When medicine advances, is productivity left behind?

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WHAT CAN HAPPEN IN 20 YEARS

1993   5.6 BILLION WORLD-WIDE   7.06% MORTGAGE RATE

2014   7.1 BILLION WORLD-WIDE   4.46% MORTGAGE RATE
### 20 YEARS OF PROGRESS?

| OR | New treatments | Earlier detection | Better medicines | Less invasive surgeries |

### 20 YEARS OF CHANGE!

| | Older workforce | Changing perceptions | Twice as many obese* | Increasing service sector |

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*Center for Disease Control, Obesity Fact Sheet"
DURATIONS DOWN, BUT MORE INJURY/DISEASE DRIVE HIGHER ABSENCE

Key 20 year trends: Top major diagnostic categories

Growing threats to absence.

When medical advancements and health trends collide, is it employee productivity that gets stuck in the middle?
WHERE SHOULD WE FOCUS OUR EFFORTS?

<table>
<thead>
<tr>
<th>1993 – Top 8 drive 32% of absence</th>
<th>2013 – Top 8 drive 37% of absence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Musculoskeletal-Joint-Other</td>
<td>1 Musculoskeletal-Joint-Other</td>
</tr>
<tr>
<td>8.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2 Back/Neck Strain</td>
<td>2 Tendonitis, Bursitis</td>
</tr>
<tr>
<td>4.3%</td>
<td>5.8%</td>
</tr>
<tr>
<td>3 Depression (acute, chronic, major)</td>
<td>3 Arthritis (all types)</td>
</tr>
<tr>
<td>4.2%</td>
<td>4.6%</td>
</tr>
<tr>
<td>4 Female reproductive system</td>
<td>4 Herniated Disc</td>
</tr>
<tr>
<td>3.5%</td>
<td>4.4%</td>
</tr>
<tr>
<td>5 ASHD/CAD/Angina Pectoris</td>
<td>5 Depression (acute, chronic, major)</td>
</tr>
<tr>
<td>3.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>6 Arthritis (all types)</td>
<td>6 Female reproductive</td>
</tr>
<tr>
<td>3.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>7 Reproductive Cancers (breast, etc.)</td>
<td>7 Reproductive Cancers (breast, etc.)</td>
</tr>
<tr>
<td>3.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>8 Herniated Disc</td>
<td>8 Back/Neck Strain</td>
</tr>
<tr>
<td>2.6%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

**Notables:**

| 91 Skin Cancer                      | 27 Skin Cancer                      |
| 0.2%                                | 0.90%                              |
| 173 Obesity                         | 40 Obesity                          |
| 0.04%                               | 0.70%                              |

- **Still a top issue**
- **Rising concerns**
- **Less concern**
- **Skyrocketing increases**

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OBESITY: 1993 – TODAY

Population impact:
• Diagnosis doubled

Medical effects:
• New surgery techniques introduced in 1996
• Criteria lowered in 2009
• Positive health impact

Productivity impact: (not so positive)
• 3300% increase in disability claims
• 26% file a later claim
• 40.3% of total costs driven by presenteeism

Disability claim volume increased by 3300%

Modeled obesity costs

- $6,219.00 LTD
- $7,255.00 STD
- $365,859.00 Presenteeism
- $389,697.00 Medical
- $137,845.00 Sick

Laparoscopic bypass introduced

% of Disability Absence

0.5%
0.4%
0.3%
0.2%
0.1%
0.0%

Population impact:
- Aging population
- Skin cancer is top cancer in 25-29
  – Tanning increases risk by 75%*

Medical effects:
- Detection/survival increase claims
- Earlier detection helps duration
- Lung cancer saw significant reduction

Productivity impact:
- More survivors = more cancer absence
- Skin cancer saw increases greater than 300% in new claims and absence
- 97% RTW

* The World Health Organization. The global burden of disease; 2009
DEPRESSION: 1993 – TODAY

Population impact:
- Impacts 6.7% of adults each year.\(^1\)
- More prevalent in women and people 45-65.\(^1\)

Medical effects:
- Anti-depressant use increased, but psychotherapy decreased.
- Advancements having a positive effect on absence.

Productivity impact:
- Disability claims, durations and overall absence are down.
- Still, Major Depressive Disorder is the leading cause of disability in the U.S. for ages 15-44.\(^1\)
- Presenteeism accounts for more aggregate productivity loss than absenteeism.

\(^1\) The Numbers Count: Mental Disorders in America.” NIMH RSS. Web. 17 Feb. 2014
Population impact:
- Neck pain affects about 10% of the general population.
- Higher prevalence among people aged 30-50 years, with a male to female ratio of 2:1. 

Medical effects:
- More surgeries.

Productivity impact:
- 45% increase in absence.
- 60% of the absence was due to surgery.
- Most significant increase among sedentary occupations.
- Durations down by 12 days.
**Obesity: Don’t be the biggest loser**
- 10% of body weight delivers the biggest benefits
- Bariatric surgery is effective in improving long-term health. But must be in it for the long haul

**Cancer: We all have a story**
- Cancer risks and risky behaviors vary by demographics
- Know your population and ‘speak their language’

**Depression: It’s there**
- Absence has decreased, prevalence hasn’t
- Scratch below the surface – it’s a very common comorbidity

**Herniated disk Surgery is the answer….sometimes**
- Identify employees at risk and educate and engage them proactively
- Support them: Flexible/work at home arrangements, modified duty, vocation support efforts.
INDIVIDUALIZING A PROGRAM – FOR EMPLOYERS AND THEIR EMPLOYEES

Absence prediction and prevention
• Using data models to predict future absence and proactively offer assistance.

Keep them at work
• Vocational support programs
• Safety programs

Don’t rely on money as your ONLY incentive
• Engage people in need
• Help them understand the impact on their livelihood

Consider productivity a health outcome
• Use absence data TOGETHER with health data to see the full impact
WHO IS CON-WAY?

• **Three business units**: Freight (LTL), Truckload and Menlo (logistics)
• Global operations in **22 countries** across **5 continents**
• **28,500 employees and 70% of them are truck drivers**
• **Non-union** status valued as competitive advantage
• Many **long tenured** employees
• Goal is to be competitive in our peer group in terms of total rewards.
• **Changing health care** from FREE to CDHP

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85% male  
72% over 40  
Paternalistic to employee empowerment
POPULATION HEALTH RISKS

Low preventative health engagement.

We have hard, physical jobs.

- BMI >25: 63%
- HDL cholesterol: 38%
- Blood pressure: 34%
- Increasing reports of chronic/back pain
FACTORS IMPACTING PRODUCTIVITY

It’s difficult to control employee productivity in the transportation industry.
Can a disability be prevented before it occurs?

How do I get my employees back to work sooner?

How can I leverage medical data to improve outcomes?

We spend $153 million per year on chronic diseases and musculoskeletal claims are #1 cost driver.* How can I keep my employees healthy and at work?

* Cigna internal data, year end September 2013
KEEPING OUR EMPLOYEES HEALTHY AND AT WORK

Managed together = better outcomes
ABSENCE PREDICTION AND PREVENTION (APP) PROGRAM

- Identified high risk employees using STD predictive model
- Randomly assigned to the intervention or control groups
- Intervention group received:
  - proactive outreach
  - clinical assessment
- Used a range of disability absence prevention strategies

Disability reduced by 15%

Cigna Study of 118,000 employees, representing 24 employers

Journal of Occupational and Environmental Medicine, Volume 54, Number 12, December 2012
PROACTIVE OUTREACH REDUCES DISABILITY

- 839 identified as at-risk
- 38% engaged in the program
- 31% of those individuals were engaged on an ongoing basis
- 3% Behavioral health
- 1% Drug therapy optimization
- 18% EAP
- 40% Pre-disability vocational services
- 57% Disease management
- 5% Lifestyle management

Cigna internal data 2010-2013 Con-way AP&P program
Engagement drives reduced absence

47% Less disability absence

56% Fewer disability claims
CIGNA’S DISABILITY AND HEALTHCARE CONNECT®

Drives reduced absence through Integrated Personal Health Team

- 23% Fewer disability claims
- 10% Less disability absence
- 67% Engagement rate

Test for statistical significance was conducted at the 95% confidence level.
# Value of an Individualized Approach to Absence Management

<table>
<thead>
<tr>
<th>Engage</th>
<th>Reduce</th>
<th>Save</th>
</tr>
</thead>
<tbody>
<tr>
<td>91.2% of members with biometrics</td>
<td>17% Reduction in overall STD absence rate in the last year</td>
<td>$391,225 Savings from Absence Prediction and Prevention interventions</td>
</tr>
<tr>
<td>115% Increase in Health Assessment completion rates</td>
<td>34% Reduction in absence due to Fractures/Sprains</td>
<td></td>
</tr>
<tr>
<td>62% Engagement in health improvement programs among DHCC population</td>
<td>18% Reduction in absence due to Musculoskeletal Conditions</td>
<td>21,021 Absence days saved</td>
</tr>
<tr>
<td></td>
<td>50% Reduction in absence due to herniated disc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% Less absence among DHCC population</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.8 Days less presenteeism per year among those with chronic pain</td>
<td></td>
</tr>
</tbody>
</table>

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Questions?
All statistics, unless otherwise stated, are based on a Cigna 2013 internal analysis of data from our Short Term Disability book of business for the years of 1993 through 2012, excluding maternity claim data.

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