Darryl Williams
Head of Global MDM and Platform Solutions
LexisNexis Health Care

Understanding the Value Proposition of Account Hierarchies

NOVEMBER 2016
Agenda

• Evolving Life Sciences Landscape

• Understanding the Relationships and Hierarchies

• Practical Applications
Evolving Life Sciences Landscape
Evolving Market Dynamics for Life Sciences Organizations (LSOs)

Integration / Consolidation:
• Rise in IDN influence
• Account-based marketing and selling

So how do you know which providers are independently influential—or conversely, influenced by the IDN/health system or accountable care organization (ACO)?

80% of hospitals’ and nursing homes’ non-labor expenditures are funneled through GPOs or IDNs

IDN STATISTICS:
• 1,500 IDNs with over 67K parent/child relationships
• 250 GPOs with over 94K purchasing relationships
• 800 ACOs with more than 4K relationships to HCOs & IDNs
• Over 2.7M HCP & HCO affiliations

2 LexisNexis Data
You May Be Left With Lots of Questions

- How many locations does HCP practice at—FTE and % stats?
- What is the potential value of a system?
- Is business within campus owned or just co-located?
- HCO influence—is it 100% owned by corporation?
- Where should we focus field force?
Understanding the Relationships and Hierarchies
Starting Point: The Right Sources and Mix of Data

The right combination of sources is key to a comprehensive view of IDNs
Example of How the Consortium helps enhance master data

Previous Address, Jones 123 Apple St.

Record 2, Jones 123 Apple St.

Record 3, Jones 123 Apple St.

NEW Record 4, Jones 345 Pear St.

Record 5, Jones 345 Pear St. VALIDATED
Accurate and Broad Data is Critical—What the Data Tells Us

**DATA REQUIREMENTS:**

- IDNs structure, influence and decision-making
- Where practitioners and facilities are located
- Organizational affiliations
- Practitioner affiliations
- GPO memberships
- ACO populations

**ALLOWS FOR:**

- Quantifying the actual or potential contract value of an IDN
- Developing more effective account-based sales strategies and plans
- Targeting and establishing business relationships with IDN and provider key decision makers
Bringing it All Together for a Complete View of the Market

Group Purchasing Organization (GPO)

Integrated Delivery Network (IDN)

Accountable Care Organization (ACO)

Group Purchasing Organization (GPO)

Integrated Delivery Network (IDN)

Accountable Care Organization (ACO)
The Customer Data Management Challenge
The Customer Data Management Challenge for LSOs

MASTER DATA

• Your business critical data that is stored in disparate systems spread across your Enterprise.

• Common data about customers, suppliers, partners, products, materials, accounts and other critical “entities,” that is commonly stored and replicated across IT systems.

• High-value, core information used to support critical business processes across the enterprise. It is at the heart of every business transaction, application, report and decision.

• Big data = all data: both structured and unstructured as well as internal and external. The combination of MDM and emerging big data technologies provides a 360-degree view of customers and products.

CUSTOMER DATA (DOMAIN-SPECIFIC)

• **Individuals:** Practitioners, healthcare providers

• **Organizations:** Hospitals, clinics, group practices

• **Affiliations:** Hospital networks, group practice physicians, and the myriad of relationships between and among individuals and organizations
Question 1: What is the primary means by which your organization reaches the healthcare market to sell products?

Select one (1)

• HCP: Practitioners who treat patients (MD, DO, NP, RN, PA)
• HCO: Providers (hospitals, clinics, group practices, etc.)
• Health Systems (networks)
• Patients (direct marketing to)

When poll is active, respond at PollEv.com/cbi2016
Text CBI2016 to 22333 once to join

Answers to this poll are anonymous
How does your commercial organization acquire affiliations and relationships data on healthcare influencers?

- 3rd Parties: Consultants, Advisors, Data/Information Suppliers
- Field Sales: SFA/CRM tools
- Home Office: Web searches, dedicated internal teams, PT/temp resources
- Other Methods

*When poll is active, respond at PollEv.com/cbi2016
*Text CBI2016 to 22333 once to join
*Answers to this poll are anonymous*
Practical Applications
Use Case #1: Systems of Care – How Big is Big?

GPO: Premier
13034 Ballantyne Corp Pl
Charlotte, NC

IDN: Adventist Health
900 Hope Way
Altamonte Springs, FL

- 5,009,271 Total Claims for Adventist IDN
- 140 HCOs with all codes claims volume
- 20,855 HCPS with all codes claims volume

<table>
<thead>
<tr>
<th>FACILITY TYPE</th>
<th>COUNT</th>
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<tbody>
<tr>
<td>Group Practice</td>
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<td>Hospital</td>
<td>43</td>
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<tr>
<td>Extended Care</td>
<td>42</td>
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<td>Outpatient Facility</td>
<td>30</td>
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<tr>
<td>Equipment/Supplies</td>
<td>15</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>7</td>
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<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Imaging</td>
<td>2</td>
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<tr>
<td>Ambulance</td>
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Physicians (MD, DO, DMD, DDS)
Mid-level Practitioners (PA, RN)
Patients, Members
Systems of Care: LUNG CANCER DIAGNOSIS

GPO: Premier
13034 Ballantyne Corp Pl
Charlotte, NC

IDN: Adventist Health
900 Hope Way
Altamonte Springs, FL

Lung Cancer Activity
- 16.7k total lung cancer claims
- 60+ HCOs with lung cancer claims volume
- 2k+ HCPs with lung cancer claims volume

Pulmonary Consultants of Texas
Arlington, TX
Rank 4
1,100+ Claims

Penrad Imaging
Colorado Springs, CO
Rank 2
300+ Claims

Florida Hospital
Tampa, FL
Rank 3
700+ Claims

Florida Hospital
Orlando, FL
Rank 9
6,6k+ Claims

Physicians (MD, DO, DMD, DDS)
Mid-level Practitioners (PA, RN)
Patients, Members

[Diagram showing the systems of care with hospitals and healthcare providers]
## Top Facilities & Practitioners with Lung Cancer Activity

### Organizations with Lung Cancer Activity

<table>
<thead>
<tr>
<th>ORGNAME</th>
<th>STATE</th>
<th>RANK</th>
<th>CLAIMS</th>
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<tbody>
<tr>
<td>FLORIDA HOSPITAL</td>
<td>FL</td>
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<td>6623</td>
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<td>CO</td>
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<td>2015</td>
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<tr>
<td>PULMONARY CONSULTANTS OF TEXAS</td>
<td>TX</td>
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<td>733</td>
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<tr>
<td>ST ANTHONY HOSPITAL CENTRAL</td>
<td>CO</td>
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<tr>
<td>FLORIDA HOSPITAL FISH MEMORIAL</td>
<td>FL</td>
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<td>704</td>
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<tr>
<td>SHAWNEE MISSION MEDICAL CENTER</td>
<td>KS</td>
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### Practitioners with Lung Cancer Activity

<table>
<thead>
<tr>
<th>FIRST</th>
<th>LAST</th>
<th>SPECIALTY</th>
<th>STATE</th>
<th>RANK</th>
<th>CLAIMS</th>
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<tr>
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<tr>
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<td>SAAD-NAGUIB</td>
<td>Oncology, Medical</td>
<td>GA</td>
<td>10</td>
<td>2066</td>
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<tr>
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<td>LUKMAN</td>
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<td>1566</td>
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<td>TIRRELL</td>
<td>JOHNSON</td>
<td>Internal Medicine</td>
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<td>ROBERT</td>
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<td>SEEMA</td>
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<td>TREVINO</td>
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<tr>
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<td>AL-HAZZOURI</td>
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<td>FL</td>
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</table>
Systems of Care: **KNEE REPLACEMENT**

**GPO: Premier**
13034 Ballantyne Corp Pl
Charlotte, NC

**IDN: Adventist Health**
900 Hope Way
Altamonte Springs, FL

Knee replacement activity
- 8.4k+ total knee replacement encounters
- ~20 HCOs with knee replacement activity
- ~300 HCPs with knee replacement activity

**Avista Adventist Hospital**
Louisville, CO
Rank 2
200+ Claims

**Evans & Schroeder MDS**
Orlando, FL
Rank: 1
<11 Claims

**Florida Hospital Tampa, FL**
Rank 6
600+ Claims

**Florida Hospital Orlando, FL**
Rank 10
3,900+ Claims

**Physicians (MD, DO, DMD, DDS)**
**Mid-level Practitioners (PA, RN)**
**Patients, Members**
## Top Facilities & Practitioners with Knee Replacement Activity

<table>
<thead>
<tr>
<th>ORGNAME</th>
<th>STATE</th>
<th>RANK</th>
<th>CLAIMS</th>
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<td>3928</td>
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<tr>
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<td>CO</td>
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<td>1027</td>
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<tr>
<td>ORTHOPEDIC COLORADO HOSPITAL AT ST ANTHONY MEDICAL CAMPUS</td>
<td>CO</td>
<td>8</td>
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<tr>
<td>FLORIDA HOSPITAL</td>
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<td>606</td>
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<tr>
<td>SHAWNEE MISSION MEDICAL CENTER</td>
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<tr>
<td>ORTHOPEDIC COLORADO HOSPITAL AT ST ANTHONY MEDICAL CAMPUS</td>
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<td>ST CATHERINE HOSPITAL</td>
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<tr>
<td>GORDON HOSPITAL</td>
<td>GA</td>
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<td>128</td>
</tr>
<tr>
<td>FLORIDA HOSPITAL FISH MEMORIAL</td>
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<td>107</td>
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<table>
<thead>
<tr>
<th>FIRST</th>
<th>LAST</th>
<th>SPECIALTY</th>
<th>STATE</th>
<th>RANK</th>
<th>CLAIMS</th>
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<tr>
<td>VUONG</td>
<td>NGUYEN</td>
<td>Surgery, Orthopedic</td>
<td>FL</td>
<td>10</td>
<td>527</td>
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<tr>
<td>KENNETH</td>
<td>KRUMINS</td>
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<tr>
<td>IRA</td>
<td>GUTTENTAG</td>
<td>Surgery, Orthopedic</td>
<td>FL</td>
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<tr>
<td>J</td>
<td>COLE</td>
<td>Surgery, Orthopedic</td>
<td>FL</td>
<td>9</td>
<td>325</td>
</tr>
<tr>
<td>MARK</td>
<td>MILLS</td>
<td>Surgery, Orthopedic</td>
<td>CO</td>
<td>9</td>
<td>273</td>
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<tr>
<td>JARED</td>
<td>FORAN</td>
<td>Surgery, Orthopedic</td>
<td>CO</td>
<td>9</td>
<td>253</td>
</tr>
<tr>
<td>KRISHNA</td>
<td>TEWARI</td>
<td>Internal Medicine</td>
<td>FL</td>
<td>9</td>
<td>253</td>
</tr>
<tr>
<td>RICHARD</td>
<td>KONSENS</td>
<td>Surgery, Orthopedic</td>
<td>FL</td>
<td>9</td>
<td>245</td>
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<tr>
<td>JAVIER</td>
<td>PEREZ</td>
<td>Physician Assistant</td>
<td>FL</td>
<td>9</td>
<td>240</td>
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<tr>
<td>MICHAEL</td>
<td>FEIGN</td>
<td>Surgery, Orthopedic</td>
<td>CO</td>
<td>9</td>
<td>233</td>
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</tbody>
</table>
System of Cares – How Big is Big?

GPO: Premier
13034 Ballantyne Corp Pl
Charlotte, NC

Avista Adventist Hospital
Louisville, CO
Rank 2
200+ Claims

Penrad Imaging
Colorado Springs, CO
Rank 2
300+ Claims

Pulmonary Consultants of Texas
Arlington, TX
Rank 4
1100+ Claims

Florida Hospital Orlando, FL
Rank 10
3,900+ Claims

Florida Hospital Orlando, FL
Rank 9
6,600+ Claims

Evans & Schroeder MDS
Orlando, FL
Rank 1
<11 Claims

Florida Hospital Tampa, FL
Rank 3
730+ Claims

Florida Hospital Tampa, FL
Rank 6
600+ Claims

Physicians (MD, DO, DMD, DDS)
Mid-level Practitioners (PA, RN)
Patients, Members
ACTIONABLE INSIGHTS:
IDN contracting, targeting and general account management strategy will be shaped by the account potential determined by the type of patients seen/treated by disease/condition.

<table>
<thead>
<tr>
<th>THERAPY LINE</th>
<th>IDN TOTAL CLAIMS VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congestive Heart Failure</td>
<td>92,500+</td>
</tr>
<tr>
<td>Knee Replacement</td>
<td>8,400+</td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>16,700+</td>
</tr>
<tr>
<td>All Codes</td>
<td>&gt;5,000,000+</td>
</tr>
</tbody>
</table>
Which components are important to me?

What are the network components?

What level of granularity should I view?

What is our market share strategy?

How do I target the right influencers?
The federal government and some states and municipalities require manufacturers to disclose certain promotional and research activities which are published on Web sites for review and analysis.

Published transparency data includes the following:

- Manufacturer
- Covered recipient
- Spend type
- Transaction amount and date
#2: Leveraging TOV Transparency Data

• See where competitors are focusing resources
• Determine where my company is focusing resources
• Determine where my company COULD BE focusing resources
• See marketplace trends
• See what’s working and what’s not
• See what’s fading and what’s hot

Understanding behaviors at what levels and where purchasing decisions are being made
How does your organization use public transparency data for market intelligence?

- Yes, we use it formally to support Targeting and Segmentation
- Yes, we use it informally to support Targeting and Segmentation
- No, we do not have a formal or informal process to use it
- No, but we have plans to

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Text CBI2016 to 22333 once to join
Answers to this poll are anonymous
Use Case #3: Socioeconomic Data

Affordable Care Act
• 1/1/2014 - Health Insurance Marketplace Exchanges
  • New health plan members without claims history

Population Management & Risk Stratification
• Assessing members’ future health risk
  • Identifying high-risk members for engagement
  • Predictive analytics

Legacy Data
• Medical/Rx claims data – baseline
  • Less reliable supplemental data (lab, HRA)
  • Hidden trends and costs

Socioeconomic Data
• Reliable
  • Identifies hidden trends and costs
  • Improves model accuracy
Discovering the TRUE Predictive Power of Socioeconomic Indicators

Socioeconomic Indicators have shown value when **added to legacy health care data** in uncovering ‘hidden’ risks and behavioral patterns.

Socioeconomic Indicators have great value in quantifying healthcare risks for new members and prospects for whom **legacy health care data are missing**.

Socioeconomic Indicators have great value in solving some **health care operational roadblocks**—finding where members live and/or correct phone numbers so the members can be reached; prevention of fraud, waste and abuse, etc…
What are Socioeconomic Health Attributes?

- Comprehensive and current socioeconomic factors available via flat files or XML
- Selected after being validated by using statistical methods and visualization techniques targeting 8 continuous health care targets and 7 health care binary outcomes to study the predictive power of 384+ Socioeconomic attributes:

<table>
<thead>
<tr>
<th>Health Care Targets</th>
<th>Health Care Outcomes (Yes/No Observations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Cost</td>
<td>1. Top 10% Total Cost</td>
</tr>
<tr>
<td>2. Hospitalization</td>
<td>2. Hospitalization</td>
</tr>
<tr>
<td>3. Emergency Visits</td>
<td>3. Emergency Visits</td>
</tr>
<tr>
<td>4. Pharmacy Cost</td>
<td>4. Top 10% Pharmacy Cost</td>
</tr>
<tr>
<td>5. Medication Adherence</td>
<td>5. Medication Adherence =&gt;80%</td>
</tr>
<tr>
<td>6. Stress Index (Severity)</td>
<td>6. Top 5% Stress Index</td>
</tr>
<tr>
<td>7. Stress Index (Percentile)</td>
<td>7. Top 10% Motivation</td>
</tr>
<tr>
<td>8. Motivation</td>
<td></td>
</tr>
</tbody>
</table>
How are Socioeconomic Health Attributes Used?

**Custom Predictive Risk Modeling**
- Increase accuracy of clinical risk models
- Determine stress severity
- Feed health risk models to assess initial health risk for new members and established members who do not utilize their health care benefits
- Enhance traditional age/gender models used when historical claims data is unavailable

**Risk Insights**
- Provide insights into the Socioeconomic Health Score and other predictive risk scores produced by models that use this data
Innovation and Intelligence - The Socioeconomic Health Score

Predicting health outcomes utilizing socioeconomic attributes without any claims data

GLM (Generalized Linear Model) predicts next year's health status at individual level

Improved accuracy over traditional age/gender models

Disease management cost savings value

Improved cost predictions
What is the Socioeconomic Health Score?

Predicts the potential health risk over the next 12 months for new members and members who do not utilize their health care benefits.

Utilizes the Socioeconomic Health Attributes and internally derived measures based on socioeconomic factors.

Member-level score represented.

Available via flat or XML files refreshed in various frequencies.
How is the Socioeconomic Health Score Used?

Initial health risk assessment for members with little-to-no historical claims data

Concise score can be used alone or in conjunction with other modeling or population platforms to identify patients for proactive intervention

Weighted with other health risk predictions to create a composite score for improved accuracy in a member’s health risk assessment

• New members / health exchange members
• Non-users
• Improved health risk assessment over traditional age/gender models

• Wellness programs
• Care management
Case 1: Socioeconomic Health Score (SHS) for Individuals who Filed for Bankruptcy*

<table>
<thead>
<tr>
<th>Bankruptcy Count</th>
<th>Count</th>
<th>%</th>
<th>Age</th>
<th>PMPM Actual P$K</th>
<th>Age/Gender Model</th>
<th>SHS Model</th>
<th>Age/Gender Model</th>
<th>SHS Model</th>
<th>Delta($)</th>
<th>Delta(%)</th>
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<tr>
<td>0</td>
<td>1,364,053</td>
<td>88.8</td>
<td>44.8</td>
<td>$361</td>
<td>$372</td>
<td>$360</td>
<td>-$11</td>
<td>$0</td>
<td>-3.0%</td>
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<td>49.7</td>
<td>$475</td>
<td>$402</td>
<td>$477</td>
<td>$73</td>
<td>-$2</td>
<td>15.3%</td>
<td>-0.4%</td>
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<td>2</td>
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<td>50.7</td>
<td>$527</td>
<td>$409</td>
<td>$531</td>
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<td>-$4</td>
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<td>-0.8%</td>
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<td>50.8</td>
<td>$542</td>
<td>$409</td>
<td>$549</td>
<td>$133</td>
<td>-$7</td>
<td>24.5%</td>
<td>-1.2%</td>
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<td>4+</td>
<td>1,899</td>
<td>0.1</td>
<td>50.8</td>
<td>$532</td>
<td>$411</td>
<td>$576</td>
<td>$121</td>
<td>-$44</td>
<td>22.8%</td>
<td>-8.2%</td>
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<tr>
<td>Total: 1+</td>
<td>172,836</td>
<td>11.2</td>
<td>49.9</td>
<td>$485</td>
<td>$403</td>
<td>$488</td>
<td>$82</td>
<td>-$3</td>
<td>16.9%</td>
<td>-0.6%</td>
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</table>

*11.2% of the commercially insured population with age over 18

**Conclusion**

On average, the Socioeconomic Health Score is more accurate in total cost prediction than the traditional Age/Gender model by ~15% for those who filed for bankruptcy. For this population, the Socioeconomic Health Score model is more accurate by $79 per month, $948 annually.
## Case 2: Socioeconomic Health Score (SHS) for Individuals with Derogatory Records*

<table>
<thead>
<tr>
<th>DerogSeverityIndex</th>
<th>Count</th>
<th>%</th>
<th>Age</th>
<th>PMPM Actual $5K</th>
<th>Age/Gender Model</th>
<th>SHS Model</th>
<th>Age/Gender Delta ($)</th>
<th>SHS Delta (%)</th>
<th>Age/Gender Delta (%)</th>
<th>SHS Delta (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No derogatory record</td>
<td>1,198,114</td>
<td>78.0%</td>
<td>44.4</td>
<td>$353</td>
<td>$370</td>
<td>$352</td>
<td>-$17</td>
<td>$1</td>
<td>-4.7%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Record contains released liens</td>
<td>7,743</td>
<td>0.5%</td>
<td>50.3</td>
<td>$447</td>
<td>$409</td>
<td>$434</td>
<td>$38</td>
<td>$13</td>
<td>8.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Record contains bankruptcies</td>
<td>97,991</td>
<td>6.4%</td>
<td>50.0</td>
<td>$483</td>
<td>$407</td>
<td>$485</td>
<td>$76</td>
<td>-$2</td>
<td>15.7%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Record contains filed liens</td>
<td>192,133</td>
<td>12.5%</td>
<td>49.5</td>
<td>$449</td>
<td>$398</td>
<td>$451</td>
<td>$51</td>
<td>-$2</td>
<td>11.4%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Record contains evictions</td>
<td>26,657</td>
<td>1.7%</td>
<td>44.4</td>
<td>$380</td>
<td>$354</td>
<td>$397</td>
<td>$26</td>
<td>-$17</td>
<td>6.8%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Record contains felonies</td>
<td>14,251</td>
<td>0.9%</td>
<td>44.3</td>
<td>$391</td>
<td>$320</td>
<td>$387</td>
<td>$72</td>
<td>$4</td>
<td>18.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total w derog. records</td>
<td>338,775</td>
<td>22.0%</td>
<td>49.0</td>
<td>$451</td>
<td>$394</td>
<td>$454</td>
<td>$57</td>
<td>-$3</td>
<td>12.6%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>

*22% of the commercially insured population with age over 18

### Conclusion

On average, the Socioeconomic Health Score is more accurate in total cost prediction than the traditional Age/Gender model by ~12% for individuals with derogatory records (lien, bankruptcy, eviction, felony). The Socioeconomic Health Score model is more accurate by $54 per month, $648 annually.
## Case 3: Socioeconomic Health Score (SHS) for Individuals with a Last Name Change in the Last 12 Months*

<table>
<thead>
<tr>
<th>Gender/Last Name Change</th>
<th>Last Name Change Count</th>
<th>%</th>
<th>Age</th>
<th>PMPM Actual $5K</th>
<th>Age/Gender Model</th>
<th>SHS Model</th>
<th>Delta($)</th>
<th>Delta(%)</th>
<th>ER</th>
<th>IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male No</td>
<td>92,618</td>
<td>47.1</td>
<td>30.3</td>
<td>$148</td>
<td>$162</td>
<td>$151</td>
<td>-$14</td>
<td>-9.5%</td>
<td>0.15</td>
<td>0.02</td>
</tr>
<tr>
<td>Male Yes</td>
<td>3,065</td>
<td>1.6%</td>
<td>28.8</td>
<td>$126</td>
<td>$152</td>
<td>$145</td>
<td>-$26</td>
<td>-21.0%</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>Female No</td>
<td>95,785</td>
<td>48.7</td>
<td>30.4</td>
<td>$349</td>
<td>$308</td>
<td>$350</td>
<td>$41</td>
<td>11.8%</td>
<td>0.22</td>
<td>0.12</td>
</tr>
<tr>
<td>Female Yes</td>
<td>5,289</td>
<td>2.7%</td>
<td>29.5</td>
<td>$380</td>
<td>$301</td>
<td>$377</td>
<td>$78</td>
<td>20.6%</td>
<td>0.25</td>
<td>0.17</td>
</tr>
</tbody>
</table>

**Conclusion**

Age/Gender model underestimates this pattern by 20% which equates to $75 per month, $900 annually.
Innovation and Intelligence: Advancing Health Care Predictive Analytics for LSOs

Comprehensive and current data that was statistically validated in the context of health care outcomes.

These solutions provide meaningful insights that drive highly informed decisions in the absence of clinical data.

These solutions improve the accuracy of existing models and are the perfect complement to health care customers’ ongoing risk identification and stratification efforts.
Using Data and Intelligence to Derive Business Insights

Insights required to more efficiently and accurately target and interact with the right providers:

- Sales
- Claims
- Promotional response
- Transfers of value
- Real-time, rules-based alerts/validation
Wrap Up
For More Information

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