### **Exploring Tools to Measure Progress**

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# In God We Trust, Everyone Else Must Bring Data!



## A Case Exemplar The Ohio State University

### Fast Facts

- >Over 66,000 students
- >46,000+ faculty and staff
- >18 colleges & schools, including 7 health sciences colleges co-located on the same campus
- >5 regional campuses
- ≻7 hospitals
- >16 primary care practices
- Extension offices in all 88 Ohio counties
- First university to appoint a chief wellness officer
- CEO Cancer Gold Standard
- Silver in HealthLead Accreditation
- C. Everett Koop Awardee in 2019
- NAM published case study example



### OSU Takes a Multi-Component Evidence-based Approach With a Focus on Culture and Measurement of Outcomes System Issues Must be Fixed!



### Trends Year Over Year in 10 Leading Health Indicators are Shared with VPs/Deans and Their Cabinets Annually

Healthcare costs are higher in people who are at higher risk on these 10 indicators

- Obesity
- Blood pressure
- Total cholesterol
- HgbA1c
- Poor nutrition
- Physical inactivity
- Tobacco use
- Alcohol use
- High stress
- Depression

Change in Health Risks with Wellness Program	Annualized 5-year average of actual health risk change <u>Biometric risks data:</u> biometric screenings, healthcare provider- faxed forms, and lab values from preventive visits. <u>Behavioral and psychosocial risk data:</u> self-reported YP4H Personal Health Assessment (PHA).	
Expenses		
Wellness Programs	OSUHP: Wellness Education, Biometric Health Screening, Health Coaching, and Care Coordination Office of the Chief Wellness Officer/Buckeye Wellness OSUWMC: Gabbe Health & Wellness OHR: YP4H	
ROI, medical care + workplace productivity	\$1.95	

Ten Modifiable Health Risk Factors and Employees' Medical Costs—An Update Ron Z. Goetzel et al., American Journal of Health Promotion, 2020, Vol. 34(5) 490-499

### Mental Health & Well-being Risk

**Exemplar Unit** 

#### All OSU

#### -Anxiety Risk - Depression Risk - Alcohol Risk -Anxiety Risk - Depression Risk - Alcohol Risk 14% 13% 11.8% 13% 12% 12% 11% 11% 10% 8.5% 10% 8.5% 8.5% 9% 7.3% 9.5% 8.5% 9% 8% 8% 7% 7% 7.0% 6.2% 6.7% 6.9% 6% 6.9% 6% 5% 5% 5.0% 4% 5.6% 5.7% 4% 5.1% 4.9% 3% 3% 3.6% 2% 2% 1% 1% 0% 0% PHA Year Count 2021 2022 2021 2022 2023 2023 PHA Year Count 2021 193 2021 18799 2022 201 2022 20480 2023 21714 2023 222

Anxiety Risk: Score of >= 3 on following questions: Over the last two weeks, how often have you felt nervous, anxious, or on edge? Over the last two weeks, how often have you felt unable to stop or control worrying?

Depression Risk: Score of >= 3 on following questions: In the past two weeks, how often have you had little interest or pleasure in doing things? In the past two weeks, have you felt down, depressed or hopeless?

Weekly Drinking related to heavy drinking

### **Tracking of Outcomes Determines Impact**

#### • Culture and Environment of Health and Wellness

o 11 Item Wellness Culture and Environment Scale (Melnyk & Amaya, 2012)

#### • Population Lifestyle Behaviors and Well-being Outcomes

- Lifestyle behaviors (e.g., intake of fruits and vegetables; physical activity)
- $\odot$  Prevalence data to show burden of illness
- $\odot$  Incidence data to show rate of changes in burden of illness
- Mental health data (PHQ-2, GAD-2, burnout)
- $\circ$  Mattering, Belonging, Purpose
- Biometric Data (e.g., high blood pressure, high cholesterol, Hgb A1c, BMI)
- Engagement in programming

#### • Fiscal Health/Return on Investment/Value of Investment

- $\circ\,$  Per member Per Year (PMPY) costs of health insurance plans for faculty, staff and students
- YP4H/CWO costs
- Annual costs of absenteeism, presenteeism, and disability
- Excess costs associated with obesity, hypertension, prehypertension, diabetes, pre-diabetes, depression and smoking

Ohio State's ROI in recent years has ranged between \$3.65 to \$1.95 for every dollar invested

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# Instruments to Tap Key Well-Being and Culture Outcomes

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### **Mental Health**

#### Burnout

- Maslach Burnout Inventory<sup>1</sup>
- Single Item Burnout Measure<sup>2</sup>
- Copenhagen Burnout Inventory<sup>3</sup>

#### Depression

- The Patient Health Questionnaire-2<sup>4</sup>
- The Patient Health Questionnaire-9<sup>4</sup>
- Beck Depression Inventory<sup>5</sup>

#### Anxiety

- Generalized Anxiety Disorder-7<sup>4</sup>
- Generalized Anxiety Disorder-2<sup>4</sup>
- Beck Anxiety Inventory<sup>6</sup>

#### Stress

- Perceived Stress Scale-4<sup>7</sup>
- Perceived Stress Scale-14<sup>7</sup>
- Depression Anxiety Stress Scale – Short Form<sup>8</sup>

### Well-being & Workplace Wellness Culture

- Stanford Professional Fulfillment Index<sup>9</sup>
- Mayo Well-Being Index<sup>10</sup>
- NIOSH Worker Well-Being Questionnaire (WellBQ)<sup>11</sup>
- Perceived Wellness Culture and Environment Support Scale (PWCESS)<sup>12</sup>
- AACN Health Work Environment Assessment Tool<sup>13</sup>



### **Work and Purpose**

#### Professional Quality of Life

- Professional Quality of Life Scale 5 (ProQoL 5)<sup>14</sup>
- Professional Quality of Life Health (ProQoL Health)<sup>15</sup>

#### Workplace Mattering

Work Mattering Scale<sup>16</sup>

#### **Job Satisfaction**

- The Job Satisfaction Survey<sup>17</sup>
- Job Satisfaction Scale<sup>18</sup>

#### Presentism

- 6-Item Stanford Presenteeism Scale<sup>19</sup>
- 13-Item Stanford
   Presenteeism Scale<sup>20</sup>

### **Return on Investment & Value of Investment**

Term	Definition
Return on Investment (ROI) • Agency for Healthcare Research and Dissemination <sup>21</sup>	<ul> <li>A metric used to measure the profitability of an improvement action like a new program or intervention or new technology.</li> <li>ROI uses the ratio of financial gains / improvement investment costs.</li> <li>Investment costs include personnel, supplies, training, outreach, etc.</li> <li>A positive ROI is ≥ 1 and indicates that the financial returns on the improvement action are greater than the investment costs.</li> </ul>
Value of Investment (VOI) • AMA Organizational Cost of Physician Burnout <sup>22</sup>	<ul> <li>VOI differs from ROI as it also considers other valuable outcomes for an improvement action other than direct financial returns.</li> <li>VOI considers intangible outcomes like morale, knowledge, engagement, sick days, absenteeism, productivity, retention, turnover, and patient satisfaction.</li> </ul>

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