Optimizing Heart Health in the Workplace: Opportunities & Challenges

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Measuring Program Quality & Workforce Health

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By 2020, improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases & stroke by 20%.
## Causes of Death: USA (2015)

<table>
<thead>
<tr>
<th>Disease Condition</th>
<th>Total Deaths (n, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Heart disease</strong></td>
<td>614,348 (31.7)</td>
</tr>
<tr>
<td><strong>2. Cancer</strong></td>
<td>591,669 (30.5)</td>
</tr>
<tr>
<td><strong>3. Chronic lower respiratory diseases</strong></td>
<td>147,101 (7.6)</td>
</tr>
<tr>
<td><strong>4. Accidents (unintentional injuries)</strong></td>
<td>136,053 (7.0)</td>
</tr>
<tr>
<td><strong>5. Stroke (cerebrovascular diseases)</strong></td>
<td>133,103 (6.9)</td>
</tr>
<tr>
<td><strong>6. Alzheimer’s disease</strong></td>
<td>93,541 (4.8)</td>
</tr>
<tr>
<td><strong>7. Diabetes</strong></td>
<td>76,488 (3.9)</td>
</tr>
<tr>
<td><strong>8. Influenza and pneumonia</strong></td>
<td>55,227 (2.8)</td>
</tr>
<tr>
<td><strong>9. Nephritis, nephrotic syndrome, and nephrosis</strong></td>
<td>48,146 (2.5)</td>
</tr>
<tr>
<td><strong>10. Suicide</strong></td>
<td>42,773 (2.2)</td>
</tr>
</tbody>
</table>

38.6% of annual deaths from heart disease & stroke
Poor Heart Health Costs Employers

Four of the 10 **most expensive health conditions** for U.S. employers are related to **heart disease** and **stroke**:

- **HIGH BLOOD PRESSURE**
- **HEART ATTACK**
- **DIABETES**
- **CHEST PAIN**

**Employees with cardiovascular disease:**
- Lost 56 hours more per year in productivity
- Cost $1,119 more per year in health insurance
- Heart failure costs all payers $8,332 a person a year

**Source:** CDC

**Source:** AHA
## 10 Most Costly Risk Factors to Employers

<table>
<thead>
<tr>
<th>Rank</th>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tobacco Use</td>
</tr>
<tr>
<td>2</td>
<td>Obesity</td>
</tr>
<tr>
<td>3</td>
<td>Hypertension</td>
</tr>
<tr>
<td>4</td>
<td>Dyslipidemia</td>
</tr>
<tr>
<td>5</td>
<td>Physical Inactivity</td>
</tr>
<tr>
<td>6</td>
<td>Poor Diet</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes</td>
</tr>
<tr>
<td>8</td>
<td>Depression</td>
</tr>
<tr>
<td>9</td>
<td>Stress</td>
</tr>
<tr>
<td>10</td>
<td>Alcohol Abuse</td>
</tr>
</tbody>
</table>

Source: Goetzel et al. – *Health Affairs (Milwood)* (2012)
A high LS7 score (≥5 ideal metrics) is associated with lower risk for:

- **Heart disease and stroke** (Lloyd-Jones et al, 2010, Ford et al., 2012)
- **Diabetes** (Joseph et al, 2016)
- **Depression** (Kronish et al, 2012)
- **Improved cognitive function** (Reis et al, 2013)
- **Incident cancer** (Rasmussen-Torvik et al, 2013)
- **Incident dementia** (Gottesman et al, 2017)
- **Healthcare costs in Medicare population** (Willis et al 2015)
- **Healthcare costs in a young, ethnically diverse working population** (Osondu et al 2017)
Few US Adults Have Good Heart Health

Source: Mozaffarian et al. Circulation. 2015;131:e29-e322
Assessing Program Quality – Version 1

Launched: 2007

Criteria: Leadership Support, Physical Activity, Nutrition & Tobacco Policies

Recognition Tiers: Gold & Platinum

Reach: > 4,000 Companies nation-wide

Health Outcomes Assessed: No
Recommendation: Update Fit-Friendly approach to also include employee heart health (Life’s Simple 7) as a measure of success
Workplace Health Achievement Index

• A voluntary online assessment that measures the comprehensiveness and quality of:

  1. A workplace’s culture of health (structures and processes) and
  2. The heart health of its workforce (Life’s Simple 7)
Conceptual Approach

- **Structure**

- **Process**

- **Performance (Outcomes)**
  - Health outcomes
  - Life’s Simple 7
  - My Life Check™

**“Workplace culture of health”**
Do I have a healthy **worksite**?

Do I have a healthy **workforce**?
PART ONE: CULTURE OF HEALTH METRICS  Complete a 55 question survey

- Leadership
- Policies & Environment
- Programs
- Communications
- Engagement
- Partnerships
- Reporting Outcomes

PART TWO: EMPLOYEE HEALTH METRICS  Use My Life Check® or submit company biometric and health risk data

- Percentage of Employees with all Life’s Simple 7 Metrics Completed
- Aggregate Employee Heart Health Score
- Relative Improvement in Average Employee Heart Health Score over Time

- Body Mass Index
- Smoking Status
- Fasting Blood Sugar
- Diet Quality
- Physical Activity Level
- Total Cholesterol
- Blood Pressure
Current Recognition Tiers

First Year

- **GOLD**: 175-217 points
- **SILVER**: 130-174 points
- **BRONZE**: 86-129 points
- **EARLY ADOPTER**: <86 points

Subsequent Years

- **GOLD**: 200-250 points
- **SILVER**: 150-199 points
- **BRONZE**: 100-149 points
- **COMPLETION**: 0-99 points

*Note: 33 points are added to subsequent years to award those that improve in their aggregate heart score from one year to the next. (250 points total instead of 217)*
Index 2016: Key Findings

• Opening an account is easy

• Approximately 2-4 hours required to submit the 55 structure and process questions and requires internal collaboration and coordination

• Few companies were currently able to submit employee health data in time

• A minority of companies that submitted employee health metrics are meeting the current 25% employee data minimum threshold

• Few companies were willing or able to submit employee-level data via the Batch Upload and API functionality
## Index Enrollment 2016-2017

<table>
<thead>
<tr>
<th>Metric</th>
<th>Definition</th>
<th>2016 Result n (%)</th>
<th>2017 Result n (%)</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participated</td>
<td>Opened new account, or updated existing account</td>
<td>667 (100)</td>
<td>992 (100)</td>
<td>+ 49</td>
</tr>
<tr>
<td>Enrolled + Did Not Start</td>
<td>Opened new account, but did not start the Index</td>
<td>326 (49)</td>
<td>80 (8)</td>
<td>- 75</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Started Index, but did not complete</td>
<td>102 (15)</td>
<td>100 (10)</td>
<td>+ 6</td>
</tr>
<tr>
<td>Completed</td>
<td>Completed “Structure-and-Process” Measures</td>
<td>239 (36)</td>
<td>812 (82)</td>
<td>+ 240</td>
</tr>
</tbody>
</table>
Recognitions: 2016-2017

Improve performance overall between 2016 and 2016
Continuous Quality Improvement Framework

![Diagram of the Continuous Quality Improvement Framework]

- **Point of Entry**
- **Data Insights Based on Health Analytics**
- **Assess Culture of Health Status**
- **Guidance Using AHA Resources**
- **Implement, Improve and Re-assess**
- **Recognize and Award Achievement**

**AHA Workplace Health Achievement Index**
life is why
es por la vida
全為生命