Innovation and Data-Driven Strategies in Corporate Healthcare

Karen Amato  R.N.
Vice President, Director of Health Risk Solutions
Objectives

- Learn how insights from big data in combination with your population data can help inform targeted solutions, aligned with business objectives, to improve employee health and lower medical costs.

- Review emerging and innovative healthcare delivery, tools and technologies that are changing the approach of disease/condition management.

- Explore well-being program best practices and how they are increasingly being leveraged to drive employee engagement and performance.
The Drivers of Medical Cost

High-risk claims
~20% of the total population drives 80% of the costs.

High-cost claimants
~2% of the total population drives 50% of the costs.

High-risk claimants have chronic conditions (such as coronary artery disease, diabetes, hypertension, smoking-related illness and obesity) but also include maternity, behavioral health and orthopedic conditions.

High-cost claimants are associated with specialty medicines, cancers, back conditions, trauma, premature births and complications of hospitalization and surgeries.

Specific Cost Drivers

- Healthcare inflation is driven by price increases, not just utilization (new medical and pharmacy technologies).
- Severity and frequency of catastrophic claims continue to increase.
- Specialty medications are the fastest growing driver of high cost.

Source: Lockton InfoLock.
What Can We Learn From Data?

<table>
<thead>
<tr>
<th>Category</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Costs</td>
<td>What are the drivers of the year-over-year cost increase, or overall costs that are greater than benchmark expectations?</td>
</tr>
<tr>
<td>Utilization</td>
<td>What are the key indicators of the covered population’s inefficient or inappropriate utilization of medical care?</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>What are the key drivers of an increasing trend in pharmacy spend within the population that can be affected?</td>
</tr>
<tr>
<td>Population Health</td>
<td>What risk, cost and gaps in care can be identified in the member population where practical solutions might drive improved outcomes?</td>
</tr>
<tr>
<td>Condition Specific</td>
<td>What particular medical conditions are more prevalent and costly in the population than we see using benchmark values?</td>
</tr>
</tbody>
</table>
Lockton Infolock Insights - Population Risk Stratification

**Population**

- **High Cost Population**
  - 1.4% of members
  - $126,068 PMPY
- **High Risk**
  - 10% of members
  - $12,341 PMPY
- **Moderate Risk**
  - 14.4% members
  - $4,912 PMPY
- **Low Risk**
  - 74% of members
  - $990 PMPY

**Goals**

- Manage higher cost treatment plans
- Identify higher impact members and target individual interventions that improve health outcomes and lower costs.
- Assist members in better accessing quality medical care in the right way at the right time.
- Address total population health and wellness with solutions that make sense for your organization

**Interventions**

- • Intense Case Management
- • Centers of Excellence
- • Case Management
- • Second Medical Opinion
- • Disease Management
- • Treatment Support
- • Patient Advocacy
- • Medical Transparency
- • Telemedicine
- • Onsite Health Solutions
- • Culture of Health
- • Biometric Screening
- • Health Risk Assessment
- • Wellness Program
High Cost Claimants Overview

High Cost Claimants are members who incurred $50,000 or more in paid claims July 2016 - June 2017.

<table>
<thead>
<tr>
<th>Number of Chronic Conditions Per HCC</th>
<th>High Cost Claimants</th>
<th>July 2016 - June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Number of Members</td>
<td>22,383</td>
</tr>
<tr>
<td>1</td>
<td>Medical Paid</td>
<td>$2,137,511,014</td>
</tr>
<tr>
<td>2</td>
<td>Rx Paid</td>
<td>$483,179,359</td>
</tr>
<tr>
<td>3+</td>
<td>Total Plan Paid</td>
<td>$2,633,697,952</td>
</tr>
<tr>
<td></td>
<td>Average Medical Paid</td>
<td>$95,497</td>
</tr>
<tr>
<td></td>
<td>Average Rx Paid</td>
<td>$21,587</td>
</tr>
<tr>
<td></td>
<td>Average Total Paid</td>
<td>$117,665</td>
</tr>
</tbody>
</table>
High Cost Claimant by Diagnostic Category

Norm Paid Amount

- Acute or Miscellaneous: 31.0%
- Cancer: 17.10%
- Chronic Conditions: 27.10%
- Neuro-Musculoskeletal Trauma: 20.40%
- Maternity & Neonatal: 0.1%
- Psychiatric/Behavioral Health: 0.1%

Norm Member Count

- Acute or Miscellaneous: 31.4%
- Cancer: 14.50%
- Chronic Conditions: 25.30%
- Neuro-Musculoskeletal Trauma: 24.50%
- Maternity & Neonatal: 0.1%
- Psychiatric/Behavioral Health: 0.1%
### Major Diagnostic Categories by High Cost Claimants - Claims Threshold $50,000 or Greater

<table>
<thead>
<tr>
<th>Category</th>
<th>Non-High Cost Claimants</th>
<th>High Cost Claimants</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors influencing health status and contact.</td>
<td>$457,443,394</td>
<td>$238,096,556</td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal System and Connective Tiss.</td>
<td>$421,247,943</td>
<td>$228,888,840</td>
<td></td>
</tr>
<tr>
<td>Symptoms, Signs, and Ill-Defined Conditions</td>
<td>$383,624,725</td>
<td>$80,804,942</td>
<td></td>
</tr>
<tr>
<td>Neoplasms</td>
<td>$141,222,940</td>
<td>$293,881,213</td>
<td></td>
</tr>
<tr>
<td>Circulatory System</td>
<td>$153,734,837</td>
<td>$255,870,766</td>
<td></td>
</tr>
<tr>
<td>Digestive System</td>
<td>$256,660,520</td>
<td>$125,710,425</td>
<td></td>
</tr>
<tr>
<td>Injury, poisoning and certain other consequ.</td>
<td>$224,836,799</td>
<td>$148,905,327</td>
<td></td>
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<tr>
<td>Genitourinary System</td>
<td>$185,306,592</td>
<td>$86,493,194</td>
<td></td>
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<tr>
<td>Respiratory System</td>
<td>$162,773,246</td>
<td>$66,508,462</td>
<td></td>
</tr>
<tr>
<td>Pregnancy, childbirth and the puerperium</td>
<td>$211,711,779</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous System and Sense Organs</td>
<td>$100,961,611</td>
<td>$76,825,122</td>
<td></td>
</tr>
<tr>
<td>Endocrine, Nutritional &amp; Metabolic Diseases.</td>
<td>$115,466,027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental, Behavioral, and Neurodevelopmenta.</td>
<td>$85,646,333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious &amp; Parasitic Diseases</td>
<td>$53,638,720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin and Subcutaneous Tissue</td>
<td>$65,724,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood and Blood-Forming Organs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congenital Anomalies</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Diseases of the eye and adnexa</td>
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<td></td>
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<tr>
<td>Certain Conditions Originating in the Perinat.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Diseases of the ear and mastoid process</td>
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</tbody>
</table>

1.2% members have claims over $50,000. They account for 39.4% of total costs.

Source: Infolock Book of Business Benchmarks
Understanding Impact of Chronic Conditions
Chronic Conditions Drive Cost

18.2% of the Infolock employee benefits population has one of these common chronic conditions.

Given no group-specific data, we understand that improving these four conditions will positively affect population health, productivity and health plan financials.

Note, costs represented here include comorbidities.

*PMPY – Per Member Per Year.

Lockton’s Infolock Population Health Insights (2.5 M lives)

7% of members drive 73% of costs.

3% of members drive 55% of costs.

8% of members have 3 or more chronic conditions and spend **10 times** more than members without.

40% of ER visits are avoidable and cost nearly 8 times an office visit.

Specialty medicines represent 1% of prescriptions and 40% of Rx spend.

Only 25% of High Cost Claimants were high cost due to chronic illness.

The frequency of $1 million+ claims increased by 31%.

Pharmacy represents 22% of Total Plan Spend.

Source: Infolock Book of Business Benchmarks
# Market Tactical (Savings) Opportunities Index

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<thead>
<tr>
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<th>Eligibility Management</th>
<th>Health Risk Solutions</th>
<th>Participant Cost-Sharing</th>
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<td>Dependent eligibility verification audit</td>
<td>Enhancing the work environment</td>
<td>CDHP seeding</td>
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<tr>
<td>Centers of excellence</td>
<td>FMLA/absence management outsourcing</td>
<td>Executive physicals</td>
<td>Consumer-directed health plans</td>
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<tr>
<td>Direct contracting</td>
<td>Retiree eligibility</td>
<td>Health goals and biometric outcomes</td>
<td>Price transparency</td>
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<tr>
<td>Narrow networks</td>
<td>Spousal surcharge/carve-out</td>
<td>On-site health clinics</td>
<td>Rx drug utilization and spend</td>
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<tr>
<td>Pharmacy benefit management</td>
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<td>Program design</td>
<td>Rx patent expirations</td>
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<td>Private exchanges</td>
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<td>Program incentives</td>
<td>Rx plan controls</td>
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<tr>
<td>Private exchanges for retirees</td>
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<td>Stress management and resilience</td>
<td>Telemedicine</td>
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<tr>
<td>Reference-based pricing</td>
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<td>Tobacco surcharge</td>
<td>Value-based pricing</td>
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<tr>
<td>Stop-loss focus areas</td>
<td></td>
<td>Types of wellness programs</td>
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<tr>
<td>Stop-loss purchasing strategies</td>
<td></td>
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</tbody>
</table>
Hot Topics in Population Health Management

**Behavioral Health**
Condition-Specific Targeted Disease Management

**Chronic Conditions**
Second Medical Opinion

**Specialty Medications**
Health and Productivity

**Executive Physicals**
Financial Wellness

Centers of Excellence

Stress Management and Resilience
Trending Benefits

**By vendor**
- **Accolade**
  - Total population health
- **Benevity**
  - Charity giving
- **Care @ Work**
  - Enhanced care.com model, family services
- **Consumer Medical**
  - Advocacy, second opinion, medical research
- **Joyable**
  - Digital mental health solutions
- **Sleepio**
  - Sleep and behavioral health impact

**By vendor category**
- **Autism services**
  - Torchlight, Rethink
- **College savings/student loan/financial**
  - LEAF, Gradvisor, UBS, Ion Tuition, SoFi; Hello Wallet
- **Condition management**
  - Livongo, Abacus, Hello Heart, Hinge Health
- **Genetic testing**
  - Color Genomics, 23andMe
- **Infertility / maternity**
  - Progyny, Ovia, Mango Health, Milk Stork
- **Weight loss / metabolic syndrome**
  - Retrofit, Omada, Newtopia
Well-Being Program Design - Defining Expectations

**CULTURAL**
- Increase participation in activities
- Increase awareness of health status and literacy/self-care
- Improve employee retention
- Decrease presenteeism

**FINANCIAL**
- Reduce risk factors
- Reduce future claims
- Decrease disability claims
- Decrease absenteeism
- Shift contributions for health insurance; help to fund program

**Base Activities Across All Program Types:**
Health Assessment, Annual Physical/Biometric Screening

**Program Types**
- Morale-Based
- Participation-Based
- Progress-Based
- Outcomes-Based

**Activities**
- Health fairs
- Lunch & Learns
- Health Coaching/Biometrics with Health Metric bonus
- Challenges/Activities
- Condition/Disease Management
- Biometrics with Health Metric improvement
**Spectrum of Well-Being Programs**

Well-being programs must transition to progress-based and eventually outcome-based to realize cost savings.

<table>
<thead>
<tr>
<th>Program Focus</th>
<th>Morale-Based Program</th>
<th>Participation-Based Program</th>
<th>Progress-Based Program</th>
<th>Outcomes-Based Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td>Participation &amp; Engagement</td>
<td>Participation &amp; Engagement</td>
<td>Employee Accountability</td>
</tr>
</tbody>
</table>

### Sample Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Morale-Based</th>
<th>Participation-Based</th>
<th>Progress-Based</th>
<th>Outcomes-Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Physical</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Health Fair</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch &amp; Learns</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>Health Risk Assessment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Biometric Screening</td>
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<tr>
<td>Health Coaching</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Challenges &amp; Activities</td>
<td>✓</td>
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<tr>
<td>Biometrics with Health Metric Bonus</td>
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<tr>
<td>Targeted Condition Specific Disease Management</td>
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<tr>
<td>Robust Case &amp; Disease Management</td>
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<tr>
<td>Biometrics with Health Metric Improvement</td>
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<td>✓</td>
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</table>
# Well-Being Program Best Practices

## Sustainability

Policies that support healthy lifestyles; enhanced workplace environment; program evaluation.

## Strategic

Data-driven goals and objectives; consistent and diverse communication; wellness committee; meaningful incentives.

## Foundational

Visible commitment, support and participation from all levels of leadership; supportive culture; focus on all dimensions of well-being.
Employers are increasingly offering programs that address behavioral/mental, financial and social health.

Business Case for Implementing a Well-Being Program

When worksite well-being programs are in place, here is what employees and leaders are saying about the impact:

**Value on Investment (VOI)**

- Recognition as employer of choice.  
- Attracting and retaining talent lowers recruiting costs.  
- 2X more likely to be viewed as top performing organization in the community, when promoted.  
- Outperform the SEP 500.

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Lockton Contacts:

Karen Amato
VP, Director of Health Risk Solutions
kamato@lockton.com

Michael Appaneal
VP, Managing Executive
mappaneal@lockton.com
Cell: 484-723-9252
Our Mission | To be the worldwide value and service leader in insurance brokerage, risk management, employee benefits and retirement services

Our Goal | To be the best place to do business and to work

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