Onsite Health Management: Utilization of Data as a Foundation

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NAWHC – Minneapolis, MN
September 24, 2013
Today’s Discussion

- An overview of the health management business strategy
- Onsite center business development models
- Strategies for utilizing data for onsite health management
“Imagination is more important than knowledge”

Albert Einstein
Health Management Business Strategy

Workplace Health Care Solutions
HEALTH “is based on happiness, from hugging and clowning around to finding joy in family and friends, satisfaction in work, and ecstasy in nature and the arts.”

Dr. Hunter “Patch” Adams
Gesundheit Institute, 1992
Health & Productivity as a Business Strategy
A Multi-Employer Study

- Top 5 health conditions driving medical / productivity costs:
  1. Depression
  2. Obesity
  3. Arthritis
  4. Back/Neck Pain
  5. Anxiety

- Co-morbidities drive the largest effects on productivity losses:
  Nearly 50% of all absenteeism days are associated with 5 or more conditions

- Significant health-related productivity impact of health conditions
  exists regardless of treatment status

- For every $1 of medical and pharmacy costs, there are $2.3 of health-related
  lost productivity costs due to presenteeism and absenteeism

- An integrated, “whole person” health support approach is critical

Multi-Employer Study:
Total Health and Productivity Costs

Figure 10. Top. Medical and pharmacy costs for four employers. Bottom. Total health and productivity costs for four employers. Data derived from multiple sources, using metrics similar to those described in this white paper. (Adapted from Loepke RJ. Occup Environ Med, 2009.)
Good Health is Related to Productivity & Health Care Costs

- Presenteeism
- Absenteeism
- Disability
- Work comp
- Medical / Rx

- Health risks
- Health status
- Chronic conditions
The focus has shifted for employers…

**CURRENT FOCUS**

- Illness / injury treatment
- Single risk factors
- Disease conditions
- Medical costs
- Absenteeism
- Uncoordinated programs

**DESIRED FOCUS / OUTCOMES**

- Prevention orientation
- Whole person management
- Optimal health
- Quality outcomes
- Enhanced performance
- Employee-centered solutions

**ILLNESS**

**WELLNESS**
The Well-Being Value Proposition: Healthier People Cost Less and Perform Better

Improve Well-Being
- Adopt or maintain healthy behaviors
- Mitigate health-related risks
- Optimize care for health conditions

Cost Decreases
- Hospitalizations
- Event Rates
- Disease Rates
- Lifestyle Risks

Performance Increases
- Productivity
- Engagement
- Absence
- Work Impairment

Total Economic Value Increases
- States
- Communities
- Employers
- Individuals
Value of Well-Being

Well-Being Relationship to Medical Costs

Impact of Well-Being on Claims, RX and Total Medical Costs

- Well-Being Score (Composite)
- Low: 0-54 (n=110)
- >55-60: >60-70: >70-80: >80-90: >90-100: (n=153)

Annual Costs ($)
- 0-54: 3,400
- >55-60: 3,300
- >60-70: 3,200
- >70-80: 3,100
- >80-90: 3,000
- >90-100: 2,900

Source: Wellment Data, Healthways Center for Health Research Analysis (n=2,235)

Emerging Science (II)
Well-Being Relationship to Performance

Productivity Loss by Emotional Health

- HPQ
- WPAI
- WBA-P

Productivity Loss (%)
- 0
- 5
- 10
- 15
- 20
- 25
- 30
- 35
- 40

Emotional Health
- Low
- High

Pro-Change
Behavioral Systems


Well-Being Relationship to Performance Continued

Productivity Loss by Physical Health

- HPQ
- WPAI
- WBA-P

Productivity Loss (%)
- 0
- 5
- 10
- 15
- 20
- 25
- 30
- 35
- 40

Physical Health
- Low
- High

Pro-Change
Behavioral Systems

HEALTH AND PRODUCTIVITY MANAGEMENT MODEL

Population Management

Health Management

Care Management

Health And Well Being
- WELLNESS Education Prevention Onsite Clinic
- RISK Screenings Intervention Onsite Clinic
- DEMAND Self Care Advice Line Onsite Clinic
- DISEASE Care Compl LS Mgmt Onsite Clinic
- DISABILITY Decision Support Maintain Function

Value-based Health Benefit Design

Value-based Health Benefit Design

Health Risks

Illness Injury

Chronic Disease

Disability
The Onsite Health Center
More than Just Treating Illness

- **Worksite health care services**
  - Personalized care for the whole person
  - Prevalent health risks and diseases
  - Preventive care approach

- **Center for wellness**
  - Resources for health education
  - Source for preventive screenings
  - Connection to support services

- **Corporate health strategy**
  - Improve work force health, work availability and productivity
  - Enhance employee engagement in healthy activities
The Comprehensive Onsite Health Center

Definition: Assessment, treatment, and management of health risks, illness / injury, and chronic conditions that impact employee health or productivity

Health Care Team

Health Information Technology
### Health Center Service Categories

#### Personal Health
- Contusions / lacerations
- Minor eye conditions
- ENT Infections
- Respiratory infections
- Gastrointestinal disorders
- Sprains / Strains
- Urinary problems
- Skin rashes / lesions
- Burn treatment
- Minor fractures
- Drainage of cysts
- Skin tag removal
- Nail removal

#### Preventive Care
- Health risk assessment
- Wellness exams
- Preventive screenings
  - Hypertension
  - Metabolic health
  - Cancer – male, female
  - Diabetes
  - Depression
  - Musculoskeletal
- Health coaching
- Lifestyle management
- Disease management
- Group counseling

#### Occupational Health
- Contusions / lacerations
- Sprains / strains
- Repetitive injury conditions
- Contact dermatitis
- Substance abuse
- Medical exams
  - Preplacement
  - Surveillance
  - Return to work
  - Fitness for duty
- Occupational tests
  - Drug & alcohol tests
  - Pulmonary / audiometry
- Safety
  - Ergonomic assessment
  - Back injury prevention

#### Chronic Condition Management
- Hypertension
- Diabetes
- COPD, asthma
- Coronary artery disease
- Depression, anxiety
- Arthritis
- Degenerative spine disease
- Digestive disorders
- Chronic pain
Spectrum of Onsite Health Clinic Models: Based on Clinical Care Services

- Convenience Care
- Occupational Care
- Acute, Episodic Care
- Preventive Care
- Chronic Care
- Primary Care

Complexity of Clinic Models
Onsite Center Business Development Models

Workplace Health Care Solutions
Choices in Health Care Management

We offer three kinds of service:
GOOD - CHEAP - FAST
You can pick any two
GOOD service CHEAP won’t be FAST
GOOD service FAST won’t be CHEAP
FAST service CHEAP won’t be GOOD

Ray Zastrow, M.D., Quad Med Medical Director
Process for Health Center Development

New Health Center

Organizational Plan  Service & Functionality  Design & Location  Financial Feasibility

I. Preliminary Model Design Plan  III. Business Case  V. Vendor Selection
II. Business Needs Data Analysis  IV. Final Model  VI. Implementation

MONTHS
## Model assumptions:
- Utilization
- Full scope of services
- Staffing model
- Copays/incentives
- Operating expenses
- Value of Investment

### Onsite Health Center Feasibility Analysis (Employees Only)

<table>
<thead>
<tr>
<th></th>
<th>Start-Up</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>3-Year Aggregate</th>
<th>3 Year NPV^6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees^1</td>
<td>5,852</td>
<td>5,852</td>
<td>5,852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penetration Assumption</td>
<td>40%</td>
<td>55%</td>
<td>70%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Medical Savings/Cost Avoidance^2</td>
<td>$1,836,000</td>
<td>$2,432,000</td>
<td>$3,112,000</td>
<td>$7,380,000</td>
<td>$6,380,000</td>
<td></td>
</tr>
<tr>
<td>Lost Member Cost-Sharing Revenue^3</td>
<td>$(164,000)</td>
<td>$(223,000)</td>
<td>$(282,000)</td>
<td>$(669,000)</td>
<td>$(578,000)</td>
<td></td>
</tr>
<tr>
<td>Work Loss Savings^4</td>
<td>$1,836,000</td>
<td>$2,432,000</td>
<td>$3,112,000</td>
<td>$7,380,000</td>
<td>$6,380,000</td>
<td></td>
</tr>
<tr>
<td>Operating Expenses^5</td>
<td>$(754,000)</td>
<td>$(1,246,000)</td>
<td>$(1,481,000)</td>
<td>$(1,850,000)</td>
<td>$(5,331,000)</td>
<td></td>
</tr>
<tr>
<td>Net Annual Savings</td>
<td>$(754,000)</td>
<td>$1,621,000</td>
<td>$2,392,000</td>
<td>$3,166,000</td>
<td>$6,425,000</td>
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</tr>
<tr>
<td>Annual Return on Investment</td>
<td>N/A</td>
<td>2.3</td>
<td>2.6</td>
<td>2.7</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Cumulative Net Savings</td>
<td>($754,000)</td>
<td>$867,000</td>
<td>$3,259,000</td>
<td>$6,425,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative Return on Investment</td>
<td>N/A</td>
<td>1.4</td>
<td>1.9</td>
<td>2.2</td>
<td></td>
<td></td>
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</tbody>
</table>
Overview of Sample Business Pro-forma

<table>
<thead>
<tr>
<th>Direct Cost Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
</tr>
<tr>
<td>Preventive Care</td>
</tr>
<tr>
<td>Limited Emergency Care</td>
</tr>
<tr>
<td>Ancillary Services</td>
</tr>
<tr>
<td>Total Direct Cost Avoidance</td>
</tr>
</tbody>
</table>

| Net Annual Savings *                        |

| Clinic Cost Estimate                       |

| Return on Investment                       |

| Return on Investment per Dollar Spend      |

| cumulative Return on Investment            |

| Cumulative Return on Investment per Dollar Spend |
### Preliminary Pro-forma for 1000 Employee Group

<table>
<thead>
<tr>
<th>Direct Cost Avoidance</th>
<th>Start-up</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>$149,000</td>
<td>$181,000</td>
<td>$218,000</td>
<td>$259,000</td>
<td>$306,000</td>
<td></td>
</tr>
<tr>
<td>Preventive Care</td>
<td>$10,000</td>
<td>$12,000</td>
<td>$15,000</td>
<td>$18,000</td>
<td>$21,000</td>
<td></td>
</tr>
<tr>
<td>Limited Emergency Care</td>
<td>$57,000</td>
<td>$69,000</td>
<td>$83,000</td>
<td>$99,000</td>
<td>$117,000</td>
<td></td>
</tr>
<tr>
<td>Ancillary Services</td>
<td>$37,000</td>
<td>$45,000</td>
<td>$54,000</td>
<td>$63,000</td>
<td>$74,000</td>
<td></td>
</tr>
<tr>
<td>Total Direct Cost Avoidance</td>
<td>$253,000</td>
<td>$307,000</td>
<td>$370,000</td>
<td>$439,000</td>
<td>$518,000</td>
<td></td>
</tr>
</tbody>
</table>

| Net Annual Savings *          | $253,000 | $307,000 | $370,000 | $439,000 | $518,000 |

| Clinic Cost Estimate          | $202,000 | $350,000 | $373,000 | $387,000 | $401,000 | $417,000 |

| Return on Investment          | ($202,000) | ($97,000) | ($66,000) | ($17,000) | $38,000 | $101,000 |

| Return on Investment per Dollar Spend | 0.7 | 0.8 | 1.0 | 1.1 | 1.2 |

| Cumulative Return on Investment | ($202,000) | ($299,000) | ($365,000) | ($382,000) | ($344,000) | ($243,000) |

| Cumulative Return on Investment per Dollar Spend | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |

* Net Annual Savings does not include indirect savings for reduced emergency room visits, specialist visits and hospital admissions. Does not include savings for increased participation in health management programs (e.g., disease management, lifestyle management, etc.) or prescription drug savings. Does not include work loss savings or improvements in productivity.
Health Center Value Propositions: Return on Investment vs. Value of Investment

Return on Investment
- Cost avoidance vs. community care
- Improve work availability
- Health risk reduction
- Improve pharmaceutical management
- Improve chronic care compliance

Value of Investment
- Enhanced care access
- Provide comprehensive health services
- Facilitate participation in healthy activities
- Manage chronic conditions
- Measure individual and population health outcomes

Measure of “hard” tangible benefits produced by investment
Measure of “hard” and “soft” benefits produced by investment
Onsite Health Center – Stages of Change: Health Management Metrics

<table>
<thead>
<tr>
<th>TIME</th>
<th>STAGE</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 YR</td>
<td>Access and Awareness</td>
<td>Improve work availability; Health knowledge, skills, empowerment</td>
</tr>
<tr>
<td>YR 1-2</td>
<td>Engagement and Participation</td>
<td>Health risk reduction; improve clinical indicators; Reduce emergency care use</td>
</tr>
<tr>
<td>YR 2+</td>
<td>Health Improvement</td>
<td>Increase preventive care; complex risk management; Chronic condition care compliance</td>
</tr>
<tr>
<td>YR 3+</td>
<td>Health / Productivity Savings</td>
<td>Individual cost savings, pmpy; population health savings; decreased absenteeism / presenteeism</td>
</tr>
</tbody>
</table>

**Utilization**

- Utilization 30%
- Utilization 80%
Bending the cost curve. Improving health. Guaranteed.
Utilizing Data for the Onsite Health Management

Workplace Health Care Solutions
SUCCESS

WHAT PEOPLE THINK IT LOOKS LIKE

SUCCESS

WHAT IT REALLY LOOKS LIKE
Traditional Return on Investment Calculations: Limited usefulness and considerable variations

- **Cost benefit or cost effectiveness analysis**
  - Comparison of market value community services to health center
  - Retrospective, favors worksite vendor
  - Does not account for increased utilization (access, preventive services, etc.)

- **Cost avoidance analysis**
  - Evaluation of decreased costs for reduced emergency visits, radiology studies, hospitalization rates, etc.
  - Prospective approach, often subjective

- **Productivity “savings”**
  - Calculate lost time/average employee wage
  - Projected savings – due to reduction in lost work time
  - No allowance for appointments after work

- **Clinical outcome measures**
  - Health risk mitigation – projected savings
  - Does not account for dynamics of employee shifts between low, medium, high risk pools

Dr. Bruce Sherman, Feb 2012 presentation ROI Methodology for Worksite Clinic
A Strategic Approach: Focused Analytic Data Review

- Identify trends to develop focus
- Quantify current and future risk values, utilization and monetary measures to develop baseline (actuarial/medical expertise)
- Establish targeted initiatives specific to population needs
- Establish ROI values on identified initiatives
### Types of Analytic Data to Consider

<table>
<thead>
<tr>
<th>Health Plan Data</th>
<th>Work Comp Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 3 or more years to establish linear directions</td>
<td>• Generally the same period as Medical and Rx to draw correlations</td>
</tr>
<tr>
<td>• Enrollment and demographics</td>
<td></td>
</tr>
<tr>
<td>• Must include medical and Rx</td>
<td></td>
</tr>
<tr>
<td>• Utilization (why, how, when, where)</td>
<td></td>
</tr>
<tr>
<td>• Financial</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biometric Screening Data</th>
<th>Disability Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Blood Pressure</td>
<td>• Long / Short Term Disability</td>
</tr>
<tr>
<td>• Tobacco Use</td>
<td>• Type of claim</td>
</tr>
<tr>
<td>• Glucose</td>
<td>• Duration of claim</td>
</tr>
<tr>
<td>• BMI</td>
<td></td>
</tr>
<tr>
<td>• Cholesterol</td>
<td>PTO and Family Medical Leave</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Assessment</th>
<th>Productivity Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lifestyle / Consumption</td>
<td>• Production out-put per EE</td>
</tr>
<tr>
<td>• Well-being</td>
<td>• EE perception surveys</td>
</tr>
</tbody>
</table>
### A Strategic Approach: Metric or Analytic?

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Finance</td>
</tr>
<tr>
<td>Past</td>
<td>Future</td>
</tr>
<tr>
<td>Data</td>
<td>Insights</td>
</tr>
<tr>
<td>Large</td>
<td>Selective</td>
</tr>
<tr>
<td>Transactional</td>
<td>Strategic</td>
</tr>
<tr>
<td>Information</td>
<td>Transformation</td>
</tr>
<tr>
<td>Low value</td>
<td>Differentiator</td>
</tr>
<tr>
<td>Gathering</td>
<td>Asking questions</td>
</tr>
<tr>
<td>Reporting</td>
<td>Analyzing</td>
</tr>
<tr>
<td>HR Scorecard</td>
<td>Business Scorecard</td>
</tr>
<tr>
<td>HR ownership</td>
<td>Management ownership</td>
</tr>
<tr>
<td>Controlling</td>
<td>Optimizing</td>
</tr>
<tr>
<td>Inside-in perspective</td>
<td>Outside-in perspective</td>
</tr>
</tbody>
</table>

List developed by Luk Smeyers with INostix
A Balanced Scorecard Approach: Measurement of current and future value

- “A strategic planning & management system that aligns business activities to the vision and strategy of the organization”
- Result measures – measurement of “how and what” we did
  - Health care utilization, service costs, health status, etc.
- Performance indicators – specific key indicators of future value

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATORS</th>
<th>LEADING INDICATORS</th>
<th>INTERMEDIATE INDICATORS</th>
<th>LAGGING INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition mgmt utilization</td>
<td>Preventive service utilization</td>
<td>Healthcare costs, utilization</td>
<td></td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td>Clinical outcomes</td>
<td>Absenteeism</td>
<td></td>
</tr>
<tr>
<td>Medication adherence</td>
<td>Health risk profile</td>
<td>Total H &amp; P costs</td>
<td></td>
</tr>
</tbody>
</table>
The pathway to management of Health & Well-Being is not always clear
Summary
Utilizing Data for Onsite Center Development

- Health Center development requires an in-depth plan, data analysis and business pro-forma
- Business assumptions are not standardized and different vendors may present outcomes that may vary
- The impact of a health center on employee health, costs or productivity requires increasing utilization and time to demonstrate improvement
- Onsite clinics generally require a base of >1000 employees to be cost effective, although recent examples of 500 or less employees have shown value
- A strategic approach using data to focus on key health costs and productivity issues has been successful in onsite center initiatives
Thank You

Questions & Answers