State of Wyoming Labor, Health, and Social Services Committee Presentation

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Population Health Management Cloud Solutions

For Employers, Health Organizations, and Government
Health as Human Capital Paradigm
Connecting Health to Business Performance by Aligned Economic Incentives

Business Employers Want:

Day’s Work for Day’s Pay
• Work Ethic vs. Entitlement Attitude
• Self Health Management
• Good Safety Practices

Employer Workers Want:

Day’s Pay for Day’s Work
• Wages
• Benefits
• Human Capital Growth

Rewards
Responsibilities
### Four Healthcare Reform Problems That Need Solutions

<table>
<thead>
<tr>
<th>Problem</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Waste/Moral Hazard Problem</strong></td>
<td>30/30 The US spends 30% more on healthcare compared to similar countries and gets 30% less in health return.</td>
</tr>
<tr>
<td><strong>The Opportunity Cost Problem</strong></td>
<td>10/2 Health benefit costs are increasing annually at roughly 10%, while wages are increasing by 2%.</td>
</tr>
<tr>
<td><strong>The Overutilization Problem</strong></td>
<td>5/50 Only 5% of an insured employee risk pool drives 50% or more of health benefit costs.</td>
</tr>
<tr>
<td><strong>The Medicalization Problem</strong></td>
<td>50/50 50% of the 5% group’s health benefit costs are driven by business policy design, while only 50% is driven by disease.</td>
</tr>
</tbody>
</table>
Health as Human Capital “Big Data” Research Reference Database (RRDb)

- 730 Million Compensation Records
- 1.5 Million Workforce Transition Episodes
- 21 Million Work Performance Records
- 9 Million Disability Lost Time Claims
- 1.5 Million Safety & WC Claims
- 1.5 Million Prevention & Wellness Program Participants
- 303 Million Health Plan Medical & RX Claims with 850,000 Medical Provider IDs
- 65 Thousand Management & Training Records

3.7 Million People in the RRDb
The HCMS Wyoming Health Information Network (WHIN) Service Model
HCMS Wyoming State Service Model

Data Inputs
- DOH
  - Medicaid
  - Mental Health/Substance Abuse
  - CHIP Enrollment/Claims
- DFS
  - SNAP
  - POWER & LIEAP
  - Child Care
  - Child Support Enforcement
- A&I
  - State Health Plan
- DWS
  - WIA
  - Voc Rehab
  - WDTF
  - Worker’s Compensation
  - Unemployment Insurance
- DOI
  - WHIP
- DOC
- OCIO (Pending)
- Dept of Education (Pending)
- Board of Parole (Pending)
- Military (Pending)

Data Management
- Integrated Data Warehouse & Research Reference Database

Data Analytics
- Population Risk Analysis (Human Capital Risk Index)
- Program|Benefits Design & Evaluation
- Ad Hoc Data Analytics
- Data Extracts

Information Outputs Delivered with Decision Support
- WHIN/ELT (Health, Family, Workforce, Corrections, Insurance, A&I)
- Healthy Families Succeed
- Health and Human Services Sub-Cabinet
- State Legislature

Healthy Families Succeed
- Enroll & Assessment
- Healthy Assist High Risk Population
- Job Ladder

Online Reporting (O|BI)
- Policy-Level Integrated Risk Information
Wyoming State Person-Centric Integrated Database... Connecting the Dots

WHIN
Integrated Database
275,000
Since 2001

Medicaid
SNAP
POWER

Child Care

Department of Corrections

Unemployment Insurance

Workers’ Compensation

State Health Plan
Population Risk Analysis
The Human Capital Risk Index® (HUI) is a unique person-centric risk index that is based on the HCMS Health as Human Capital paradigm. It measures human capital risk based on lost time in addition to medical and pharmacy utilization. The HUI adjusts for population demographics and is positively correlated with employee engagement.

The HUI score is normalized to 1.0. For example, an individual with a HUI score of 2.0 carries twice as much risk as average. Used in HCMS predictive modeling, the HUI is a leading risk indicator because it assigns the entire weight of the health event right when it occurs; whereas claims cost data is a lagging risk indicator.

HCMS uses over 300 weighted indicators in calculating the Individual HUI Score.

**Sample HUI Risk Scores**

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
<th>Category</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>4.50</td>
<td>Diabetes</td>
<td>0.21</td>
</tr>
<tr>
<td>Asthma</td>
<td>0.15</td>
<td>Hypertension</td>
<td>0.12</td>
</tr>
<tr>
<td>Respiratory agent</td>
<td>0.05</td>
<td>Cerebrovascular disease</td>
<td>0.90</td>
</tr>
<tr>
<td>Anti-infectives</td>
<td>0.05</td>
<td>Spondylisis</td>
<td>0.35</td>
</tr>
<tr>
<td>STD leave</td>
<td>1.35</td>
<td>Mood Disorder</td>
<td>0.20</td>
</tr>
<tr>
<td>WC leave</td>
<td>2.25</td>
<td>Psychotherapeutic Agent</td>
<td>0.15</td>
</tr>
<tr>
<td>Total</td>
<td>8.35</td>
<td>Cardiovascular Agent</td>
<td>0.10</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>Total</td>
<td>2.03</td>
</tr>
</tbody>
</table>
WyState Social Welfare Service
Non-Disabled Adult Population Risk Analysis

Population = 70,801
Average Cost = $6,682

Population = 70,801
Average HUI = 0.70

Time period: 01/01/2013-12/31/2013
Key Finding:
Medicaid non-disabled adults’ co-morbidities are significantly more expensive than the primary medical disease which demands the need for a person-centric, as opposed to a disease-centric, approach.
WyState Social Welfare Service
Aged and Disabled Population Risk Analysis

Population = 13,015
Average Cost = $14,313

Population = 13,015
Average HUI = 3.01

Time period: 01/01/2013-12/31/2013
Kid Care Claimants Population Risk Analysis

Population = 6,439
Average Cost = $1,477

Population = 6,439
Average HUI = 0.47

Time Period: 07/01/10 – 06/30/11
Wyoming Health Insurance Pool (WHIP) Population Risk Analysis

Population = 1,288
Average Cost = $7,933

Population = 1,288
Average HUI = 2.10
Population = 18,657

Average Cost = $7,299

Average HUI = 1.52

Time Period: 01/01/13 – 12/31/13
State Health Plan Disease Cluster Analysis

Key Finding:
State Health Plan employees’ co-morbidities are significantly more expensive than the primary medical disease which demands the need for a person-centric, as opposed to a disease-centric, approach.

Time Period: 01/01/2013 - 12/31/13
Wyoming Healthy Frontiers
“Aligned Incentives” Health Plan Pilot
One
“Aligned Incentives” Health Plan
Incentive-Funded Health Account
Consumer Choice: “Skin in the Game”

Incentive-Reimbursed Primary Care
Whole Person
Disease Screening & Management
Continuity Care

Free Clinical Prevention Service
Clinical Decision Support for 5% Group
Ownership of Health Decisions
Medical Consumerism that Bridges Primary & Specialty Care

Value-Based Variable Deductible
Specialty/Hospital Care
Centers of Excellence

Lost Time
Disability & Workers’ Compensation

Mental Health/EAP
Anxiety & Depression

Health & Wellness
Eat Right, Exercise, Don’t Smoke

Clinical Prevention
• For “5% high-risk group
• Independent Provider
• Consumer decision support
• Health as human capital outcomes
Key Findings:
- Using HUI and historic cost, high-risk people rationally choose richer plans.
- **500% variance in cost** from the Bronze plan to the Platinum plan, but only a **50% variance in premium**.
- Selection bias produces winners and losers.
Private Insurance Health Exchange vs. Legacy Individuals Risk Comparison

Time Period: 01/01/14 – 01/31/14

Avg. HUI (Annualized)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Group - Individuals</td>
<td>0.80</td>
</tr>
<tr>
<td>Exchange - Individuals</td>
<td>1.14</td>
</tr>
</tbody>
</table>

(N=1,641) (N=262)
Healthy Frontiers Compared to Medicaid Non-Disabled Adult

<table>
<thead>
<tr>
<th>HF Annualized Cost</th>
<th>Medicaid Non-Disabled Adult</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,216</td>
<td>$6,156</td>
<td>-15.3%</td>
</tr>
</tbody>
</table>

**Methods:**

WHF annualized cost on a per member per month (PMPM) basis for 109 individuals that were enrolled long enough for the following data to be collected on them.

In order to accurately evaluate initial WHF Plan performance, costs are compared to Job-Mobile Adults (Non-Disabled Adults ages 18-64) in Medicaid. The average claim costs per full-year Medicaid Job-Mobile Adult claimant was $6,156.
Cost Trend for Single “Aligned Incentives” Health Plan

Implementation of a Single Aligned Incentives Health Plan From 3 Plans

Key Findings:
- Costs decreased 20% after implementation.
- Decreases in costs are accompanied by significant decreases in ER visits, inpatient days, and specialty care visits.
- Decreases in cost are also accompanied by an increase in primary care visits.
Healthy Families Succeed Program (HFS)

A Job Training & Health Management Service
Healthy Families Succeed
State Services Utilization

State Service Utilization Trend:
9.2% annual Decrease

Quarters Since Enrollment in JobAssist
Foster Care Young Women
Pregnancy Rate Comparison Analysis

<table>
<thead>
<tr>
<th>Population</th>
<th>Age Group</th>
<th>14 - 15</th>
<th>16 - 17</th>
<th>18</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster Care: Medicaid</td>
<td></td>
<td>11%</td>
<td>25%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>State Health Plan</td>
<td></td>
<td>3%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Wyoming Private Insurance</td>
<td></td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Key Finding:**

The total comparative pregnancy rate for Foster Care Medicaid young women was 11 times higher than privately-insured young women and almost 5 times higher than State-Health-Plan-covered young women.
<table>
<thead>
<tr>
<th>Health Plan Deductible Level</th>
<th>Health Plan Costs (PEPY)</th>
<th>HUI</th>
<th>V</th>
<th>HUI (PEPY)</th>
<th>V</th>
<th>HUI Opportunity (PEPY)</th>
<th>Enrolled Employees</th>
<th>Total V</th>
<th>HUI Opportunity</th>
<th>Cost Savings Opportunity (After Adjusting for Risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDHP</td>
<td>$3,163</td>
<td>0.6</td>
<td>$4,923</td>
<td>$0</td>
<td>1,059</td>
<td>$0</td>
<td></td>
<td></td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>$750</td>
<td>$5,440</td>
<td>1.0</td>
<td>$5,608</td>
<td>$685</td>
<td>3,695</td>
<td>$2,531,085</td>
<td>$2,455,152</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$350</td>
<td>$7,569</td>
<td>1.4</td>
<td>$5,607</td>
<td>$683</td>
<td>9,633</td>
<td>$6,583,402</td>
<td>$8,887,593</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Estimated Savings if all Employees move to the High Deductible Plan with a Health Savings Account** $11,342,745
Finance

Form

Function