What is Productivity?

- Productivity – amount of output per unit of input

How can we measure this?
- # hours worked to produce a good
- Revenue generated by an employee or salary
- Being present at work
Alternate Ways to Consider Productivity

- Cannot remove the human aspect from work and productivity
- Need a mix of quantitative and qualitative measures to accurately measure
- Begin with what you have and add self-report data to measure lost work time

Lost Work Time = Absenteeism + Presenteeism

Importance of Indirect Costs

- “You cannot manage what you can’t measure” (Dr. Ron Goetzel)
- Mortality: employee replacement, effect on family & friends, value of lost future income
- Morbidity: lost wages (paid sick-time, unpaid sick-time, payroll & benefit costs for absent employee), loss of vacation & personal leave, lost leisure time, disability, idle employer assets
- Reduced productivity: return-to-work productivity, health capital investment, on-the-job training, new-hiring administration & training, teamwork & communication, institutional effect among coworkers, effect on family members
Co-Morbid Chronic Health Conditions and Lost Time

Top 10 medical conditions by annual medical, drug, and productivity over cost per 1000 FTEs for all companies

Introduction to Health and Productivity Management (HPM)

“The integrated management of health & injury risks, chronic illness & disability to reduce employees total health-related costs including medical expenditures, unnecessary absence from work & lost performance from work”

(Institute for Health and Productivity Management)

- Health of a workforce is linked to productivity & health of the economy
- Human capital should be invested, it is not a cost to be managed
- Human capital is 80% of the entire world’s capital

Conceptual Model of H&P Management

Summex, L., AJHP, 2005, vol. 19(4), 1-8
Desired Outcomes

- Primary Outcomes
  - Reduce medical & pharmacy costs
  - Reduce health-related lost productivity
  - Improve employee satisfaction
  - Reduce sick days and disability absence
  - Reduce presenteeism

- Secondary Outcomes
  - Reduce health-related lost productivity
  - Improve employee satisfaction
  - Reduce medical or pharmacy costs
  - Reduce sick days or disability absence
  - Reduce presenteeism

IBI Survey of 450 employers (2010)

Introduction to Standardized Measures

- Need to assess your program and match outcomes with the needs of the employer
- One size does not fit all for EAPs and their customers

“the voice of the purchaser is more important than ever. It is essential that purchasers, at the very minimum, understand the root causes of problems involving health and productivity”

(Pompe, 2011, JWBH, p. 15)
Things to Consider Before Getting Started…

- **Training**
  - Need buy-in from counselors and employer

- **Timing**
  - Need a pre- and post-test score to measure change
  - Data needs to be collected consistently and accurately

- **Procedures**
  - How will you embed the questions into the EAP intake, assessment, and/or follow-up?

Possible Measures

*(not an exhaustive list)*

- Blueprint for Health
- Endicott Work and Productivity Scale
- Gallop Employee Engagement
- Health and Labour Questionnaire
- Health and Productivity Questionnaire
- Stanford Presenteeism Scale
- Work Impairment Scale
- Work Limitations Scale
- Workplace Outcomes Suite
- Work Productivity and Activity Impairment Questionnaire
- Worker Productivity Index
- Work Productivity Short Index
Application to EAPs

Rationale for EAPs to Be Involved

1. Effectiveness in EAP should be defined as improving health and productivity
2. Provide documentation regarding productivity payback specific to your program
3. Use empirical data to differentiate your program
4. The value proposition is moving away from just counting utilization to measuring results
5. Support for ‘generic’ EAP is at risk: purchasers prefer value to be quantified and data to be credible
6. We are not paid in proportion to our effectiveness and this won’t change without embracing outcomes.
What Questions Can Be Answered?

- What is the relationship between your EAP intervention and work effectiveness?
- How strong is the association between your EAP and reduced absenteeism / presenteeism?
- How can you reliably monetize absenteeism to produce a cost benefit?
- How can your EAP provide your customer with a credible and quantifiable report?

Practical Barriers to Implementation

- Uncertainty about a valid, short, affordable measure
- Limited staff resources or data collection capacity... costs are not ZERO
- Follow-up (post-tests) are DIFFICULT to obtain
- Staff resistance to implementation (actively or passively)
- Access to scientific data analysis expertise
- Not sure we want to know the results
- Not sure how to produce meaningful reports
Two Key Methodological Barriers

- Sample size is too SMALL to detect change with statistical significance
- Response rate is too LOW to generalize findings to larger population of EAP users or the workplace

Overcoming Barriers

- Decide if your measure should be administered with all clients or a representative sample
- Staff who collect data need to be invested and understand the value of outcomes
- Make data collection a part of your normal operational flow – use technology when feasible
- SELL the post-test during the pre-test to get good locator data
- In needed, get help with follow-up, data analysis and report writing
Health and Productivity Questionnaire

Introduction to the Health and Productivity Questionnaire

- Developed by Dr. Ron Kessler at Harvard Medical School with the World Health Organization
- Validation studies in 1997-1998
- Implemented in 23 countries
- Over 500,000 completed worldwide
HPQ-Select

“Health status GPS for your company”
(Integrated Benefits Institute)
Validated self-report tool for health and work
Focus: absence, presenteeism, and lost productivity from chronic health conditions
Currently administered by IBI
Shorter, online, improved analysis and business-friendly

HPQ-Select (continued)

Full report includes
- Prevalence, treatment status, lost time from absence and presenteeism, and lost productivity due to chronic conditions
- Report prevalence for acute conditions
- Provides data for the business case for investing in employee health
- Provides a baseline to measure changes over time
II. The absenteeism and presenteeism questions

B3. About how many hours altogether did you work in the past 7 days? (If more than 97, enter 97.)
   Number of hours (00-97)

B4. How many hours does your employer expect you to work in a typical 7-day week? (If it varies, estimate the average. If more than 97, enter 97.)
   Number of hours (00-97)

B5. Now please think of your work experiences over the past 4 weeks (28 days). In the spaces provided below, write the number of days you spent in each of the following work situations.

In the past 4 weeks (28 days), how many days did you...

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Number of days (00-28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B5a. ...miss an entire work day because of problems with your physical or mental health? (Please include only days missed for your own health, not someone else’s health.)</td>
<td>□□□</td>
</tr>
<tr>
<td>B5b. ...miss an entire work day for any other reason (including vacation)?</td>
<td>□□□</td>
</tr>
<tr>
<td>B5c. ...miss part of a work day because of problems with your physical or mental health? (Please include only days missed for your own health, not someone else’s health.)</td>
<td>□□□</td>
</tr>
<tr>
<td>B5d. ...miss part of a work day for any other reason (including vacation)?</td>
<td>□□□</td>
</tr>
<tr>
<td>B5e. ...come in early, go home late, or work on your day off?</td>
<td>□□□</td>
</tr>
</tbody>
</table>
B6. About how many hours altogether did you work in the past 4 weeks (28 days)? (See examples below.)

☐ ☐ ☐ Number of hours in the past 4 weeks (28 days)

Examples for Calculating Hours Worked in the Past 4 Weeks

40 hours per week for 4 weeks = 160 hours
35 hours per week for 4 weeks = 140 hours
40 hours per week for 4 weeks with 2 8-hour days missed = 144 hours
40 hours per week for 4 weeks with 3 4-hour partial days missed = 148 hours
35 hours per week for 4 weeks with 2 8-hour days missed and 3 4-hour partial days missed = 112 hours

B9. On a scale from 0 to 10 where 0 is the worst job performance anyone could have at your job and 10 is the performance of a top worker, how would you rate the usual performance of most workers in a job similar to yours?

<table>
<thead>
<tr>
<th>Worst Performance</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>Top Performance</th>
</tr>
</thead>
</table>

B10. Using the same 0-to-10 scale, how would you rate your usual job performance over the past year or so?

<table>
<thead>
<tr>
<th>Worst Performance</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>Top Performance</th>
</tr>
</thead>
</table>

B11. Using the same 0-to-10 scale, how would you rate your overall job performance on the days you worked during the past 4 weeks (28 days)?

<table>
<thead>
<tr>
<th>Worst Performance</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>Top Performance</th>
</tr>
</thead>
</table>
Scoring Absenteeism

- 2 ways to measure and score absenteeism
  1. Respondent estimates how many hours worked over 4-week period
     - Absolute absenteeism = 4xB4 – B6
     - Relative absenteeism = (4xB4 – B6) / (4xB4)
     - Relative hours of work = B6/(4xB4)
  2. Respondent estimates how many hours worked in past 7 days
     - Absolute absenteeism = 4xB4 – 4xB3
     - Relative absenteeism = (4xB4 – 4xB3) / 4xB4
     - Relative hours of work = B3/B4

Scoring Presenteeism

  - Absolute presenteeism = 10xB11
  - Relative presenteeism = B11/B9 (restricted to range of 0.25 to 2.0)

Note: B10 is not used in calculations; it is used to help respondent focus response to B11 on past 4 weeks by asking about earlier times (Bounded recall question)
Scoring Presenteeism (continued)

- Combine RELATIVE absenteeism and presenteeism into one score:
  - First, create measure of relative work hours = 1 minus relative absenteeism

Limitations of not using full HPQ measure
- Lose additional questions that allow for imputation and consistency checks
- Lost memory priming question series
- Cannot add or compare data to larger master dataset

H&P Snapshot

- Estimation of typical prevalence, treatment, and lost work time associated with chronic health conditions for similar workplace
- Predicts
  - Health conditions (treated and untreated)
  - Lost work time resulting from absence and presenteeism
  - Bottom-line impact of lost productivity costs in financial terms
- Requires basic workforce demographic and financial information
Workplace Outcome Suite

Introduction to the Workplace Outcome Suite

- Workplace focused (not a clinical measure)
- Based on a formative measurement model
- Validated with demonstrated psychometrics
- Short, but precise (sensitive to change)
- FREE with signed license agreement
- You may use one, some or all scales
Workplace Outcome Suite Scales

- 5 scales, 5 items per scale (new scales are being created)
- Absenteeism: # hours away from work in past 30 days... can also use this to monetize
- Presenteeism: proxy for productivity; extent to which problems inhibit work
- Engagement: measure of ‘over’ involvement with the job
- Life Satisfaction: gauges importance of job to ‘life’
- Workplace Distress: looks at distress at work across problems

Absenteeism

<table>
<thead>
<tr>
<th>Indicate past 30 days the total hours your personal problem(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caused you to miss work altogether.</td>
</tr>
<tr>
<td>Made you late for work.</td>
</tr>
<tr>
<td>Caused you to take off early.</td>
</tr>
<tr>
<td>Pulled you away from your normal work location while still at work.</td>
</tr>
<tr>
<td>Required you to be on the phone, e-mail, or internet while at work.</td>
</tr>
</tbody>
</table>
Presenteeism

Indicate past 30 days the degree to which you agree with:

<table>
<thead>
<tr>
<th>Presenteeism Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had a hard time doing my work because of my personal problems.</td>
</tr>
<tr>
<td>My personal problems kept me from concentrating on my work.</td>
</tr>
<tr>
<td>Because of my personal problems I was not able to enjoy my work.</td>
</tr>
<tr>
<td>My personal problems made me worry about completing my tasks.</td>
</tr>
<tr>
<td>I could not do my job well because of my personal problems.</td>
</tr>
</tbody>
</table>

Data From Two Fortune 100 Companies

- **N = 197**
- Mainly affiliate network model with <10% of onsite internal model
- Statistically significant results
- For Absenteeism, a nonparametric Wilcoxon signed rank test was used (p=.009)
- Presenteeism was also statistically significant (p=.000)
Figure 1: Comparison of Pretest and Posttest Means

Absenteeism

Hours of Missed Work

Presenteeism score

Figure 1: Comparison of Pretest and Posttest means on the five scales of the WOS

Presenteeism

Means on the five scales of the WOS.
Future of Health and Productivity Measurement for EAPs

- What is the role, or potential of EAP?
  - Functioning independently or
  - Larger organizational initiative
- HPM – program or concept?
- Linking measures to intervention
  - Who to focus on?
- How to share data:
  - with the organization
  - with the broader field

For More Information....

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Thank you!