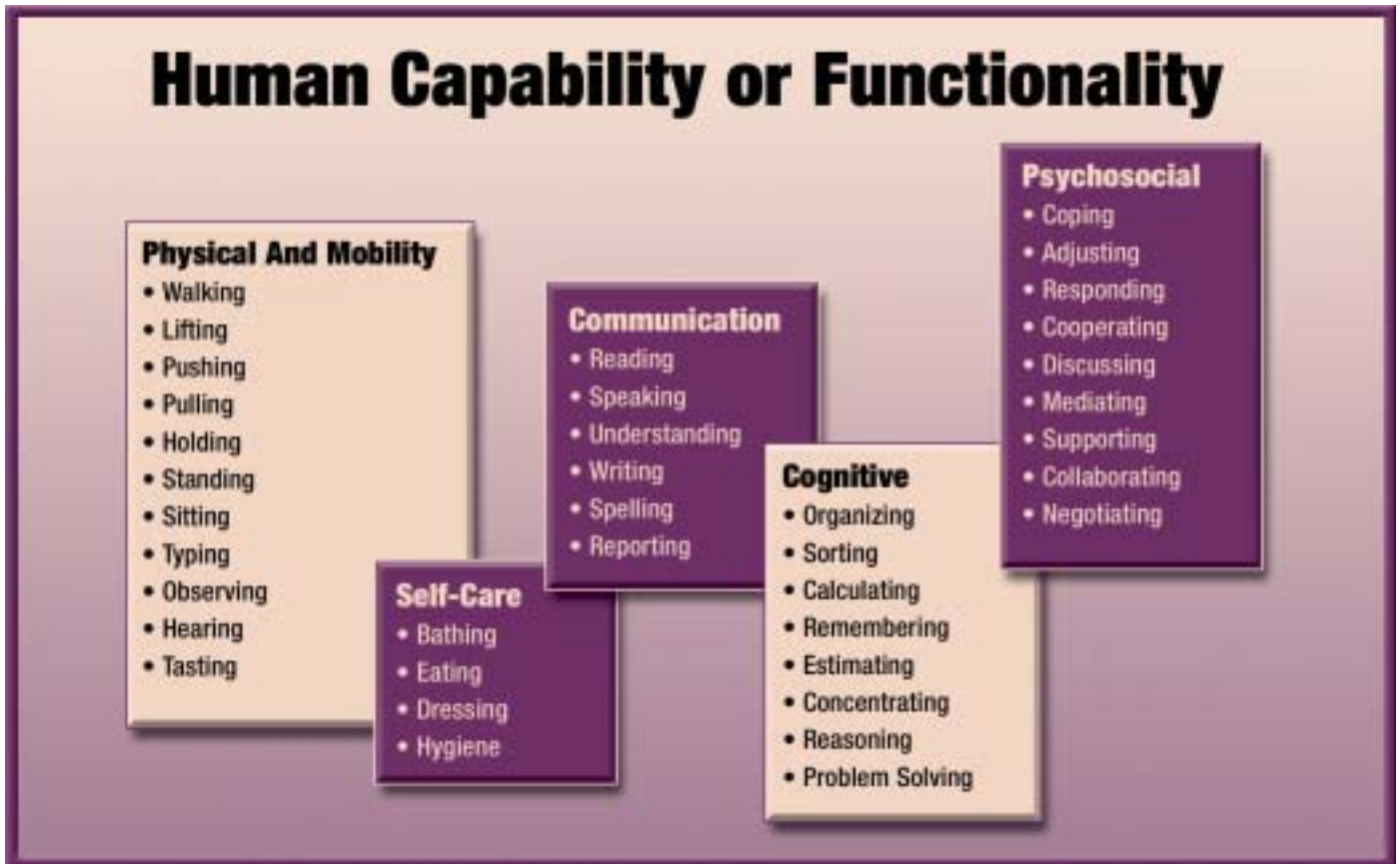


Figure 3

A more detailed list of human functions is shown in **Figure 3**. While few projects will require measurement at this level of detail, it makes sense conceptually to identify what specific abilities are likely to be impaired by the health condition.

Link #4: Work impairment

Work impairment differs from functional impairment only with regard to a task's relevance to the person's job. In life, a human benefits from high functioning in all domains. In work, some domains may be more critical than others. Brick-layers, actuaries, politicians, typists, truck drivers, chemists, and artists have differing functional needs to perform their jobs well. While one might be completely incapable of working with a broken arm, others would not be limited at all. The implications of being drowsy at work may vary from catastrophic to minor. Thinking clearly and analytically will help in some jobs more than others.

A great source of information about the types of knowledge, skills and abilities various jobs require is available from O-Net online at <http://online.onetcenter.org/>. This program defines and prioritizes all aspects of jobs—in great detail—to help match people to professions. A sample of their skill areas is shown in **Figure 4**. Although O-Net may provide much greater detail than necessary about specific occupations, researchers and practitioners alike can benefit from its char-

acterization of job skills and abilities to further define how a health condition may impair workers in specific jobs.

The key measurement issue here is to quantify the degree of impairment in essential job-related performance in as clear and relevant terms as possible. What specifically are workers unable to do that they *need* to do? Is it enough to ask about general performance compared to usual, or are certain job functions or outcomes of critical interest?

Again, in most instances measurement projects will require only a limited number of metrics.

A general indicator of work-loss or work-impairment will suffice. However, to advance the field, the choice of measures should reflect the specific attributes of the health issue, symptoms, and type of suspected impairment. One might choose a different approach to assess the effects of arthritis on lumberjacks than the effects of depression on computer programmers. Furthermore, organizations should consider the specific requirements of specific job types (physical labor, knowledge work, public relations) in planning a measurement project. What must a worker be able to do to perform his job well?

Link #5: Business consequences

Now for the bottom line. Employers are interested in how health issues affect work performance because that implies a connection to economic and business outcomes. To have

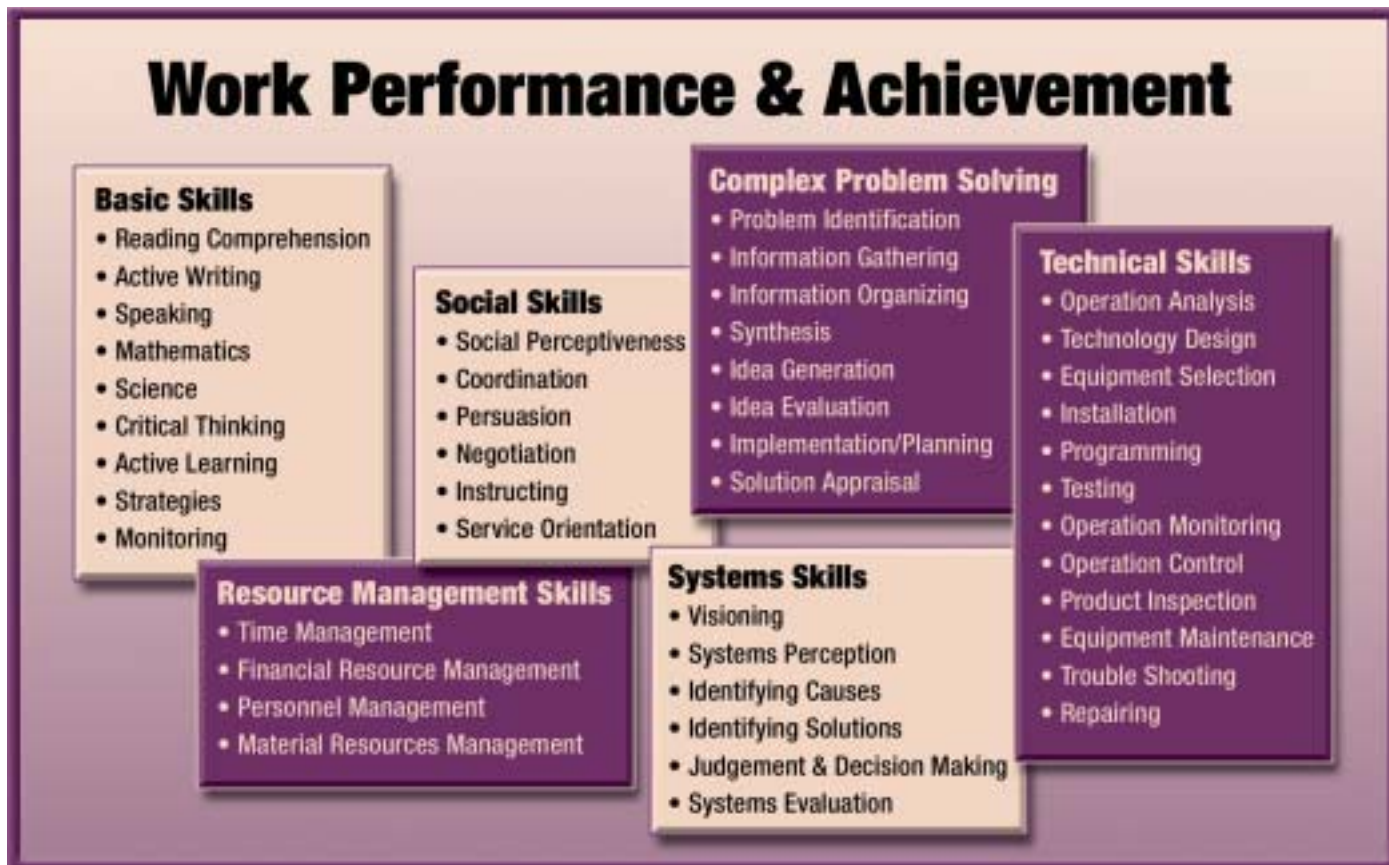


Figure 4

business relevance, a case must be made in business terms. When researchers treat this step as an afterthought (not converting lost productivity into a meaningful business metric), the implications are lost on a key intended audience. Whether it translates into sales not closed, calls not answered, units not completed, or projects not delivered on time, there are business and financial implications of work not done.

The key measurement issue here is to insure that selected performance measures translate directly into relevant consequences. Answer the questions and examine what the responses really mean to the business. What is a lost day worth? What is a ten percent reduction in productivity worth? What are the consequences of an increase in accidents? These expressions of business value should be defined prior to collecting data—and reviewed by key stakeholders, if possible—to insure a focus on the most relevant outcomes.

How Would I Use This Framework?

First, recognize that this overview is offered as a conceptual framework, not as a set of measurement requirements. This framework should NOT discourage any attempt to start somewhere, in a small way.

Second, use the logic chain as a guide when reading study results and see how many steps have been completed. Based on the study, fill in the following series of assumptions:

Workers who have _____(condition)
 Experience more/less _____(symptoms)
 Which limit their ability to _____(general function)
 And specifically their ability to _____(work function) on the job
 Which results in _____(business consequence/lost value)

If the study only fills in the first and last blanks, think of the many possible answers to incomplete portions of the chain. What questions could the study have included to complete the logic chain? If a study leaves the last link unfilled, how might it have been translated into more relevant business terms? Review complete and incomplete logic chains and consider how the chain contributes to the strength of evidence.

Lastly, use the framework to think through a measurement project before collecting data. Even if the measurement objective only covers step two and step four, think through the full chain to see if the narrow objectives change. The big picture could lead to an interest in one other type of question or a different way of expressing work function.★



*Health and productivity measurement hasn't reached the mainstream of usual corporate activities.
The field is young. Examples are limited. Perceived barriers are common.
So how can your company get on the right path, and how will you know
if you're headed in the right direction?
The path to productivity will lead you in the right direction.*

THE PATH TO PRODUCTIVITY

BY JOHN RIEDEL, MBA, MPH

Most employers would like to know how much their employees' health affects work performance. Most don't. When it comes to believing the numbers, employers would rather make decisions based on data from their own workers. That means doing their own measurement. In a survey of 60 medium to large employers, 88% said that data from their own company was critical to their decision making (IHPM Employer Survey: *Corporate Decision Making For Health And Productivity*).

But health and productivity (H&P) measurement hasn't reached the mainstream of usual corporate activities. The field is young. Examples are limited. Perceived barriers are common. Self-report measurement is not yet accepted as the reference standard. What's a company to do?

A small but growing number of employers are beginning to use absence data and performance information systematically. They are collecting and disseminating data, applying data to targeted solutions, taking more actions based on the data, and creating integrated datasets to inform integrated solutions. How can you get something going within your company?

Looking For Your Organizational Sweet Spot

According to a leadership survey conducted by IHPM, one of two groups within an organization typically spearhead a focus on health and productivity. *Figure 1* shows how these two groups—Human Resources and Medical—tended to evolve in this direction.

The Medical Department moved from a focus on reactive medicine to a more proactive, holistic approach that led to an interest in functional status and ultimately the impact on productivity. The HR department moved from a benefits purchasing role to one that maximizes value purchasing and ultimately focuses on the business value of human capital.

While these paths of evolution overlap with other influencing factors such as sen-

ior management support or availability of data, it appears that about two-thirds had arrived at a productivity focus by open-minded medical departments, and one-third were led by value-focused HR people.

What Shapes The Health And Productivity-Minded Companies?

Five key factors contribute to a company's level of adoption of a H&P perspective. These factors are internal data and evidence, external evidence and research, stakeholder influence, corporate culture, and job characteristics (*Figure 2*, pg. 24).

1. Internal data and evidence

The powerful influence of a company's own data is a common theme. Having any data related to health helps promote interest

in health outcomes. The more specific the health data are to productivity outcomes (absences for example), the more influential it is. Any results showing a direct connection between health, productivity, and the bottom line are likely to prompt more focused action.

2. External evidence and research

Evidence from outside sources—such as increasing awareness and building knowledge—is also an important influencer for action. Benefits consultants are a common source of evidence about the health and productivity connection. Participation in joint research projects with other employers or associations appears

Two Origins For Productivity



Figure 1

to prompt action. The combination of internal evidence coupled with the perception that action is relevant and doable is highly influential for action.

3. Stakeholder influence

The opinions of company leaders is crucial to the adoption of productivity initiatives. The most influential stakeholder is the CEO. Opinions of the senior management team and interest from operations managers is also important. Publicity about a competitors' action regarding health and productivity creates senior level interest.

4. Corporate culture

Corporate belief systems and decision-making processes are highly influential. Orientation towards a health or data-driven management style are supportive. Cultures that measure and reward performance naturally tend toward a health and productivity focus.

5. Workforce and job characteristics

Most often interest is greatest from employers that have a high concentration of hourly workers with measurable performance goals and visible consequences for poor performance. Circumstances where line managers experience significant work disruption due to disability or poor performance are likely to support action.

A Clear Purpose For Health And Productivity Measurement

Being clear about why you want to do measurement may be the most important factor in developing a useful measurement initiative. Should you even consider measurement in the first place? Measurement makes business sense under the following conditions:

- When significant dollars and manpower are at stake
- When an issue is known but the magnitude is uncertain
- When there is a known potential to improve health that may result in increased productivity

- When you need a starting point or baseline of data.
- When you need to estimate the value of productivity improvement
- When you want to hold health partners/vendors accountable

Who Needs To Be Sold On The Measurement Project?

To get a measurement project off the ground you're going to need buy-in from your key stakeholders, logistical support from appropriate departments, and buy-in from the employees you want to measure and their department heads. The stakeholders you'll need to convince will, of course, vary according to your company's size, corporate culture, predilection to measurement, and other local factors. You'll likely need to convince your HR department, your workers' comp people, your disability department, health benefits staff, and work-life leadership about the value of measuring the relationship between health and productivity. Think about how they make their decisions. Think through the specific value of your measurement project to them.

Making the case to stakeholders might include the following points:

Point 1: Work happens or, more to the point, doesn't always happen, whether you measure it or not. For the most part we don't measure it very well.

Point 2: So far, it appears that the economic costs of lost productivity related to poor health far exceed the direct medical costs to a company.

Point 3: Self-report productivity metrics have validity.

Point 4: So far, it appears that employees that feel better, do better.

Point 5: Until and unless you know what your health and performance issues are, you cannot possibly address them.

Point 6: Tools, methods and support are available to help measure cost-effectively and reliably.

If logistical support is limited within your organization, you'll want to consider external sources of support for a variety of functions. The necessary logistical/data/analytics support might include existing vendors or health care partners. All of the possible partners listed below could collect absence or productivity data. In addition, they have specific expertise and systems that might complement your health and productivity efforts.

Possible partnerships

- Health Plans/Insurers
- Health care providers
- Behavioral health care
- Behavioral health providers
- Disability insurers
- Case managers
- Occupational health professionals
- Health educators
- Pharmacy Benefit Managers
- Disease management firms
- Health promotion professionals

Possible roles

- Correlate with claims data
- Collect encounter and fee data
- Collect case identification data
- Document service delivery
- Document management actions
- Document clinical improvement
- Provide absence data
- Tie interventions to productivity outcomes
- Provide medication compliance data
- Tie disease management programs to productivity
- Describe health improvement strategies

“The first, and usually most difficult, step in launching a health and productivity initiative is measurement. The axiom, “you can’t manage what you can’t measure” is especially apt given the newness of the field.”

Barriers Will Emerge

Health and productivity measurement is new to most organizations. As with anything new (especially if it will require use of organizational resources) you can expect to encounter barriers. A survey of corporate decision-makers suggests that the three critical barriers are lack of senior management support, lack of data, and lack of evidence. (Figure 3)

You need information about the effect of health on productivity, but lack of information is precisely the issue that drives the barriers cycle. It is helpful to think about two kinds of barriers: 1) Those that are associated with buy-in are more related to issues of *perception*. 2) Those that are associated with actual capabilities and resources are more related to corporate *realities*.

Statements of perception resistance

include: *This is not relevant to our organization. Even if there is a relationship, the ability to do anything about it is limited. The measures of health and productivity are not valid. This is just not a priority for us.*

Statements of reality resistance include: *We don’t have access to the right data. We don’t have a budget for this. We don’t have the right data collection process. We don’t have any expertise.*

Perceptions tend to change through the opinions of trusted colleagues, increased awareness of the issue, personal experience, or personal discovery. Use the following approach to address perception issues.

- **Acknowledge the barrier(s):** “Yes, it may be difficult to believe that people can rate themselves objectively, so there is concern about the validity of self-report.”

- **Reassure that the barrier(s) has been shared by others:** “The concern about the validity of self-report is a major reason that more companies do not measure productivity by survey, partly because the field is new and the evidence is young.”
- **Present evidence that has changed others’ perceptions:** “A growing number of companies have described some compelling reasons for self-reported productivity measurement. Many of their decisions are already based on self-report, e.g. customer and employee satisfaction. They realize that much of the so called objective data is not extremely accurate either. Highly respected researchers at Harvard and Stanford have demonstrated strong correlations between self-report and actual productivity.”
- **Show how others have moved forward as a result:** “Many leading companies like Dow Chemical, BankOne, International Truck and Engine, Aetna, Federal Reserve Bank of Dallas, and others are moving forward with self-measurement projects. Estimated productivity loss is becoming an important element in designing and evaluating health benefits.”

Corporate realities require a strategy for overcoming real issues having to do with scarce resources. Use the following approach to address resource issues.

- **Determine whether these barriers are true rather than perceived:** Find out what other surveys are already being used. Are there complementary initiatives underway? Do some business



Figure 2

units already have performance data? Are there any other productivity sources?

- **Identify options for reducing cost and gathering data:** Find out what people think the budget needs are going to be. Be prepared to give an accurate budget estimate. Note that the project won't be free but cost-saving options exist such as combining with other existing surveys, tying it to vendors' processes, using the web to keep costs down, and working in conjunction with a business and health coalition.
- **Identify options for collaborating with experts:** Investigate internal survey expertise, internal data gathering/analysis expertise, or current data management vendors used by your company. Vendors may be willing to partner if they get some publicity, have the opportunity to investigate other issues important to them, or have the opportunity to offer certain interventions.

Moving Forward

The first, and usually most difficult, step in launching a health and productivity initiative is measurement. The axiom, "you can't manage what you can't measure" is especially apt given the newness of the field. Corporate managers want to know the magnitude of the economic opportunity. They also need to track progress in order to assure an appropriate return on investment.

The good news is that we are making significant headway in the field of measurement. Tested measurement tools provide alternatives to meet differing objectives. A growing number of employers have done measurement so the body of evidence is expanding. An increasing amount of consulting expertise is available to support measurement initiatives.

The impact of employee health on your company's productivity has a significant influence on your bottom line. Find ways to measure that influence so you can build the right mix of initiatives for an absolute competitive advantage. ★



Figure 3

ABOUT THE EXPERT: John Riedel, MBA, MPH

John Riedel has more than 29 years of experience in the fields of managed care, health promotion, and demand management. He provides strategic consultation to a number of national managed care firms, pharmaceutical companies, hospitals, and provider groups to help them successfully integrate and market demand management services.

John was co-leader of IHPM's Research Center for Health Promotion and Disease Prevention and recently was a co-director of its Academy for Health and Productivity Measurement.

John was Vice President of Marketing for Healthtrac, one of the original providers of demand management products to hospitals, employers, and Blue Cross Plans. During this time, he worked on the development and execution of several programs including self-care evaluation, high-risk identification and intervention, and the landmark Bank of America and California Public Employee Retirees System (CalPERS) studies.

John holds a Master's Degree in public health from the University of Illinois and an MBA in organizational effectiveness from George Williams College.

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Tools of the Trade

Defining the business criteria and establishing metrics to measure productivity in the knowledge worker. A compilation of self-report survey tools in the Institute for Health and Productivity Management's "Gold Book."

Current State of the Art

Few jobs in today's information based economy require workers to perform repetitive tasks that can be counted or tracked easily. Yet, to identify the relationship between worker health and productivity, performance measures must address specific aspects of work output, at a specific point in time, for a specific person. Even in industries where employee performance can be tracked objectively, companies often lack reliable systems to capture and review such data.

Without defined business criteria and established metrics to monitor daily work output and individual performance, companies are left with few and usually unsatisfactory options for estimating on-the-job productivity. Self-reporting of performance is an obvious alternative. But can we rely on self-reporting?

Do we really have an option? We would like to have an objective "gold standard" of presentism, but for most jobs it just doesn't exist. That leaves us with the individual employee, each worker, as the realistic "gold standard."



Measurement Tools

The health and productivity measurement field is maturing. A growing number of measurement tools provide employers with a greater range of options for addressing specific areas of productivity most germane to them. These tools are similar to health risk appraisals in the way information is collected and analyzed. Since many employers conduct health risk appraisals, these similarities provide a common methodology that can be leveraged for maximum efficiency. Plus, preliminary reports about the validity and reliability of self-report looks promising.

Wendy Lynch and John Riedel in conjunction with IHPM (Institute for Health and Productivity Management) and Mercer Human Resource Consulting compiled and reviewed seven self-assessment instruments and published the results in *Measuring Employee Productivity: A guide to self-assessment tools*. Only tools in the public domain were included. The tools included are:

- Endicott Work Productivity Scale (EWPS)
- Health and Labour Questionnaire (HLQ)
- Health and Performance Questionnaire (HPQ)
- SF-36
- Stanford Presenteeism Scale
- Work Limitations Questionnaire
- Work Productivity and Activity Impairment Questionnaire

How To Choose The Right Tool For Your Situation?

No single tool is necessarily the best choice for all purposes. Some have advantages over others for certain job types, health conditions, or budget constraints. Some cover a broad range of outcome measures and include a variety of health indicators such as overall health status, specific symptoms, or specific conditions that can be correlated with outcomes. Others are very short focusing only on productivity outcomes. With this in mind, the following four points will help you decide which tool is right for you.

1. Consider the basic purpose of your measurement initiative

Describe: If your purpose is to describe ways in which health affects performance it may be most effective to administer a comprehensive assessment with the widest range of work performance attributes and with a longer time period (a month for instance) in or to capture a wide window of potential effects.

Compare: If your purpose is to compare the impact of different health conditions, symptoms, or health risks on performance, it is important to include the domains of performance that have the best chance of differentiating among the various conditions or symptoms. If you are focusing on the physical versus the social impairments of a particular

condition you'll need a tool that measures those elements of productivity.

Detect Change: If your purpose is to detect change in performance over time, e.g. to evaluate the impact of an intervention, the tool needs to be sensitive enough to change in the areas of interest in order to find the expected differences. Also, the recall period needs to reflect a time-frame for which change in performance seems reasonable.

2. Consider the nature of the health issues you want to address

If you are focusing on health issues involving musculoskeletal pain, then physical aspects of work will be important. If you are focusing on mental health or depressive conditions then items measuring mistakes, accidents, or concentration will be important. You need to take into account the ways your chosen health issues are expected to interfere with an employee's ability to work and select a tool that measures these interferences.

3. Job type is a key factor

The measurement tool needs to represent important aspects of the worker's job. A manufacturing company needs to pay attention to the physical demands of the job. A software developer may need to focus more on worker concentration. Some jobs require the use of replacement workers, so that may be an important variable for the selected tool to include.

4. Trust in the validity of the tool is always an important consideration

Some tools have been tested for reliability and validity to a greater extent than others. Reliability indicates the degree to which a tool provides a consistent score over time. Validity indicates the degree to which the tool actually measures what it intends to measure. Both of these scientific factors are critical to the researcher's "peace of mind" that they are getting information they can depend on.

A Brief Summary And Description Of The Tools

For detailed descriptions of each tool, refer to the *Gold Book...Measuring Employee Productivity: A guide to self-assessment tools* published by IHPM and William M. Mercer. Available at www.ihpm.org or www.ahpm.org

• Endicott Work Productivity Scale (EWPS)

Developed by:

Jean Endicott, PhD

Department of Research Assessment and Training

New York State Psychiatric Institute

212-543-5536

je10@columbia.edu

Intended uses: Assess attitudes and behaviors that affect work performance and efficiency

Sensitive to the effects of various disorders and the efficacy of different therapeutic interventions

Number of items: Twenty-seven questions

Recall timeframe: Past week

Areas covered: attendance, quality of work, performance capacity, person factors (social/mental/physical/emotional)



- **Health and Labour Questionnaire (HLQ)**

Developed by Erasmus University Rotterdam
Institute for Medical Technology
Leona Hakkaart
hakkaart@bmg.eur.nl

Intended uses: Collecting quantitative data on the relationship between illness and treatment and work performance.

Permits the estimation of production losses (costs) of paid and unpaid labor.

Number of items: 23 questions

Recall timeframe: Previous 2 weeks

Areas covered: Absence from work, reduced productivity at paid work, unpaid labor production, impediments to paid and unpaid labor.

- **Health and Performance Questionnaire (HPQ)**

Developed by Ronald C. Kessler, PhD
Harvard Medical School
Department of Health Care Policy
617-432-3587
Kessler@hcp.med.harvard.edu

Intended uses: Provide global ratings on the main dimensions of work performance.

Used to study associations between illness and broad dimensions of work performance.

Measure productivity loss due to health conditions and productivity gain achieved through treatment.

Number of items: 30 questions specific to work productivity

Recall timeframe: Either 1 week or 1 month depending on the nature of the question.

Areas covered: Sickness absence, quantity of work, quality of work, interpersonal relations at work, big successes/big failures at work.

- **SF-36**

Developed by John E. Ware, PhD
Medical Outcomes Trust
401-334-8800
Jware@qmetric.com

Intended uses: This is a functional status indicator used broadly across all health care industry sectors worldwide.

Number of items: 36 questions

Recall timeframe: Past 4 weeks

Areas covered: Nine areas are covered including physical function, role-physical, bodily pain, general health, vitality, social functioning, role-emotional, mental health, health transition.



- **Stanford Presenteeism Scale (SPS)**

Developed by Kenneth R. Pelletier, PhD
American Health Association
925-932-7074
drkrpelletier@aol.com

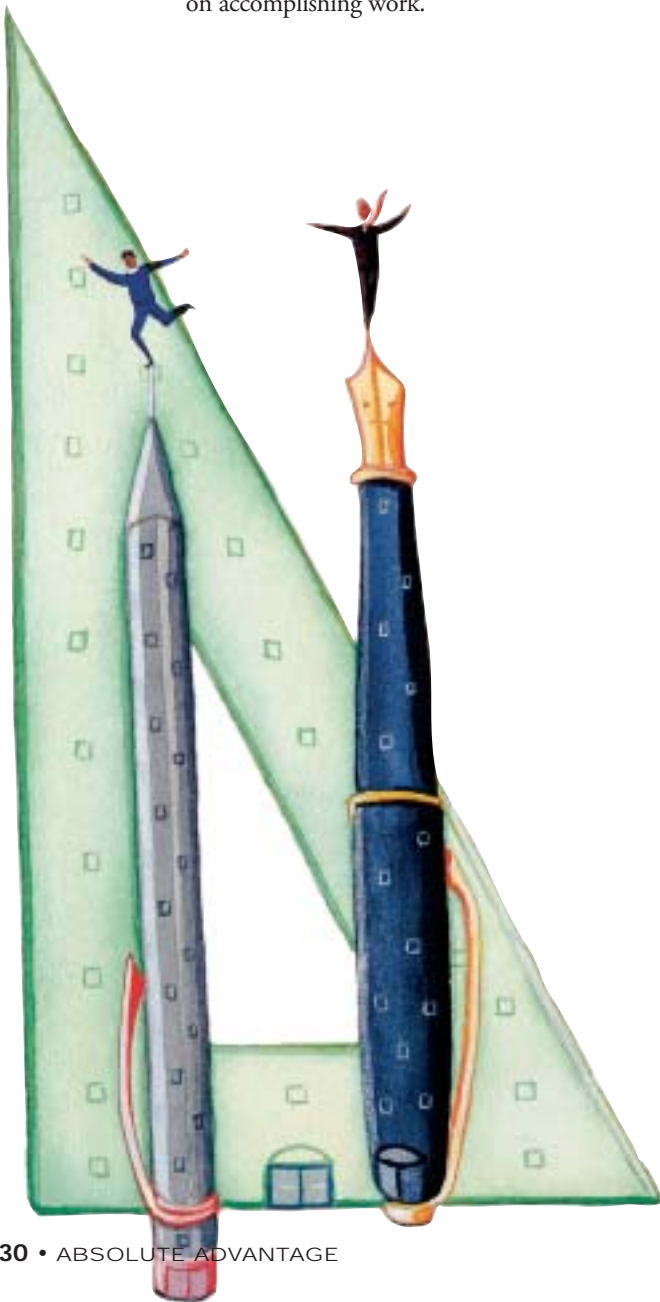
Cheryl Koopman, PhD
Stanford University
650-723-9081
Koopman@leland.stanford.edu

Intended uses: Measures the ability to concentrate on work among employees despite the possible impact of pain and other health problems on job performance and work productivity.

Number of items: 15

Recall timeframe: 1 month

Areas covered: The instrument focuses on the employee's cognitive, emotional, and behavioral concentration on accomplishing work.



- **Work Limitations Questionnaire (WLQ)**

Developed by Debra Lerner, PhD
The Health Institute
New England Medical Center
617-636-8636
debra.lerner@es.nemc.org

Intended uses: Measures the impact of chronic health problems on job performance and work productivity.

Measures health related decrements in ability to perform job roles.

Number of items: 5 questions divided into 5 sub-categories

Recall timeframe: 2 weeks

Areas covered: Time management, Physical demands, Mental/interpersonal demands, Output (capacity) demands

- **Work Productivity and Activity Impairment Questionnaire (WPAI)**

Developed by Margaret C. Reilly
Reilly Associates
561-243-1155
reillym@adelphia.net

Intended uses: Measures the effect of health problems and diseases on work productivity.

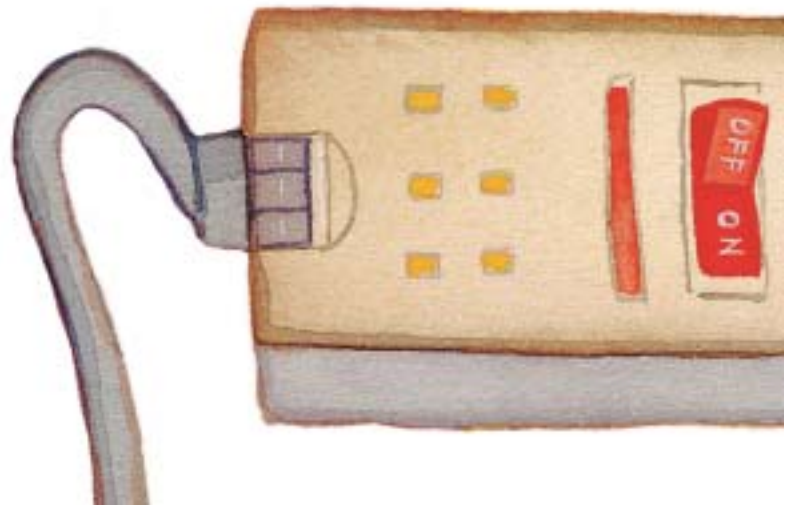
Assesses function-related end-points to measure the economic impact of relative differences in efficacy of therapeutic interventions.

Allows for computation of the attributed monetary value of lost productivity.

Number of items: 9 questions

Recall timeframe: Past 7 days

Areas covered: Percent work time missed due to health, percent impairment while working due to health, Percent activity impairment due to health.



Tool Administration

Tool administration issues can be divided into 1) environment considerations and 2) process considerations. Environment considerations have to do with the culture of the organization and other measurement projects that need to be understood and addressed in order to launch a successful health and productivity initiative. Process considerations have to do with the data collection process itself.

Environment Considerations

There are a number of things to think through before beginning to plan the actual measurement process itself. The answer to these considerations will help you move forward, reconsider the measurement project, or put it on hold for the time-being. Attention paid to these considerations should help to avoid unforeseeable pitfalls and sharpen your measurement approach.

How does your measurement initiative fit within your company's corporate culture? Areas to consider include:

- Sensitivity to confidentiality—who needs to announce this initiative in order to assure employees' trust?
- Where do you need to get buy-in for the project—unions, human resources, health benefits, occupational health, finance department, employees, CEO?
- How data driven is your company—can this be positioned as part of a culture of knowledge?
- What is your orientation to outsourcing—can you work with outside experts to help develop or administer the survey?
- Does your company prefer to conduct smaller pilot projects before launching an all employee effort?
- Can you attach this measurement initiative to other survey-type projects conducted by your company?
 - Employee satisfaction surveys
 - Employee health risk appraisals
 - Care delivery evaluation like CAHPS
 - Absence/disability management surveys
 - Safety initiatives
 - Performance evaluations
 - Quality improvement processes

Process Considerations

Let's assume that the decision has been made to move ahead with a measurement initiative. Now you have decisions to make

about survey administration, data collection, data management, and dissemination of findings.

Project introduction

- Need for focus groups or an advisory board
- Leadership endorsement
- Timing of the announcement
- Coordination with others

Administration of the survey

- Who responds? On their own time or company time? At home or at work?
- What is the method of administration? Paper and pencil? Interviews? Automated telephone response? Electronic?
- Will you offer incentives? What kinds of incentives will be offered?
- How often will you conduct follow up reminders?

Data Management

- Who receives the survey? An internal department or third party?
- Who stores the data? An internal department or third party?
- Who analyzes the data? What is the agreed upon analysis plan?
- What kind of reports will be generated?

Dissemination

- What feedback will participants receive?
- Who are the key stakeholders and what reports will they receive?
- What are the planned decisions to be made based on the results?

Summary

The tasks of selecting the appropriate health and productivity measurement tools and administering them to employees may, at first, seem daunting. However, if you have clarity regarding what you are trying to accomplish with your measurement initiative and if you follow the simple steps outlined here, the task really becomes quite straightforward.★

HEALTH AND PRODUCTIVITY MANAGEMENT:



THE DOW CHEMICAL STORY



AN EXCLUSIVE INTERVIEW
WITH DOW CORPORATE
MEDICAL DIRECTOR
DR. CATHY BAASE

Dow Chemical has been at the forefront of health and productivity measurement and recently completed a major self-report initiative to determine the burden of on-the-job productivity loss due to employee health issues. Dr. Baase talks about why this project was important and how they made it happen.

Q:

Let's start from the beginning. When did you start thinking about measuring the health and productivity connection at Dow?

BAASE: About four years ago we started thinking that someday we'll have to measure presenteeism. As we shared our health care developments with other departments within Dow, we would talk about this productivity connection. It isn't measured well but we know it exists. We would talk in general terms about these indirect costs. Of course, we didn't have a lot of specifics to offer.

Q:

What were the specific circumstances that precipitated actually taking the step to measure productivity?

BAASE: We seemed to have a "critical mass" of understanding and acceptance regarding the concept. We wanted to get more sophisticated. Our feeling was that we've talked about this generally for quite some time, now is the time to get more specific.

Also, we had incorporated into our goals for the year that we wanted to refine our overall employee health business case and that meant we needed to measure health-related productivity. As we were reviewing the various tools described in the *Gold Book* (Measuring Employee Productivity: A guide to self-assessment tools), trying to determine the right tool, a serendipitous event occurred. Merck Pharmaceuticals approached us saying, "we'd like to fund a study that has broad-scale application of the Stanford Presenteeism Scale," a tool that they'd helped develop. We thought that this might fit within our measurement strategy. So, we seized upon the opportunity and partnered with them.

Q:

So critical intellectual understanding, a desire to build a business case, and the interest of an external collaborator intersected to create a 'tipping point' of sorts.

BAASE: Right, that propelled us forward. My team said, "this is the time, let's go!"

Q:

How would you characterize what you were trying to accomplish?

BAASE: We expected this would give us baseline information that we could use for three purposes. One was to characterize the size and scope of the “presenteeism” issue. A second was to provide us with the knowledge we needed to conduct appropriate health interventions or take other actions (policy changes for instance) to improve productivity or, as we refer to it, capability for performance. The third was to establish a stronger business case and help select priorities among the myriad of things that we could do in the next phases of our overall employee health strategy.

Q:

You decided to do a self-report survey of employees to determine on-the-job productivity. Why didn't you use objective data of productivity?

BAASE: We didn't think we had any. We didn't think there was any plausible, objective data we could use that wouldn't be fraught with all kinds of confounders. We just didn't see how we could do it with existing sources of data.

Q:

How did you think your internal stakeholders/decision-makers would react to self-reported data?

BAASE: Well, I thought they would find it useful because we'd already talked quite a bit to various stakeholders about this before we ever proceeded. We wouldn't be doing this if they didn't think it was going to be useful for them.

Q:

What were the specific things that you really wanted to measure?

BAASE: We were trying to figure out how large the presenteeism issue was, trying to put some order of magnitude on it. We wanted to know how big a deal this is. Is it as big as our direct costs? Is it 20% as big as direct costs? We were really trying to get a “place-holder” for presenteeism and determine how it fits into the overall economics of health and productivity at Dow.

Q:

What were the elements of health that were important to measure in relationship to on-the-job productivity?

BAASE: We started with chronic health conditions, recognizing, of course, that there are a lot of things that will impact productivity and presenteeism, and that chronic illness is just one of them. But we had to define a scope of effort, so we focused on chronic conditions. We said, let's at least look at that element of health and get our arms around it.

Q:

How did you decide that chronic disease was the place to focus?

BAASE: Chronic disease was a strong interest of Merck Pharmaceuticals, our partner in funding this study. They wanted to understand the health and productivity connection related to various chronic conditions. From a logic perspective, in terms of where we might have large presenteeism issues, chronic conditions made sense to study. We were struggling with the whole concept of disease management. We were asking ourselves what disease management programs we should offer and how we should position disease management programs within our overall health strategy. We thought that this focus would paint us a clearer picture in terms of our total understanding of both direct and indirect costs for chronic conditions.

The other thing we're looking at is ways we can partner more effectively with our various provider networks and health plans. We thought this measurement initiative would give us some information we could use in talking further with them about productivity value as well as direct dollars spent.

Q:

You have three areas where you plan to apply your measurement results. One is feedback to management so they are more aware of the health and productivity connection. A second is to inform the planning process of your broader integrated health team. And a third is to mobilize a health plan to think about presenteeism and productivity as an outcome for the way they provide their services. Is there a priority?

BAASE: That first one is really most important. It's part of a process where we're trying to convert ourselves from a cost mindset to an investment mindset regarding the dollars that are being spent on our human capital.

“A major concern was how to get the employees to buy-in? This was totally voluntary, we were not going to use any incentives, so we needed to convince our employees to participate.”

Q:

Could you focus a bit on the people who you needed to involve in the project?

BAASE: This is significant. From the beginning we were in a parallel process of designing the study and getting buy-in. We went to those we thought were key stakeholders including our own health and human performance team, which includes HR and worker’s comp folks, the health benefits plan staff, and work-life leadership, and we talked to them about the concept. We also went to management at the sites we wanted in our pilot project. We talked to the site leaders, we talked to the heads of human resources for those sites, and we talked to the heads of environment, health and safety. We included a significant swath of leadership across the organization.

There were two phases of getting buy-in. Phase one was getting buy-in to the fact that we wanted to do this in the first place. The second phase was getting buy-in to support high participation. A major concern was how to get the employees to buy-in? This was totally voluntary, we were not going to use any incentives, so we needed to convince our employees to participate.

We embarked on a wave of communications where the target audience was the broad employee base for the sites in Michigan and Texas. We put together a “leadership tool kit,” which was a four-slide, scripted presentation that we asked every supervisor to use in a staff meeting or safety meeting that they had coming up in the next 30 days; we had messages on the internal TV stations; we had promotions going out through electronic newsletters.

Our message to employees was two-fold. One was convincing them of the confidentiality and privacy of the survey. The second was, “we’re going to use this to make wise choices about corporate investments in health programs that may benefit you and your family. If we understand better the situations that influence you, then we can make better choices for the health plan and support programs that we deliver.”

Q:

By the way, what level of participation did you get?

BAASE: Right now, we’re just over 63%.

Q:

That seems like a very high response rate. What was your response rate goal?

BAASE: When we were doing our response rate calculations, one of the things we considered was what should we reasonably expect. We looked at response rates from surveys done within the last couple of years like our employee opinion surveys and census surveys. They ranged from 38 to 54%. We thought we should be able to get 50%. But we also thought that, with a targeted communication effort, we could get 60%.

Q:

Would you talk about the measurement tools and how you decided which tools you were going to use?

BAASE: I mentioned that we were contacted by Merck and that they had a tool they wanted to use. We also wanted to get SF-36 data. That was something we had been talking about for quite a while. So we said, maybe this is the right time to do that in conjunction with the Stanford tool.

Then we decided to use a third survey instrument to be used as part of the protocol. Our intention was to include a tool that had been in use for a while and had more extensive use and maybe even some benchmark data available. That’s how we ended up with the Work Limitations Questionnaire (WLQ). So, we’re doing a side-by-side analysis: every single person is getting a research version of the Stanford Presenteeism Scale and the SF-36. And 10% of the people are getting the WLQ.

Q:

Did you use any resources or advice in figuring out which tools you wanted?

BAASE: We used the *Gold Book*. Plus, I had been working with the American College of Occupational and Environmental Medicine’s (ACOEM) presidential task force looking at these tools. So, I had the benefit of those discussions also.

Q:

What are the kinds of statements that you would like to be able to make as a result of this endeavor?

BAASE: We would like to be able to say that we understand the significance of presenteeism related to chronic health conditions and that we’ve identified priority actions that we can take to address them.

Q:

And have you been able to make these statements?

BAASE: Yes. And we had a really fascinating “ah-ha” when we were going through our discussions with stakeholders. We started talking to them about the direct dollar impact of health on productivity. It became very clear that we had to clarify that we don’t have the means to measure actual, across the board productivity. What we can measure is one niche of productivity. It was important to emphasize that people’s personal productivity output could be affected by their attitude, by the workplace culture, by the design of the department they’re in, by whether they like their supervisor or not, by all kinds of things that we’re not including in this survey. We are only measuring productivity related to their personal health and, in particular, their chronic conditions. It’s important to recognize that this is not the sum total of productivity elements.

One of the reasons this distinction is important, is that when we were explaining this to management they were asking, “well, are you saying that you’ll actually be giving me a numeric value of each person’s productivity?” Of course, that’s not something we can give them. But what we can talk about is that one of the important factors related to a person’s capability for performance is their health.

That was also important when we were talking to employees to get their buy-in. There would certainly be concern (and probably very low response rates) if people thought that you were assigning a number to their personal productivity that might be used to decide a variety of corporate decisions. So, the ability to distinguish the fact that we were working on the health niche of productivity, rather than the end-all, be-all measurement of productivity, was very important.

Q:

So you believe a point to keep in mind is not to over-position this as the ultimate answer to the question of individual output.

BAASE: Right, because that is not true. I would finish by sharing a scenario: One person has a chronic illness, yet they cope very well with it; they have good resiliency and their attitude is great and they’re very dedicated, and they’re involved in managing their own illness effectively. Their productivity could be much higher than a person who has none of these chronic health conditions, and yet has a bad attitude that has a negative influence on their performance. So, it’s important to highlight the fact that this is not the definitive answer on one person’s productivity, but it’s an important piece of the big picture. ★



Dow Corporate Profile

Dow is a leading science and technology company that provides innovative chemical, plastic and agricultural products and services to many essential consumer markets. With annual sales of \$28 billion, Dow serves customers in more than 170 countries and a wide range of markets that are vital to human progress, including food, transportation, health and medicine, personal and home care, and building and construction, among others. Committed to the principles of Sustainable Development, Dow and its approximately 50,000 employees seek to balance economic, environmental and social responsibilities.

Dow people around the world develop solutions for society based on Dow’s inherent strength in science and technology. For over a decade, they have embraced and advocated Responsible Care®—a voluntary industry-wide commitment to safely handle their chemicals from inception in the laboratory to ultimate disposal. This worldwide commitment helps consumers lead better lives, customers succeed, stockholders prosper, employees achieve and communities thrive.

ABOUT THE EXPERT: Catherine M. Baase, MD

Dr. Baase is the Global Director of Health Services for The Dow Chemical Company, where she is responsible for occupational health, epidemiological research, health issues management, health promotion, and partnership with other internal functions for strategic planning and vision development for health-related areas of The Dow Chemical Company and its global workforce.

Dr. Baase also serves on the Board of Directors of the Partnership for Prevention, a national, public-private partnership dedicated to preventive health services. She is on the Advisory Board of the Institute for Health and Productivity (IHPM), and the Editorial Advisory Board of the IHPM’s publication, Health & Productivity Management.

Dr. Baase is a member of ACOEM and has been board certified in Family Practice since completing her residency at Saginaw Cooperative Hospitals where she served as Chief Resident. She graduated from the College of Human Medicine at Michigan State University, and has completed a post-doctoral fellowship in primary care faculty development.

Before entering medical school, Dr. Baase worked as a chemist doing polymer research for Dow Chemical, and graduated summa cum laude from Saginaw Valley State University with degrees in chemistry and secondary education.



Taking Health And Pro To New Heights

*An Inside Look
At The Academy
For Health And
Productivity
Measurement*





The Academy for Health and Productivity Measurement (AHPM) is a resource for employers, health plans, providers and others interested in measuring and understanding the relationship between worker health and on-the-job performance. AHPM has given a series of training programs, researched the literature, and conducted benchmarking surveys to address key measurement topics including:

- Foundations of health and productivity measurement
- Implications of various measurement objectives and the tools available to achieve them
- Practical applications and case studies of existing measurement programs
- Guidelines for implementing measurement programs
- Models for estimating the economic implications of health and productivity
- Approaches for incorporating productivity into business planning

As a resource of the Institute for Health and Productivity Management (IHPM), AHPM's mission is to provide education, training, and consultation to all stakeholders in the HPM field. AHPM works collaboratively with a number of organizations and individuals to carry out its mission. An active advisory board of leading professionals supports its strategic development. A growing faculty of corporate leaders insures the most up to date content and examples of health and productivity measurement outcomes.

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AHPM Resources**Direct learning opportunities**

These are hands-on training programs typically two days in length immersing participants in an intensive and interactive learning environment.

Health and Productivity Measurement: Demonstrating the Business Value of Good Health provides the core competencies for:

- Identifying the tools to measure lost productivity due to health-related problems
- Understanding the full impact of health on performance in the workplace
- Connecting the health of employees to the financial performance of the company
- Building a case for investing in health and productivity management
- Understanding and overcoming barriers to using productivity as a health outcome

2002-2003 venues:

- Chicago in collaboration with the Chicago Business Group on Health
- Scottsdale Pre-Conference Workshop as part of the IHPM Annual Conference
- Kansas City in collaboration with the Mid-American Coalition
- United Kingdom in collaboration with Goldman-Sachs, Unilever, VieLife
- Atlanta at the American Occupational Health Conference in collaboration with the American College of Occupational and Environmental Medicine
- San Francisco in collaboration with the Pacific Business Group on Health and the Integrated Benefits Institute

Coming Events:

- Scottsdale Measurement Training Academy as part of the IHPM Annual Conference
Next Steps In Productivity Measurement and Design
October 6, 2003

Comments from Participants:

“I took away practical applications that I can implement immediately”

“The real-world examples were right on target and I can use them to build my measurement initiative”

“I’ve already selected a measurement tool that will work in my setting”

“Excellent blend of practical and theoretical”

Customized Training

AHPM customizes training for groups interested in offering a tailored program specific to their organizational needs.

Applied Measurement Initiatives

These are resources that advance the overall field of health and

productivity measurement and that provide real-time, user-friendly information for professionals engaged in measurement initiatives.

Academy Briefs

One page summaries of important and timely measurement findings published in Health and Productivity Management magazine and on the AHPM portal.

Gold Book

A compilation of tools used to measure health and productivity. Includes the specific tools, guidelines on how to use them, descriptive information about their features, ratings of validity and reliability, comparisons of instruments and what they measure.

Measurement Applications Book

Due out by the end of 2003, this is the 'how to' companion to the *Gold Book*. It provides practical applica-

tions of the various measurement tools and methods. While the *Gold Book* gives practitioners the information they need to select an appropriate measurement tool, this book is the user's guide for all the measurement issues they will face.

Research Links

AHPM reviews the research studies, surveys, articles, and other relevant literature and provides an easily accessible, easily searchable annotated database.

Benchmarking Surveys

Periodic surveys are offered through the AHPM portal and results summaries are communicated publicly. These surveys track the evolution of the HPM field. Survey 1 provides basic, foundational information about who is measuring health and productivity, how data are being collected and used, planning for measurement initiatives, and barriers

to making health and productivity a corporate priority. Future surveys will address the impact of interventions on productivity, building the value proposition for HPM, and assessing the need for new products.

WWW.AHPM.ORG

The AHPM web portal delivers a range of products and services in an easily accessible, cost effective manner. The portal provides one click viewing of current training events with electronic registration, access to the latest Academy Briefs and all archived editions, downloadable measurement tools, annotated research reports, archived power point presentations of each training program accessible by registrants at those programs, benchmarking surveys, and access to books and publications. AHPM has been funded by an unrestricted educational grant from Aventis Pharmaceuticals. ★

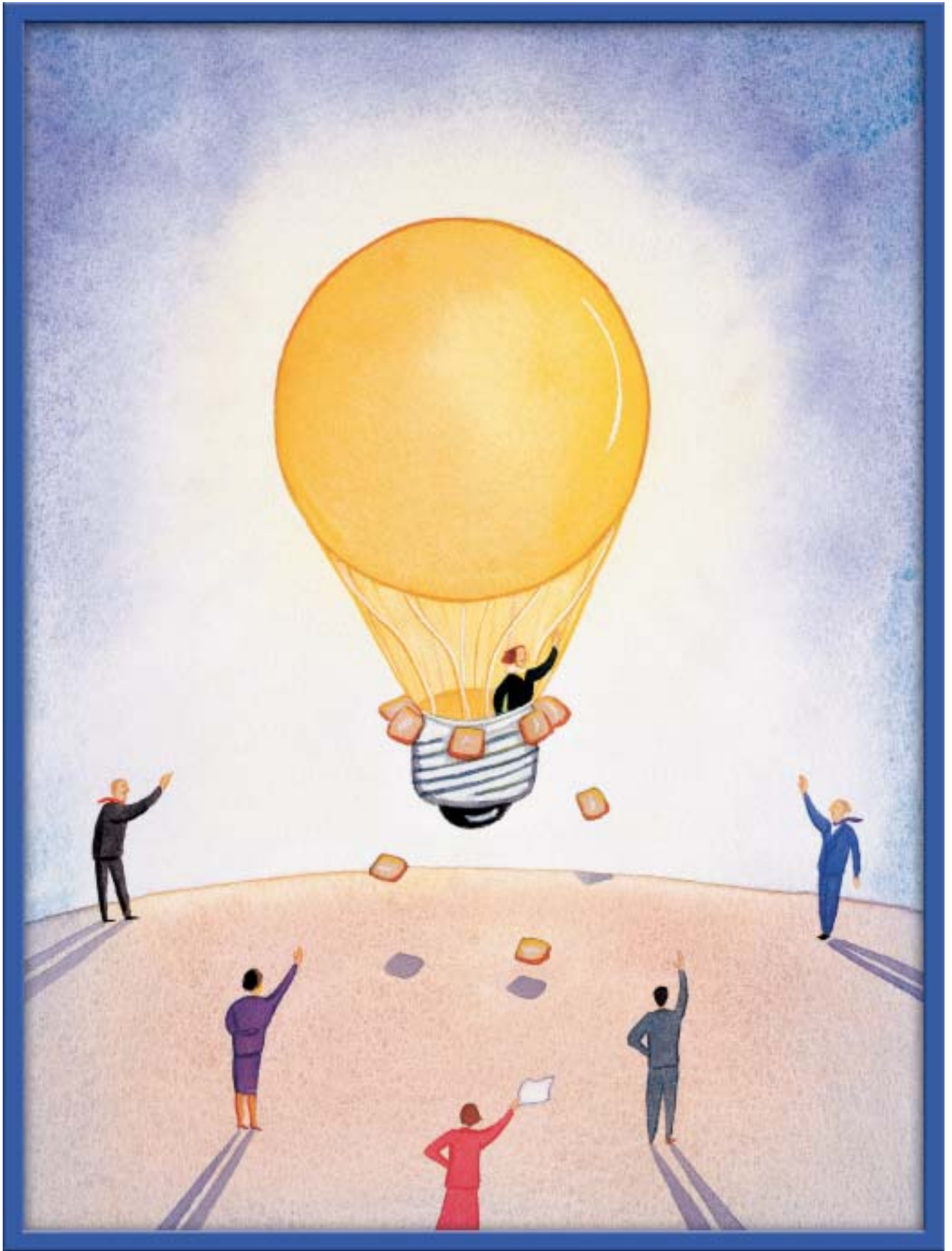
The screenshot shows the homepage of the Academy for Health and Productivity Measurement (AHPM) e-learning portal. At the top, there is a decorative header with a grid of orange and yellow squares. Below this is the AHPM logo, which includes the text 'AHPM e-learning portal' and 'Academy for Health and Productivity Measurement'. A navigation menu is located below the logo, with links for Home, Academy Archives, Opportunities to learn, Publications, Measurement Tools, Research, Benchmarks, Leadership, and Contact. The main content area features a 'Welcome!' message, a stack of books, and a banner with the text 'How is the health of your employees affecting your corporate productivity?'. Below the banner, there is a call to action: 'Learn more about The Academy's e-Learning Web Portal...'. The footer contains the Aventis logo, a statement that the portal is funded by an unrestricted educational grant from Aventis Pharmaceuticals, the IHPM logo, and the text 'The Academy is a division of the Institute for Health and Productivity Management. Click here to go to the IHPM web site. Copyright © 2003 - IHPM'.

The home page for the AHPM website, www.ahpm.org

Advancing Health and Productivity Measurement

An exclusive interview with Wendy Lynch, PhD and John Riedel, MBA, MPH

Practitioners around the country are showing a heightened interest in health and productivity management. In this exclusive interview, WELCOA President David Hunnicutt, PhD, speaks with Wendy Lynch, PhD and John Riedel, MBA, MPH about what it takes to get your productivity measurement initiative off the ground.



In this interview, two of the experts in the field of health and productivity measurement shed some light on what productivity really is, how it can be quantified, and which tools will be most helpful as you begin to measure health and productivity within your organization.

Q:

John and Wendy, would you tell us your views on the relatively new field of health and productivity management?

RIEDEL: As a field of study, health and productivity management looks at the relationship between employee health factors e.g., health risks, diseases, symptoms, and the impact employee health has on productivity.

LYNCH: When it comes to health and productivity measurement, it's important to remember that we're looking at outcomes differently than we have in the past. We're looking at outcomes and broad health gains that have larger implications for the business than simply reducing the medical care budget.

Before we were asking, "Will we save health care costs in the long run if employees are generally healthier?" "Can we make people less expensive on this line item budget?" When we start to talk about productivity, we're saying that the implications of somebody's well-being are much broader than simply a cost item within the benefits or HR department. We're talking about implications for the whole business and what it's able to produce, long term.

Q:

What is productivity? Can you give us a straightforward definition to get started?

RIEDEL: The definition of productivity is really broken down into two parts. The first part is whether or not a person is actually on the job at all. This is the "absenteeism" component of productivity—assuming that if people aren't at work at all, they aren't producing at all. The second part has to do with on-the-job performance—how productive an employee is when they're at work. We call this "presenteeism."

The idea of presenteeism may be the bigger issue, and it's one Wendy and I have really been addressing through the Academy for Health and Productivity Measurement (AHPM). The basic questions behind "presenteeism" are, "Are people who are less well, less productive?" "Are they less able to perform their job to the best of their ability when they're at work?"

So, health and productivity management means taking these two factors into account—absenteeism and presenteeism—and finding ways to maximize them by enhancing health and well-being.

Q:

Is it possible to quantitatively and qualitatively measure health and productivity in a work environment?

LYNCH: Absolutely! Recent developments have allowed us to better quantify when employees are performing well and when they aren't. Recent research shows that self-report tools are quite valid. There are some very good indicators of how productive employees are in relation to their health status. And you can even measure productivity for people who don't have jobs that involve widgets, phone calls, or things that are countable. That's really the measurement area that AHPM is focusing on.

Q:

I see how productivity measurement would work in a widget-related environment—simply count products made or phone calls answered. How does health and productivity measurement work in a non-widget-related environment?

LYNCH: That's a good question, and you're right—the ideal is to have some truly measurable, countable, visible outcomes. FedEx is a great example, and they've done some good analysis on the number of boxes that get moved each day. But most of us don't move boxes, or have a certain number of phone calls we have to make in a day. That's where measurement tools come in.

Usually these tools are either paper or online questionnaires. Each tool examines productivity a little bit differently. Usually there's a component that asks how many days you missed as a result of your health, or how many days you had to leave early or arrive late because of a medical appointment or something having to do with your health. So there's the specific, "I'm-not-at-work" component. That goes back to the absenteeism John spoke of earlier.

Then there's assessing presenteeism, and there are two ways measurement tools get at that issue. One is a scale that asks, "So, David, on a scale of 1 to 100, compared to your best day, how well did you perform today?" This kind of scale asks you to quantify how much of your normal effort you were able to give on any particular day—whether you're feeling sick or not. The other way these tools assess presenteeism

“There are other tools that are much longer and more complicated that may require a separate initiative and that’s a little more expensive. But the important thing to remember is—because there are now many tools, and various ways to administer them—pretty much anybody can get in the game.”

teicism is by asking about different domains of performance like, “Were you able to do the physical things you’re supposed to do?” “Were you able to perform mentally,” or “Did you have trouble with your interpersonal skills as a result of a health issue that you’ve been dealing with?” These kinds of measurement tools are able to assess productivity in non-widgit environments, and they do it pretty well.

Q:

So it seems that, in order to get a good grasp on measuring productivity, health professionals need to get their hands on these assessment tools. Where can they get them?

RIEDEL: I would recommend looking at *Measuring Employee Productivity: A guide to self-assessment tools*. This book, commonly referred to as the *Gold Book*, is available at www.ahpm.org. The *Gold Book* identifies seven productivity instruments on the market today, and places them in categories based on what they’re trying to measure. Almost all of the tools get at attendance in one way or another, whether through analyzing absence, turnover, or time on task. Most tools attempt to measure quality of work, and many examine quantity of work and/or work capacity. Finally, the tools examine personal factors that impact work performance and productivity. Those are the four main elements present in the tools found in the book. Whether those are the absolute categories or not, we’re not sure, but it’s a good starting place for practitioners. All of these tools are in the public domain so practitioners can actually use them at their worksites.

Q:

How good are the tools you examined in The Gold Book?

RIEDEL: The ability of the tools to actually measure health-related productivity is quite good. Many of them have been around for several years now, they’re being used more, and more research is being done to assess their psychometric

properties. So, while a couple of years ago, the instruments were rather embryonic, I would say that now there’s solid evidence of reliability and accuracy.

We had a measurement expert review all the tools in the *Gold Book*. We ranked each tool in terms of how rigorously the developer documented its measurement properties. While we always prefer more evidence, we were pleasantly surprised that these specific tools held up quite well to our scientific scrutiny. Fortunately, the measurement field is growing and so is the volume of well-designed studies calibrating the connection between health and on-the-job performance.

There are other factors that make a tool more or less useful. For instance, the ability to administer it over the Internet or by phone interview may be important to an employer. The ability to focus on specific diseases or conditions or symptoms may be of particular interest to an employer. These kinds of issues need to be taken into account when a particular measurement tool is being considered.

Q:

Can any company measure health and productivity management?

LYNCH: Yes, they can, and it’s getting easier and more cost effective all the time.

RIEDEL: And there are all sorts of different approaches to doing it. If the intent is to just take a tool off the shelf, there are some that lend themselves to that approach. For those who want to tailor questions to their specific issues, there are tools that lend themselves better to that approach.

The length and sophistication of the tool a company chooses to measure productivity depends on what they’re trying to get at. If they’re happy with broad outcomes, measurement is pretty easy and relatively inexpensive to do. The productivity measurement tool can even be attached to other measurement initiatives a company is involved in like an HRA or an annual employee satisfaction survey.

There are other tools that are much longer and more complicated that may require a separate initiative and that’s a little more expensive. But the important thing to remember is—because there are now many tools, and various ways to administer them—pretty much anybody can get in the game.

“Our intent at the Academy is to create tools that people can utilize easily, whether it’s over the Web, in a classroom setting, or in a book. We want to make health and productivity measurement as user-friendly as possible.”

Q:

So if any company can actually get involved, what’s the process for getting started?

RIEDEL: To make it easy to understand, let me break it into a four-step process. The first step is to determine what it is you’d like to measure—do you want broad outcomes or more specific kinds of results? Once you understand what you want to measure, step two is to identify the right tool that will allow you to measure adequately and accurately. Step three is putting some kind of intervention into place to improve productivity, and then step four is measuring the impact of your intervention.

LYNCH: I think the first two steps are the most important because it can be difficult to convince the organization that there are outcomes to measure other than dollars spent on medical care. Health promotion practitioners will want to introduce this idea into the organization in the most relevant terms possible. They should ask themselves the question, “What are the implications for work performance based on the health issues of our population?” It’s absolutely fundamental that you determine what you’ll measure and how you’ll measure and communicate it if you want buy-in from the entire organization.

RIEDEL: I agree—the first two steps are important because once an organization buys into this concept, it’s on the road to a fundamental health benefits paradigm shift, and is now better prepared to move forward. I think the fourth step is becoming increasingly important. It’s important because, ultimately, the people who need to be convinced of the value of productivity measurement are the CEO, CFO, and other senior-level people. If we expect to convince them, we need to have outcome measures that really resonate with their business metrics. Tool developers need to focus some of their outcomes on measures that are closer to what business

leaders use to determine success such as: revenue per employee, output per employee hour, or FTE per revenue unit.

Q:

How can health promotion professionals learn more about measuring productivity?

RIEDEL: Several resources are under development that will provide a better self-study capability. One of those resources is *The Measurement Applications Book*, which is more of a “how-to-decide-what-to-do” text. It provides a lot of case studies from companies that have been successful in doing measurement. That book is due out at the end of 2003.

Organizations can also take advantage of the services offered through AHPM. The Academy for Health and Productivity Measurement offers a variety of ways to learn more about measuring health and productivity.

It offers training programs. Surveys assess where the field is today and the kinds of advances that practitioners are looking for. A service called *Research Links* will provide an easily searchable database of relevant articles, studies, and surveys. The need for this resource is obvious based on the number of requests already received.

LYNCH: I also want to mention that all the tools in the *Gold Book* are what we call “public domain tools.” There’s little cost for using them, and they’re not proprietary. We didn’t include proprietary tools, although there are some good, low-cost proprietary tools available. Not only does the *Gold Book* include these tools, but it also addresses the design issues and questions that companies ought to be asking if they get into health and productivity measurement. The intent of the Academy is to make health and productivity measurement as user-friendly as possible.

Q:

How many companies are doing a good job measuring health and productivity within their workplaces?

LYNCH: Well, we only know about the ones that are being public about what they're doing. I'm sure there are many companies that are measuring without letting anyone know about it. With that being said, I would say there are a dozen companies right now that have results already, and many more who plan to begin measuring productivity in the coming six to 12 months—maybe 100 or more.

Q:

What's your confidence level that, if an organization commits to doing health and productivity measurement correctly, they'll actually demonstrate results and get to outcomes?

LYNCH: I'm 100% certain that they can demonstrate results and have some very positive outcomes. I'm also sure that looking at productivity would alter the way they're approaching the entire health management issue. Looking at productivity will give employers a picture they've not seen before, and it will help them identify where their biggest opportunities are. I'd venture to say that, often, the biggest areas of opportunity might come as a surprise to some employers. But, once they identify these opportunities, yes, organizations can absolutely alter outcomes for the better.

Q:

Can you tell us a little about some companies that are presently doing a good job measuring health and productivity at their organizations?

RIEDEL: There is a growing number of companies looking at the connection between employee health and productivity. We're struck by the wide range of approaches these companies are taking. Some are conducting very focused efforts on a few key health conditions while others are implementing broad efforts addressing chronic conditions, health risks, and severity of symptoms. Most

companies are using self-report but others are making use of existing "objective" data.

As examples, the following companies all have taken on the task of measuring the connection between health and productivity in one way or another: Advance PCS, Aetna, American Airlines, BankOne, Caremark, Comerica, Delnor Hospital, Dow Chemical, Federal Express, Federal Reserve Bank of Dallas, General Motors, International Truck and Engine Company, Lockheed Martin, Optum, Pitney-Bowes, Quest, Raytheon, and Union Pacific Railroad. And there are many more.

LYNCH: As this field continues to grow, the Academy will help provide the resources and knowledge that companies need.

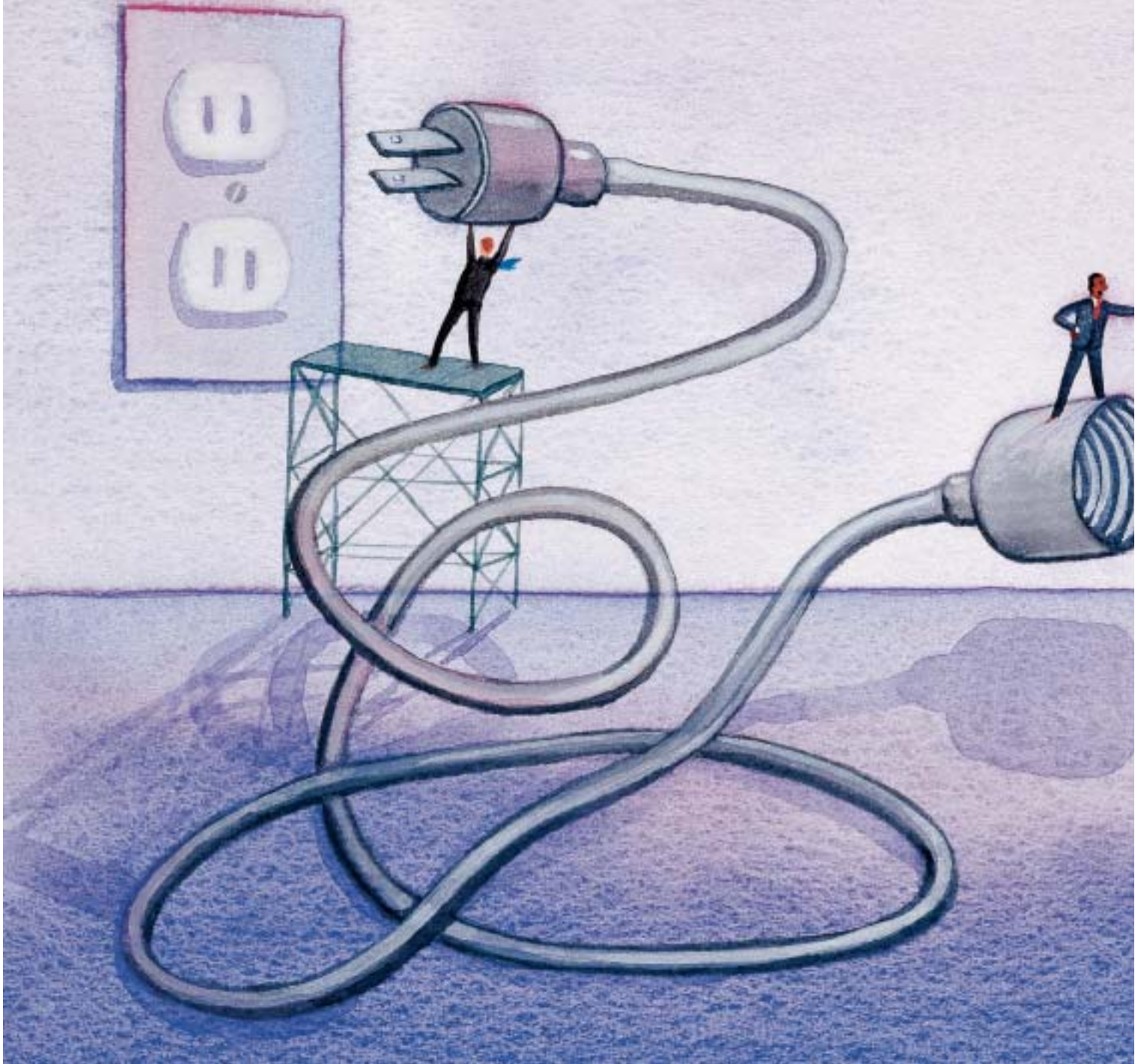
RIEDEL: And it will help to build a community of professionals who advance the field as they learn.

To learn more about the Academy for Health and Productivity Measurement, see the article on page 36 or log on to the Academy's website at www.ahpm.org. ★



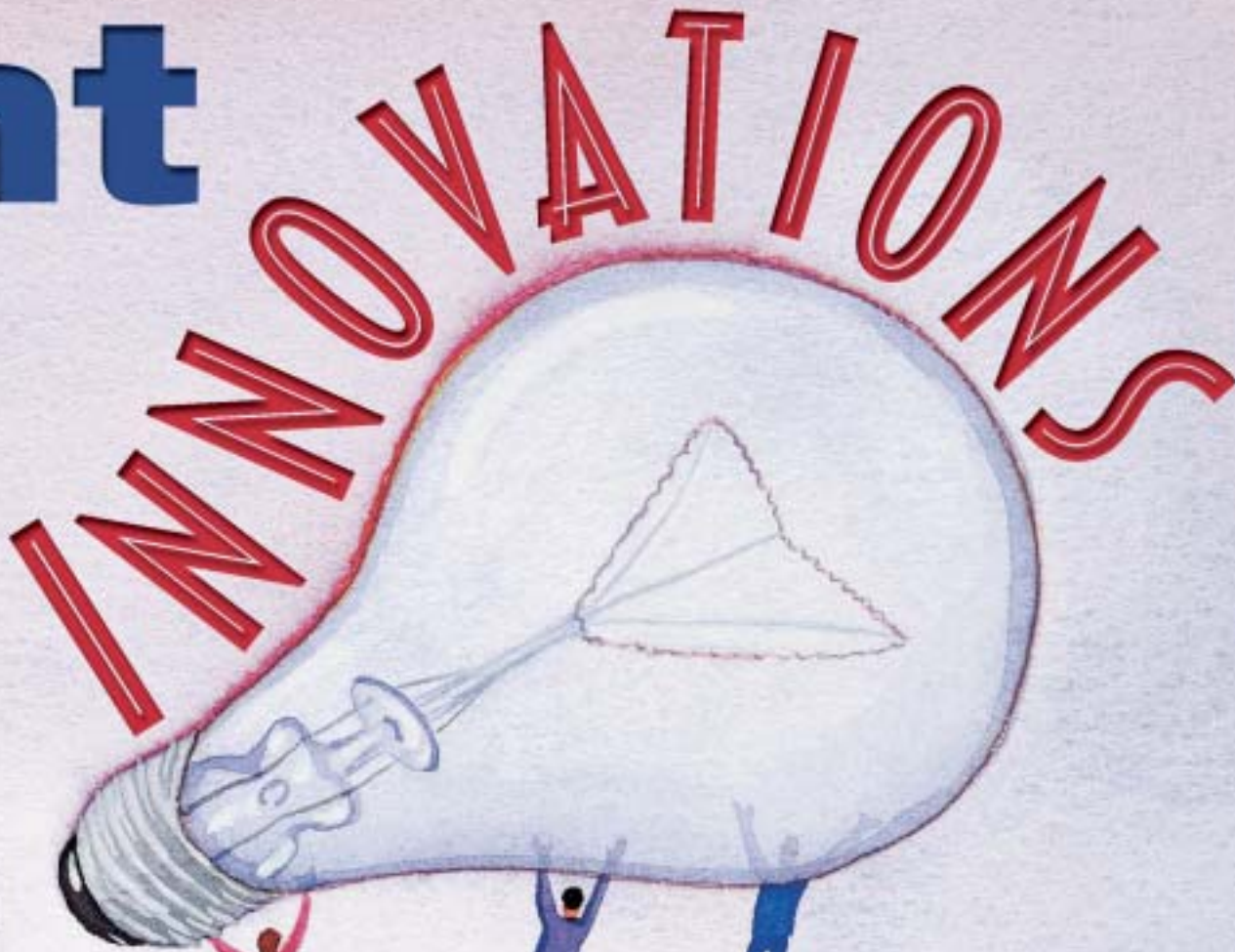
AN EXCLUSIVE INTERVIEW WITH BARBARA PELLETIER, MS, RD, VICE PRESIDENT OF AETNA INC.

Intelligence



TELIHEALTH, INC.

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***Aetna Zeroes In On
The Relationship Between
Health Risks and Productivity***

“By adding productivity measures to the health-risk assessment, we were trying to create baseline information so that we could estimate the potential opportunity for health improvement. We wanted to estimate how much money is lost due to health and we wanted a simple way to put lost time and productivity in terms of ‘dollars and cents’.”

Recently, Barbara Pelletier, MS, RD, Vice President of Aetna IntelliHealth Inc. and her colleagues conducted one of the first self-reported productivity measurement projects linked to health risk appraisal data of Aetna Inc. employees. Their findings showed a significant link between number of health risks and amount of lost productivity. In this exclusive interview conducted by Wendy Lynch, PhD, Co-Director of the AHPM, Pelletier answers questions about their measurement project and about how information from the Academy can be helpful in choosing measurement tools.

Q:

When you decided to put productivity questions alongside the HRA, what was the question you were trying to answer?

PELLETIER: The question was, “What is the economic benefit of providing our health promotion programs?” This is important information for business planning but getting at the answer can be complicated. We wanted to be able to communicate the benefit in terms that business leaders would value. So, given the limits of our resources and amidst continuous change in our organization, we decided to create a simple tool that would have the essential pieces of information needed to answer this question [health risk and productivity measures] in one place.

Q:

Who is the primary audience for the answer to that question?

PELLETIER: Initially, the primary audience was senior management within Aetna Human Resources. Working closely with senior leaders, HR is continuously evaluating health benefits and programs to assess value and deter-

mine which programs and benefits to continue or grow and which ones no longer meet business needs. Now, being part of the business, we are also using this type of data to educate and inform our business leaders about health and productivity issues.

Q:

So, there was a lot riding on the answer?

PELLETIER: Yes, there is a lot riding on the answer. When budget dollars are limited, these decisions are tough. We wanted to make sure that we had information to help us manage resources wisely and best meet employee needs.

Q:

Why didn't you use objective data about productivity or absenteeism?

PELLETIER: In our work environment, objective data, like attendance records, disability data, and medical claims information, is not readily accessible to health promotion practitioners. Also, Aetna uses a Paid Time Off (PTO) bank that was implemented a few years ago. Within the PTO bank, employees are given a certain number of days that they can use for a multitude of reasons. The bank can distinguish whether a day off was scheduled or unscheduled—or if a person was on disability. But, there was really no way to look at absenteeism, and distinguish days due to illness from days due to vacation or personal leave. Until this year, PTO was not centrally managed. Every manager was responsible for the time and attendance of their own employees. So, it wasn't feasible to look at attendance records as an accessible or reliable source of productivity data.

Q:

Do you have any productivity data?

PELLETIER: Some departments in our company maintain productivity data such as call-response time, first-call resolution and other measures of that nature. But many of our employees are “knowledge workers” and work performed on a daily basis is not really monitored in a standardized manner. The pilot group of employees we wanted to measure was a mix of people with different job types. It wasn’t realistic to consider measuring their daily productivity objectively. In addition, resources are becoming more “lean and mean,” and the shift at Aetna is to do things in a more streamlined way. Many functions have transitioned to “e-service.” So we really had to stick with a process that was fairly easy to manage and not administratively burdensome. Using an online tool to gather self-reported health and productivity information made a lot of sense for our population.

Q:

When you started to look at measuring health and productivity specifically, what were the key outcomes that you were trying to achieve?

PELLETIER: By adding productivity measures to the health-risk assessment, we were trying to create baseline information so that we could estimate the potential opportunity for health improvement. We wanted to estimate how much money is lost due to health and we wanted a simple way to put lost time and productivity in terms of “dollars and cents”. We also wanted to get a better understanding of which productivity issue was costing more—absence from work or impairment on the job?

Our plan was to use this information to document the level of return on investment for providing programs that help manage health risk at the workplace.

Q:

How much did you involve people outside your organization to help plan this project?

PELLETIER: I benchmark with other companies very frequently, and this project was no exception. I did speak with several of my benchmark partners and asked them questions about what they were doing and how they were doing it and what mistakes they had made. And,

Wendy, I even made a call to you one day to find out what work had already been done and what tools were available. I’d heard that you were pulling together references and resources that would address health and productivity . . . I think it was the beginning of the *Gold Book*. You were a good source of information, as always, and very kind to share your thoughts.

Q:

How helpful would the training academy and the Gold book have been at that time?

PELLETIER: I really don’t mind getting mud on my boots at all. But my first thought when I heard about the training Academy and the *Gold Book* was “Darn—I wish this was around a year ago!” The Academy training is very thorough and presents so much practical information in such a short amount of time. Having a training program like this early on could have saved us much time and effort and would have provided guidance for many decisions that needed to be made. The *Gold Book* provides a well-thought out blueprint for selecting the right tool. It presents information in a way that really helps you think through what it is you are seeking to achieve and how using the right tool is essential for a getting the information you need to reach your goal.

Q:

What was your time frame from the point when you started considering doing a more broad assessment of productivity along side health risks, to the time that you actually implemented the tool?

PELLETIER: It took about 12 months from the time we made a decision and got approval to move ahead to program launch. We took care to establish an integrated team of internal stakeholders including staff from occupational health, disability, EAP, fitness, health promotion, and benefits administration to participate in the planning phase. This took more time but was well worth the effort to create a common vision and shared value.

Q:

What was your general strategy in choosing among the various productivity-specific tools?

PELLETIER: A primary factor for selecting the productivity assessment tool was what I call “customer tolerance.”

“The data also showed a cumulative effect—that having more risks was associated with greater productivity loss. For this group—individuals with the highest number of risks reported being impaired an average of 8 hours more over a 7-day period than those with the fewest number of risks.”

We carefully considered the length of the tool, how easy it was to complete and how much time it would take. Customer trust was also critical. We didn't want questions that might be perceived as threatening—especially with so much change going on in the work environment. We made a decision to select a tool that had pre-established credibility; we didn't want to reinvent, or even tweak anything. We wanted to have a solid tool that had been used before, that had documented effectiveness and some level of validity and reliability. We also considered cost and since we did not have additional budget for this, it was important to find a tool we could use without fees. Finally, the tool needed to allow us to calculate economic benefit using simple statistical processes.

Q:

Did you use any particular resources or experts to guide you in the tool selection process?

PELLETIER: I learned about a few HPM tools through my benchmark colleagues. And, I spoke to you. You offered to send me a copy of the WPAI tool—which is the tool we ended up using.

Q:

If there were some key statements that Aetna would like to make about what you've discovered, what would they be?

PELLETIER: We learned that for the 2,700 employees who responded to our questionnaire, there was indeed a close statistical relationship between health risk status and self-reported perception of productivity level.

The data also showed a cumulative effect—that having more risks was associated with greater productivity loss. For this group—individuals with the highest number of risks reported being impaired an average of 8 hours more over a 7-day period than those with the fewest number of risks.

For the folks we were able to track over a 12-month period, we found a significant reduction in modifiable risks, and a simultaneous improvement in productivity level for some people within that study group. Although we can't draw any conclusions about why changes occurred, the direction of change is promising. We are encouraged that, if we can motivate participation in programs that reduce health risk and track change over time, we may likely see productivity gains as well.

Q:

What are the plans moving ahead in terms of next steps or decisions that need to be made?

PELLETIER: From the time we conducted this pilot program, we have come a long way. We felt strongly that the combination of health-risk assessment and productivity measures was very successful. And, we believe that health and productivity measures would provide information of value to our customers. This is why we've made this type of assessment an integral part of Aetna's new interactive wellness product, *Simple Steps To A Healthier Life*.™ We also reassessed our selection of the health productivity tool and decided to make some changes based on the information that we want to be able to gather. The pilot program provided many insights that we've been able to use to support our customers who want to implement health and productivity measures.

Q:

We went through several steps together using information from the academy and the Gold Book as you and your team were selecting a tool. What parts of that process were most helpful in choosing a tool for the next phase?

PELLETIER: The *Gold Book* helped us to take our thinking about health and productivity measurement to a whole new level. The process helped us further define the information we were seeking and identify critical success factors for selecting the right tool in order to achieving our specific goals. For example, we initially set out to measure impact of productivity and detect change over time. But by re-thinking our goals, we decided that we needed more specific information about how various health conditions and/or symptoms affected productivity and which might be more costly than others. Having access to the *Gold Book* and participating in the Academy provided a methodical approach for determining our next steps and helped us minimize the “guess work.”

Q:

If you could tell others about what you've learned from this measurement process, what would be most important?

PELLETIER: First, management support is key. We've learned by building management support, you can create a “pull” strategy, rather than a “push” strategy. In the past we'd go to managers and try to convince them to participate in a program without creating a sense of ownership for what occurs. We've found we have greater success in taking a softer position—through making an objective business case and presenting solid rationale for how a program might benefit their employees. Then leave it up to them to decide if they are ready to take action. It is much more likely to be successful if our business leaders embrace it.

Second, engage multiple stakeholders within the company. There is a lot to be learned from the perspectives of other business areas or units within your organization. And, this will also help create a shared vision and ownership for the initiative.

Third, plan very carefully how you want to use the data. Envision how you will report your findings and share information with your management. Then make sure you're covering all of the right steps and have all the right processes in place for being able to accomplish that.

Finally, benchmark with others. Our colleagues out there are a vast wealth of knowledge and information and I think many people are willing to share and exchange ideas and learn from each other. In turn, you also have to be prepared to share your stories and your lessons learned and help others out too.

Q:

You have generously participated in several Academy training sessions, sharing your story. If you could tell people about the value of the academy, what would you tell them?

PELLETIER: The Academy is so valuable because it can help practitioners to bridge the “knowing and doing” gap. By that I mean, many times, practitioners “know” the value of health and productivity measures but get stuck in the process of making it happen. The Academy can help develop the “know how” and confidence it takes to execute a plan of action. It also puts you in touch with others that are pursuing similar goals. You can learn so much by connecting with others. And this may be the most valuable outcome of all. ★

Special thanks to Karen Ryan and Myde Boles for their dedication and hard work on this project and to the Aetna Human Resources organization for their leadership, guidance, and support.

ABOUT THE EXPERT: **Barbara Pelletier, MS, RD**

Barbara is currently Vice President at Aetna IntelliHealth Inc., where she provides strategic direction and oversight for the design, development, delivery, and evaluation of Aetna's *Simple Steps To A Healthier Life*™ product. She has more than 16 years experience in health promotion and disease prevention program management.

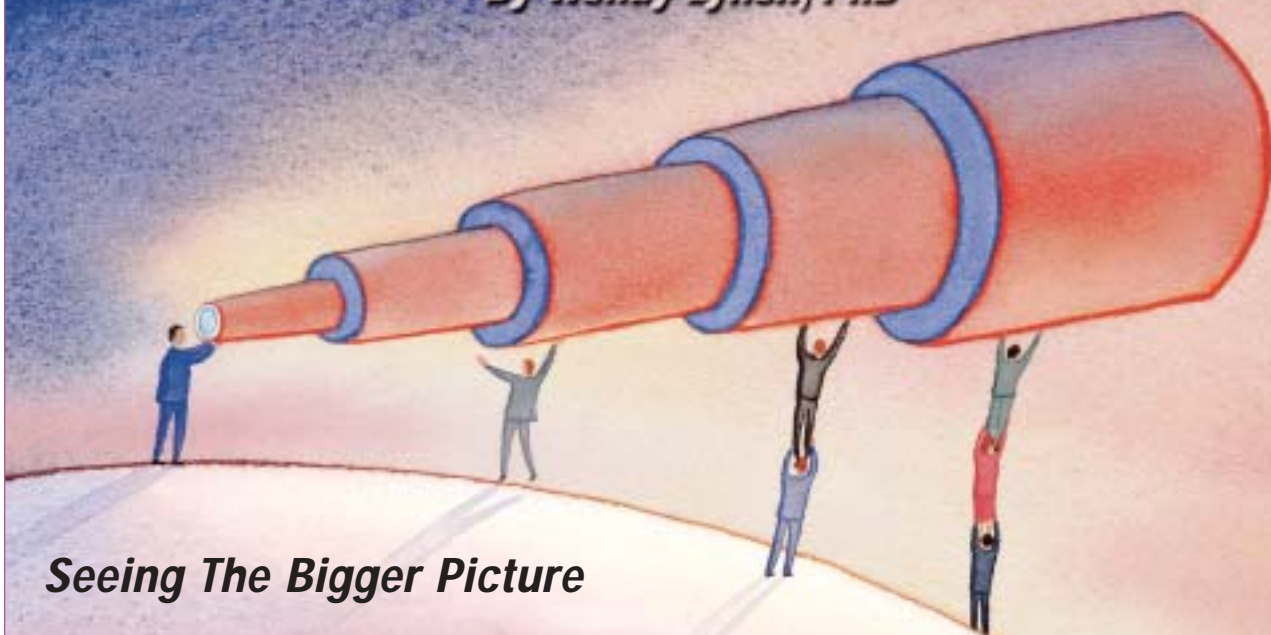
Barbara has played a key role in the development and evolution of Aetna's employee wellness program and has served as Program Director for more than 6 years. During this time, her leadership has helped to position Aetna as a nationally recognized best practice company for employee health promotion and disease prevention—twice earning the C. Everett Koop National Health Award.

Barbara graduated from the University of Connecticut with Master's Degree in nutritional science and Bachelor's Degree in education. She is currently a member of the Advisory Council to the Institute for Health and Productivity Management and a faculty member of the Academy for Health and Productivity Measurement. Barbara serves on the Health Promotion Advisory Board for the Wellness Councils of America and also serves on the Board of Directors for the Graduate Program in Health Promotion at the University of Connecticut.



Health And Productivity Management In Perspective

By Wendy Lynch, PhD



Seeing The Bigger Picture

As the health and productivity discipline evolves, a key factor will be to balance increased sophistication with relevance in the wider business context. It can't focus so exclusively on diseases that we lose sight of the effects of organizational culture, business environment, and other known influences. Relevance must be clear and obvious. Health and productivity measurement is a narrow topic within an array of broader issues. There is high risk of over-selling and misrepresenting the importance of health factors if their effects are expressed in isolation from other important circumstances. Many business leaders will dismiss findings that ignore other human capital factors like compensation, job flexibility, or training effects.

Dimensions That Will Advance The Field

Health and productivity measurement will advance along several dimensions in the next decade. Some of these advancements are already underway. Four dimensions are discussed here, although there certainly could be others. Two advances deal with dimensions internal to the field and two deal with dimensions that affect contextual relevance somewhat external to the field.

Evolution of health parameters

The “health” portion of health and productivity measurement will likely evolve beyond its current compartmentalized disease focus. As a starting point, partly capitalizing on the specific interests of funding agencies, researchers and employers have primarily investigated specific medical conditions. Some work has expanded into symptoms and health risk factors, but most have concentrated on diagnoses.

As it has in other disciplines, the concept of health will probably evolve in several ways. First, interest will grow around broader issues of well-being. Broad definitions of health often include social, spiritual, and emotional elements not yet part of most productivity discussions. This will necessarily lead to more attention to work environment, corporate culture, leadership style, and related topics that one might expect will influence both somatic responses and work performance. As such, these efforts will blend in with similar work in the fields of organizational development and personnel psychology.

Second, health will become more person-centric, rather than a person-within-a-disease category issue. Most current studies start with a problem definition (such as arthritis) around which a population is selected. This approach does not account well for large variations in outcomes within the same disease category. Outcomes reflect the entire experience of the individual, not a single health issue. With advancement in data collection and data integration capabilities, studies will more routinely examine combinations of health and work factors at the whole-person level.

Lastly, our health dimension will evolve increasingly toward factors related to maintenance of high functionality *while living with* chronic conditions. These could be markers of poor clinical management or predictors of impending disability. The aging of the US workforce will focus necessary attention on preventing or attenuating loss of ability in workers over age 50. It will be imperative that workers remain vital and capable at increasingly older ages to keep industries afloat and government services available.

Expression/quantification of business outcomes

Major advances will occur in the translation of productivity loss into business outcomes. Current methods provide believable ranges of lost fulltime equivalents, or salary equivalent dollars. But better methods will bring needed validation to this field. It may come as a surprise to some, but we predict that self-report measures will become the standard method for collecting productivity information in most industries, rather than any technological efforts to collect so-called “objective” metrics. This is

mostly due to the shift toward knowledge work, and an anticipated increase in acceptance of self-report. Both of these factors point toward the need for more advances in business valuation.

First, some level of agreement about value will emerge. For example, experts have not reached consensus on what a lost day is worth, or how its value should be calculated. In some settings, and for some jobs, we have accepted estimates, but deliberations continue. Similarly, the value of an employee’s effort to his company is not as straightforward as a simple multiple of his salary. Other factors are involved. There may never be a single method of valuation, but an accepted range of defaults will probably evolve.

Second, an accumulation of evidence will produce an ordinal ranking of business value by type of outcome. Today there is no consistent understanding of what produces the greatest loss of value in what circumstances. For example, do businesses lose more value from unscheduled absences, presenteeism, accidents, or turnover? Although some studies indicate that the value of presenteeism is several times the value of absences, we do not have definitive rankings or a clear understanding of what factors determine the rankings, how generalizable the rankings are, or which factors are most important to measure.

Lastly, expressions of business outcomes will necessarily become more industry-relevant and comparative. Rather than reporting an eight percent decrease in productivity, companies will translate eight percent

into equivalent outcomes in their setting, such as services delivered or sales calls completed. Similarly, an eight percent loss attributed to health problems will be compared to other business circumstances. For example, such information could be reported side by side with losses due to equipment failure or supplier delays.

Development of a time dimension: longitudinal measurement

Of all aspects of health and productivity measurement, timeframe has been most seriously overlooked and possibly flawed. Given the nature of both topics (health and work performance) it is virtually impossible to believe that any single point in time will be

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“It is incorrect to generalize health and productivity outcomes—no matter how convincing—to all work settings, because they will not apply to all settings. The message is that other things being equal in the work setting, better health management will likely be associated with better work outcomes.”

representative of typical. Differences in productivity between two points in time could be due to many influences—not just to changes in health status. Because the field is most interested in demonstrating that interventions that improve health outcomes over time also improve business outcomes, it is imperative that we understand how both vary naturally.

To illustrate, think of two scenarios to measure whether influenza immunization will A) reduce respiratory infections and B) improve performance of sales people. In one store immunizations are given to half the employees in early November, and outcomes are measured in November and December. In another store, immunizations are given to half of employees in early December and outcomes are measured in December and January. Because they forgot about Christmas sales season, researchers find that the effects were much more noticeable in group one because the immunizations took effect during the time of greatest sales. During the January slow-down, absences were much less noticeable.

While this example is an obvious one, many other factors influence the possibility of finding different results over time unrelated to changes in health status. New employees have a learning curve that changes their baseline productivity, diseases have different seasons (allergies, common cold) in different regions, industries have periods of high and low demand, summer holidays affect business cycles as well as absenteeism rates, and job performance has natural variation over time.

Because of these factors, it will become less and less acceptable to rely on simple cross sectional or pre versus post studies without some parallel investigation to understand the longitudinal factors involved. Another reason to think longitudinally in this area is the nature of chronic health conditions. Complications from chronic problems evolve over time. Successful management of chronic conditions depends on adherence and compliance over time. Furthermore, functional limitations usually appear gradually over time. Therefore, researchers will gain greater insights with a longitudinal perspective.

Context within Human Capital Management

The notion of human capital extends far beyond health. Published definitions (see Gardner and Fiske, UK government white paper) focus on three primary elements. First are the skills of the population—the capabilities and experience the person brings to the work. Second is the motivation, personal initiative a person brings to the job. Third is a person’s health and vitality. It is critical that statements regarding the impact of health on productivity keep other key elements in mind.

It is incorrect to generalize health and productivity outcomes—no matter how convincing—to all work settings, because they will not apply to all settings. The message is that *other things being equal in the work setting*, better health management will likely be associated with better work outcomes.

Let’s examine some obvious human capital management issues that could make health improvement less valuable to business:

- ***A toxic work environment that causes very high turnover***
- ***Compensation practices that do not reward high performers***
- ***A benefits package that makes it more beneficial for an employee to be absent than present***
- ***A workforce consisting of day laborers with no benefits***

It is not likely that a new allergy medicine can improve performance on a day that a company announces an imminent downsizing. Even if my HBA1c improves, if I hate my job and feel unappreciated, my performance may not change. If my surgeon uses a less invasive technique, but I am still allowed to have as many weeks to recover at 100% salary replacement, I may not be motivated to return. If I quit my job two weeks after quitting smoking, my employer may not notice any increase in productivity.

These examples illustrate how health—alone—will not overcome significant problems in the way people are managed, motivated, and compensated. Consequently, health-related solutions should be considered in the context of a broader human capital strategy. Measurement strategies will continue to evolve toward integrated data management across business divisions. As such, employers will be able to diagnose broader human capital management issues, including those related to workforce health. In the meantime, we should make every effort to keep the bigger context in mind.

Looking Ahead

We are already seeing a shift from the oversimplified focus on health care costs to a comprehensive understanding of human capital value. As this shift accelerates, human resource managers will necessarily become more aware of what employees are worth to a company, rather than how much they cost. The future role of health improvement programs in the developing field of human capital management will depend on how credibly and convincingly researchers can express the connection between health and productivity.★



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Health And Work Performance:

Does It Measure Up?

For years now, we in health promotion have been trying to make the case that health promotion programs have an impact on organizational performance. And, for the most part, it's been an uphill battle. There exists a logical connection between the health of an employee and his or her productivity. It's more than obvious that an employee who's out sick isn't doing a whole lot for the organization. And conversely, it makes sense that a healthy employee will be better able to keep up with the increasing and changing demands of today's workplace. But the question remains, how can we measure the productivity of today's workforce?

In the traditional workplaces of the late 19th and early 20th centuries, measuring productivity was a relatively easy task. One could physically count the number of Ford Model Ts coming off the production line, or the number of bushels of wheat yielded in a given season. But over the course of the last hundred years, our economy has evolved from one based on industry and agriculture to one based on information and knowledge. Measuring productivity in this kind of economy is challenging. How can we effectively measure productivity in the age of the knowledge worker?

That's the central and driving question behind this edition of *Absolute Advantage*. And to help us answer this question, we've enlisted the experts in health and productivity management and measurement from the Institute for Health and Productivity Management and the Academy for Health and Productivity Measurement who have produced this compelling issue of *Absolute Advantage*, establishing a measurable connection between health and employee productivity. I believe the questions addressed, and the issues explored within the pages of this edition will play a vital role in the success of health promotion as a business strategy for working well in the new millennium.

David Hunnicutt, PhD
President

PS. To order additional copies of this issue of *Absolute Advantage*, contact The Wellness Councils of America at (402) 827-3590 or go to our website at www.welcoa.org.

ABSOLUTE ADVANTAGE UP NEXT...

Women's Health In The Workplace

Historically, women's health in the workplace has received very little attention. But recently, more organizations have begun to pay attention to the health needs of this very important population. In the next issue of *Absolute Advantage*, Fern Carness, MPH, RN, President of Carness Health Management and leader of a grass-roots effort to make women's health a priority in the workplace, will lead us through some of the issues employers should be aware of when it comes to women's health.

In particular, we'll examine the current state of women's health, explore disparities and why they exist, and pay particular attention to how issues like heart disease, cancer, and domestic violence are affecting women today.

Apryl Clark, MHSA

Program Director for the Jacobs Institute of Women's Health, Apryl Clark, presents the current state of women's health in 2003. Learn how women's health is currently being addressed, and what we need to pay attention to in moving forward.



Sara Gevers, MPH

Sara Gevers, MPH of the Society for Women's Health Research will help us understand the disparities in women's health and how worksites can implement programs focusing on the unique needs of women.



Women and Heart Disease

You may be surprised by the number of women battling heart disease—for year's it's been considered to be a man's disease. Find out just how prevalent heart disease is among women, and why we should be more concerned about it.



**DON'T MISS THE NEXT ISSUE
OF ABSOLUTE ADVANTAGE**