Measuring Outcomes, Benchmarking Outcomes
Healthy Outcomes Conference
April 7, 2010

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Agenda

- Literature review: WHP in Canadian worksites
- Components of Canadian WHP programs
- WHP program evaluation

- Emerging definition of healthy workplace: what it means to different stakeholders
- Measuring healthy workplace outcomes
- Generating healthy workplace outcomes: some emerging opportunities

- Phase II: employer survey

where are we now? where are we going?
Background

- evolution of WHP understanding:

  "a marketing process which produces widespread and sustained employee participation in healthful activities"¹

- more comprehensive WHP initiatives need sophisticated management:
  - clear objectives and well defined endpoints/outcomes
  - robust evaluation of program outcomes
  - clear positioning/integration of WHP within the corporate culture

Objectives – Phase I

- Review the biomedical literature and other publicly available sources of information on the topics of health and disease management in the Canadian workplace to identify:
  - best practices
  - key clinical,
  - humanistic, and
  - economic outcomes measured in WHP evaluation
**Methods**

- most literature was retrieved from a structured PubMed search of peer-reviewed literature:
  - approximately 35 studies meeting the search criteria were published and indexed by PubMed over the last 5 years
  - other sources investigated: Canadian Association for Population Therapeutics (CAPT) meeting abstracts, Public Health Agency of Canada
The six disease categories reported to incur 70% of an organization’s benefit costs are:

- cardiovascular, musculoskeletal, respiratory, digestive, cancer, and stress
- these conditions are preventable or modifiable through behavioural changes

In our survey of the published, peer-reviewed literature reporting on Canadian WHP programs, the areas targeted related primarily to:

- cardiovascular health
- general health
- musculoskeletal disorders

Disease management

Key factors that contribute to successful WHP initiatives are:

- targeting several health issues
  - integration of occupational health and safety with WHP
    - enhanced effectiveness
    - employee receptivity

- attaining high participation
  - time and access on-site services
  - incentives

- integrating WHP into the organization’s culture and operations
Increasing focus among employers on employee health and well-being

Much of the past focus of WHP programs has been on education to modify personal health practices;
- studies reporting that—to be truly effective—a WHP program must consider appropriate organizational and policy changes

As many as 91% of Canadian organizations surveyed (N=634) by Buffet and Company\(^2\) in 2009 offered *some type* of wellness initiative – this is an increase from 44% in 1997
- many not designed to generate outcomes (e.g. flu shots)

2010 Conference Board of Canada Survey (N=255):\(^3\)
- 64% of survey respondents agreed that their benefit programs focused on health promotion and disease management, but...
- only 26% of respondents reported that their organization has fully developed a comprehensive wellness strategy

Components of WHP programs offered in Canada

- The most commonly offered elements of WHP initiatives among Canadian employers include:
  - employee assistance programs: 94-97%
  - CPR/first aid training: 84%
  - flu shots/immunizations: 78-83%

- The least commonly offered components:
  - on-site medical care: 19-21%
  - 24 hour nurse line: 22%
  - fitness counseling: 17-22%

- There is variability in the types of components offered in different regions of Canada
Program evaluation I

- Collection of program result data is not consistent
- The literature describes a number of reasons for the lack of robust data collection in the area of employee health:
  - many managers simply accept that healthier employees are more productive
  - employee health not consistently managed or monitored by health professionals
  - human resources professionals may not receive training necessary to interpret and manage employee health and wellness
    - resources/tools available

Data on employee health/well-being is typically gathered using a macro perspective which is difficult to reconcile with the more granular employee engagement/productivity data
Program evaluation II

- Program evaluation is a key component of long-term success; however, detailed measures of WHP program impact on health risks, employee productivity and costs are often not collected.

- **Tune Up Your Heart** – *designed with a focus on measurement and evaluation of health outcomes*
  - risk assessment; tailor intervention to risk strata
  - measurements of systolic and diastolic blood pressure, lipid levels & BMI
  - smoking and diabetes status were determined
  - *pre/post analysis* of statistically significant changes in components of risk
  - historical data: annual per capita costs for life insurance, absenteeism, STD, LTD and prescription drugs

- **Outcomes:**
  - components of risk
  - risk status
  - economic outcomes

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Evaluation metrics

- Health & Well-being
  - Primary health and well-being outcome measures used in studies identified in the literature search:
    - body mass index
      - short term disability
    - blood pressure
    - cholesterol and triglyceride levels
    - self-reported stress level
    - smoking cessation rate

- Other metrics?
Evaluation metrics

- Economic
  - Primary economic/productivity outcome measures used in identified studies:
    - absenteeism
    - WCB costs
    - short-term disability claims
    - annual grievances

- Evaluation of WHP success or failure not based on any *single* metric
Defining a Healthy Workplace

- Safe & Healthy Work Environment (Process AND Culture)
- Personal Health Lifestyle Practices (Awareness AND Management)
- Supportive Organizational / Work Culture (Values, Strategy AND Action)

Healthy, Productive, Successful Workplaces
## Healthy Workplace – Who Cares?

<table>
<thead>
<tr>
<th>The Stakeholder</th>
<th>Outcomes They Care About</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>↑ Engagement, ↓ Health costs</td>
</tr>
<tr>
<td>Finance</td>
<td>↑ Positive ROI, ↑ Profitability</td>
</tr>
<tr>
<td>Occupational Health</td>
<td>↑ Employee health, ↓ Absenteeism</td>
</tr>
<tr>
<td>Operations</td>
<td>↑ Productivity &amp; Performance</td>
</tr>
<tr>
<td>Sales/Marketing/Customer Service</td>
<td>↑ Sales, Customer satisfaction / loyalty</td>
</tr>
<tr>
<td>Executive</td>
<td>↑ Attraction/retention, Profitability, CSR (enhanced reputation)</td>
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<tr>
<td>Labour</td>
<td>↑ Member satisfaction, health &amp; well-being</td>
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<tr>
<td>Each employee</td>
<td>↑ Health/well-being, ↓ Stress</td>
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<tr>
<td>Government</td>
<td>↑ Population health, Labour productivity, healthcare cost trend</td>
</tr>
<tr>
<td>Community</td>
<td>↑ Contribution to community benefit; improved community well-being</td>
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Healthy Workplace Outcomes Measurement - Guiding Principles

1. Understand your organization’s key issues & cost drivers that impact employee health/well-being
   □ Determine key benchmark measures & establish baseline

2. Include qualitative measures (e.g. how employees say they manage their health) as well as quantitative

3. Consider both lagging and leading indicators

4. Determine desired objectives/outcomes; establish linkages between outcomes where possible at outset & factor into evaluation methodology

5. Evaluate at identified milestones on an ongoing basis

6. Standardize and align data requirements across all relevant vendors where possible

7. Compare where possible to relevant norms – Canadian, industry specific, etc.

8. Link to external best practice standards such as BNQ¹/GP2S, NQI, etc.

BNQ¹: Bureau de Normalisation du Québec: BNQ 9700-800 norm: "Healthy Enterprise" Prevention, Promotion and Organizational Practices Contributing to Health in the Workplace
Outcomes Measurement - Lagging Indicators of Health

The “economic burden” of illness and injury – defined costs spent on events that have already occurred

- Health & drug claims
- Absenteeism
- Short/Long Term Disability
- EAP utilization
- Accidents
- Turnover
- Productivity
- Profitability
Leading indicators of health are predictive of health issues and therefore predictive of health claims and other issues to come.

- Physical Activity
- Obesity
- Tobacco Use
- Substance Abuse
- Stress/Resilience
- Environmental Quality
- Access to Health Care
- Engagement
- Health management attitudes / habits
- Presenteeism
- Customer satisfaction/loyalty
Population Health Trends

- **Diabetes**: Economic burden of Diabetes is currently $12.2bln (2X 2000 level) – projected to rise to $17bln by 2020 – *Canadian Diabetes Association 2010*

- **Cancer**: Costs are doubling every 2-3 years. The model of cancer care is that of adding-on to existing treatments. Rarely does a new therapy substitute of an older one. In ON, cancer drugs cost $22.9mln; $79.1mln in 2006 – *Report Card on Cancer, 2007*

- **Obesity**: Employees with BMI>40 vs. recommended weight:
  - Lost workdays per 100 FTE’s - 183 vs 14
  - Medical claims costs per 100 FTE’s - $51,091 vs $7503
  - *Obesity and Workers Compensation; Arch Intern Med; Apr. 2007*

*How many of you measure the impact of diabetes, cancer and obesity on your organization?*
Linking Workplace Health Outcomes

- **Well-being-Absenteeism link**: Actual work time lost for personal reasons increased from 7.4 days per worker in 1997 to 9.7 days in 2006 – *Statistics Canada 2007*

- **Engagement-Absenteeism link (1)**: For every 100 workers, 47 disability days reported for “Very satisfied” workers vs. 129 disability days for “Not at all satisfied” workers – *Unhappy on the Job, Health Reports 2006*

- **Engagement-Absenteeism link (2)**: High-engagement organizations: 6.38 absenteeism days/year per employee; lower engagement organizations: 12.89 days - *Best Employers in Canada, Hewitt 2009*

- **Wellness- Absenteeism link**: Dow Chemical - Of those who participated in moderate or intense weight management intervention, the average days of lost work days due to illness decreased from 3.9 days in 2006 to 3.4 days in 2007 - *Emory University Rollins School of Public Health, 2009*
(More) Linking Workplace Health Outcomes

- **Engagement-Well-being link**: Sr. mgmt. interest in employee well-being is a key driver of engagement; however, less than 10% of employees agree that senior leaders treat employees as vital corporate assets – *Global Workforce Study, Towers Perrin, 2008*

- **Engagement- CSR link**: 53% of employees would take a pay cut to work for an employer with a reputation for caring about employees and the community – *Kelly Services survey (7,000 employees), 2009*

- **Wellness-Engagement link**: 45% of Americans in small-medium sized companies would stay at their jobs longer because of employer wellness programs; 40% were encouraged to work harder and perform better; 26% missed fewer days of work by participating in wellness - *The Principal Financial Group, Well-Being Index, 2009*
Linking drug and disability data - an example of a broader outcomes approach

- In a 3-year study of employees with rheumatoid arthritis*, the researchers found that:
  - Higher employee out-of-pocket payments may lead to lower medication adherence
    - As members’ out-of-pocket costs increased by $20 above the baseline, there was a 35% decrease in the percent of the population filling at least one prescription
  - People who adhered to their medication had fewer incidences and shorter durations of short-term disability claims
    - For members who did not fill a prescription, STD incidence rate was 36%, compared to 23% for members who filled at least one prescription
    - Members who did not fill a prescription averaged 5 days longer STD duration than members who did fill a prescription


Implications for organizations: plan design and pricing decisions must consider the impact on the full spectrum of programs, taking into account integrated data and metrics; in the above example, the benefits strategy would logically include promoting medication adherence
GENERATING OUTCOMES
“Preventable illness makes up approximately 70% of the burden of illness and its associated costs. Well executed health promotion programs can show savings of up to 20% in the first year.”

- Dr. James Fries, Beyond Health Promotion: Reducing the Need and Demand for Medical Care, 1998
Impact of wellness interventions - Compression of Morbidity Theory

Typical

Birth  | Onset of chronic illness associated with aging - 55 years  | Approximate life expectancy 80 years

Wellness Intervention

Birth  | Delayed onset of chronic disease - 65 years  | Approximate life expectancy 80 years

Disease free years

Source: Dr. James Fries, MD.
Workplace Health & Well-Being – an Outcomes Framework

Health Metrics
- Absenteeism
- Disability
- Healthcare cost

Rewards & Performance

Well-being

Physical Health
- Health
- Energy

Psychological Health
- Stress
- Achievement
- Control

Social Health
- Trust
- Fairness
- Connectedness

Manager Effectiveness

Positive Working Relationships

Physical Work Environment

Business Metrics
- Productivity
- Customer satisfaction
- Financial performance

Health Metrics

Well-being

Personal Growth & Aspiration

Health Metrics

Business Metrics

Health Metrics

Business Metrics
Generating Outcomes – Emerging Opportunities

- Multi-stakeholder collaboration – all workplace health stakeholders
- Employer coalitions
- Workplace health common standards & model – e.g. ON Healthy Workplace Coalition
- Certification – GP2S, NQI, etc.
- Measure societal impact of workplace health initiatives (e.g. utilization of public health resources)
  - Can help to provide the business case for government to consider incentives for workplace health improvement
Conclusion

- **The good news**: Considerably greater business emphasis on the importance of employee health and well-being

- **The challenge/opportunity**: Health/well-being to become “way of doing business”; heightened emphasis on evaluation and generating outcomes; health indicators will increasingly be linked to key organizational drivers

- **Caution**: Health/well-being resources, programs & initiatives that do not demonstrably enhance key organizational drivers will become superfluous
Several reports have been published with respect to WHP programs amongst Canadian employers

Phase 1 reviewed existing WHP literature

Phase 2 – Employer survey to better understand information on WHP initiatives that are emerging or otherwise not found in literature review

This survey and case studies will add to the current body of knowledge by assessing:

- What health and wellness metrics are used in program evaluation?
- How are health metrics related to specific employee productivity metrics?
- Are WHP programs being improved/modified in response to employee feedback?
- What is the ROI of given WHP programs?
- Do incentives play an important role in employee participation? Are incentives evolving beyond awareness towards “taking action”
Survey – a call to action

- Canadian employers will be asked to participate in the survey starting in April, 2010
- Learning opportunity: participants will have access to survey results
- The survey as well as background and contact information is available at: 
  http://www.biomedcom.org/en/whpstudy/

- If you have any questions concerning the WHP survey or any aspect of this presentation, please contact Peter or Allan at:
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