

EDITORIAL

Establishing a Research Agenda in Health and Productivity

The pace and pressure of America's workplace is at an all-time high. Mergers, downsizings, technology explosions, market swings, demographic shifts, and information overload add up to a complex workplace with a host of new issues for both employers and the employees. The quality of the work environment has become increasingly important and is a central factor in the lives of most Americans. In an era of downsizing and corporate instability, there is increased stress and pressures on employees resulting in workplace injury and illness and affecting overall employee productivity. Many American companies are striving to provide safer and healthier workplaces, which can translate to increased productivity, more job satisfaction, and stronger bottom-line results. Additionally, as medical costs continue to rise, employers are evaluating how the medical care they provide their employees affects the overall health and productivity of the workplace. Employers are looking at not only workplace illness and injury, but are attempting to quantify how the overall "health" of an employee affects their ability to work productively. Renewed attention to the health, safety and wellness needs of employees is essential if our economy and productivity are to continue growing and thriving.

As the nation's attention focuses increasingly on workplace conditions and their effect on employee health, satisfaction, and productivity, it has become clear that a defined research agenda that will provide measurable results and identified strategies for addressing absenteeism, presenteeism and other work-

place health issues is needed. To that end, the Occupational and Environmental Health Foundation (OEHF)* established research as one of its primary goals. To achieve this goal, it became necessary for the OEHF to articulate the research it would fund. In its initial years, the OEHF has determined that funding research on health and productivity was paramount to making an impact on today's workplace. The OEHF further determined that it would fund research not merely to advance the body of knowledge in health and productivity, but research that would provide results with practical applications in the workplace.

In setting the research agenda in health and productivity, the OEHF convened a Research Committee to identify the key parameters of needed research. The Research Committee conducted an extensive review of the literature, including scientific studies, ongoing workplace programs and scientific tools for assessing the impact of health in the workplace. As a result of this activity, the Research Committee developed a complex matrix prioritizing the areas for research and identifying topics where adequate research already existed. The Committee's intent was to identify those topics that were most important for the business environment and that lacked scientific studies or tools for application in the workplace.

*The OEHF was established in 2002 by the American College of Occupational and Environmental Medicine as a charitable foundation dedicated to advancing research and education in occupational and environmental health.

Using the matrix as a baseline for determination of priorities, the Research Committee developed a list of key questions which should be addressed through health and productivity research. The questions were:

1. How can the impact of health on human capital be monetized and its impact on corporate financials be demonstrated? What are the metrics that can be tracked longitudinally to define, quantify and benchmark the health-related human capital of the workforce?
2. How can we demonstrate that health-related productivity and health-related human capital can improve with specific disease management or health enhancement interventions that positively impact the health of the workforce?
3. How can we develop a practical tool-like roadmap for ACOEM members and employers to implement and measure the outcomes of health and productivity initiatives?

To verify that these are the key areas for further research in the health and productivity arena, the OEHF Research Committee convened a Focus Group of national experts (see Table 1) on health and productivity from the business and research communities, academia, and occupational physicians. The goal of this group was to validate the identified questions as being the most relevant and, if funded, would provide the most practical information on health and productivity as well as advance the body of knowledge.

Through Focus Group discussions, the questions were further refined and specific elements for research within each category were clarified. Merging the initial work of the Research Committee with that of the Focus Group, the following agenda for research in health and productivity has been established by the OEHF.

Research Agenda

The proposed research agenda in health and productivity is focused in three major areas: (1) methods/measurements and data resources; (2) the impact/affect of various interventions on health and health-related productivity; and (3) tool kits or road maps to implement programs in the workplace. The following is an expansion of each of these categories identifying specific research questions to be addressed.

Methods/Measurements and Data Resources

This category of research seeks to clarify the various measurement tools available to assess the impact of health on productivity including absenteeism, presenteeism, short- or long-term disability, as well as more clearly defining the decrements and gains in health-related productivity (HRP) from disease states. A key area of research should be identification of basic metrics that can be used as national benchmarks for assessing HRP. This category of research is also directed toward developing basic metrics for quantification of the fiscal impact of health on the corporate bottom line. Specific research questions to be addressed in methods/measurements and data resources follow.

What are the metrics that can be tracked longitudinally to define, quantify and benchmark the health-related human capital of the workforce? Metrics developed should be key benchmarks across any type of organization and should capture both presenteeism and absenteeism measures.

What is the rank order of health and disease states on decrements and gains in HRP and their relation to industry, job types, and population characteristics?

How much of workforce productivity is health related as opposed to the contributions of organizational and psychosocial factors and what are the key determinants/drivers of HRP?

How can the impact of health on human capital be monetized?

What are the appropriate measures/metrics to demonstrate the impact of health-related human capital on corporate financials and how can this information be translated into C-level language for the business case?

What level of evidence is necessary for corporate decisions-makers versus what is need for peer-reviewed scientific publications?

Impact of Interventions on Health and HRP

This category of research is designed to demonstrate how HRP and human capital can improve with specific disease management or health enhancement interventions and the extent to which these programs have a positive impact on the health of the workforce. Specific research questions follow.

What is the relative ability of various interventions to impact HRP, including identification of the drivers of HRP that are modifiable and the effectiveness and efficiency of different interventions?

What is the short-term and long-term impact of interventions on HRP and total health-related costs on the value of human capital?

What are the barriers and facilitators to implementation of programs including research related to aligning patients and physicians around quality care and evidence based

medicine, and how can this be overcome or emphasized respectively?

What is the impact of benefit design on HRP and vice versa?

Tool Kit and Road Map (Multidimensional Action Plan)

The third category of research initiatives are designed to identify/develop a practical roadmap and/or tool kit for occupational health professionals, employers, and other stakeholders to implement programs and to measure the outcomes of these health-related productivity initiatives. The following points seek to take completed research and apply this to the workplace through development of programs/projects that can be readily assessable and usable by employers. Applied research should focus on the following initiatives.

Articulate effective approaches for organizations to begin programs and develop long-term strategies even if they have not considered this in the past.

What are the *Best Practices* currently available as models and how can these be developed into a practical guide for implementation of these programs in other workplaces?

Identify how ongoing health, disease, and safety initiatives can best be leveraged including how to translate research into consumable information and frame the communication.

How can the occupational health professional's role as "change agents" be enhanced

TABLE 1.
Focus Group Participants (March 3, 2004)

- Pamela Hymel, MD, MPH, Board of Trustees, Occupational & Environmental Health, Foundation
- Catherine M. Baase, MD, Global Director Health Services, Dow Chemical Company
- Ronald Loepke, MD, Medical Director, CorSolutions
- Marc L. Berger, MD, Vice President, Clinical Outcomes, Merck & Co, Inc
- Wendy Lynch, PhD, Lynch Consulting
- Wayne N. Burton, MD, Corporate Medical Director, Bank One
- John D. Meyer, MD, University of Connecticut, Occupational Medicine
- Dee W Edington, PhD, University of Michigan
- William Molmen, JD, General Counsel, Integrated Benefits Institute
- Joseph Fortuna, MD, Medical Director, Delphi
- Dennis Richling, MD, President, Midwest Business Group on Health
- Ron Goetzel, PhD, The Medstadt Group
- John Riedel, Riedel & Associates
- William W. Greaves, MD, Dept of Preventive Medicine, Medical College of Wisconsin
- Paul Stange, MPH, Office of HealthCare Partnerships, CDC
- Gregg M. Stave, MD, JD, Director, Strategic Health Planning, GlaxoSmithKline
- Debra Lerner, PhD, Health Institute
- Doris L. Konicki, MHS, Executive Director, Occupational & Environmental Health Foundation

to assure a long-term impact of change for society, communities, employers, and other key stakeholders?

Conclusion

The OEHF Research Committee has established a framework for funding of research on health and productivity by the OEHF that will have the greatest impact for change in the workplace. Through funding research in the above-noted categories, the OEHF seeks to provide employers with scientifically validated programs to enhance the health sta-

tus of employees and ultimately their productivity. The priorities for funding will be posted on the OEHF web site along with the time frame for submission of proposals. The OEHF is committed to enhancing the health status of workers through application of research in the business community.

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 DOI: 10.1097/01.jom.0000128762.53513.cc