The Changing Nature of California’s Medical Provider Networks

Alex Swedlow
President
California Workers’ Compensation Institute
The Changing Nature of California’s Medical Provider Networks

Agenda

- California’s Increased Interest in Network Outcomes
- Changing Nature of Physician Network Outcomes
- What’s Next ...
Increased Interest in Network Evaluation

California Medical Benefits & Network Trends: 1990–2017

- 4.3-fold increase in average cost per claim
- Medical now almost two-thirds of all benefits
- Legislative and regulatory reforms to encourage network use
- Significant growth in network use and associated friction costs
Increased Interest in Network Evaluation

Estimated Ultimate Medical Benefits Per California Indemnity Claim

Source: WCIRB

1990: $8,756
1990–2017: 332% relative increase
2002: $32,084
2011: $41,678
2015: $35,434
2017: $37,828
Increased Interest in Network Evaluation

California Legislative Reforms

- **2003: Extend Network Utilization**
  - Increase quality of care and cost controls
  - Extend payer control from 30 days to life of claim

- **2013: Simplify Medical Provider Network (MPN) Administration**
  - Extend network approval to 4 years
  - All network physicians must acknowledge in writing
  - Provide appointment access assistance
  - Curtail liability of treatment outside the MPN
Changing Nature of Californian Physician Networks

Percent of 1st Year Visits to Network Providers
All Services: AY 2004–2016

Source: CWCI 2014
Increased Interest in Network Evaluation: Friction Costs

Administrative Expenses

- Medicare (2%)
- Workers’ Comp Median (22%)
- Private Group Health (18%)
- California Workers’ Comp (53%)

Source: WCIRB
Increased Interest in Network Evaluation: Friction Costs

California Benefit Delivery Expense Categories

- Med Mgt. 41%
- Defense Attorney 30%
- Medical-Legal 12%
- Other 16%

Source: WCRI 2018
Increased Interest in Network Evaluation: Friction Costs

California Medical Cost Containment
Utilization Review, Medical Bill Review & Network Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Util Rvw</th>
<th>MBR/Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>2005</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>2006</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>2007</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2008</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2009</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2010</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2011</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>2012</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2013</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2014</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2015</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2016</td>
<td>53%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: CWCI 2018
Essential Elements of Network Evaluation

Key Considerations:

- Adequate data
- “But my patients are sicker!”
- Transparency of evaluation

“I think you should be more explicit here in step two”
Essential Elements of Network Evaluation

Medical bill data is not enough: Adjusting for differences

A. Medical Services
   - Outpatient
   - Inpatient

B. Payment Transactions
   - Medical, Lost-Time
   - Expenses

C. Injured Worker
   - Employee & Injury Characteristics
   - Attorney Involvement
   - Comorbidities

D. Employer Characteristics
   - Industry and Occupation
   - Size and Location
### Average Number of Unique Providers, Visits and Diagnosis Codes

#### Source: CWCI 2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Med Only</th>
<th>Visits</th>
<th>Diagnostic Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Provs</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits</td>
<td></td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>Diagnostic Codes</td>
<td></td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>Lost-Time</td>
<td>5.2</td>
<td>68.3</td>
<td>12.2</td>
</tr>
</tbody>
</table>

2012–2014 California Injuries
Essential Elements of Network Evaluation

Getting the Injury Description Right

2015 Switch From ICD-9 to ICD-10

- Increased # of Codes
- Increased Specificity

Differences between ICD-9 and ICD-10

<table>
<thead>
<tr>
<th>Code Type</th>
<th>ICD-9</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure</td>
<td>3,824</td>
<td>71,924</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>14,025</td>
<td>69,823</td>
</tr>
</tbody>
</table>
Essential Elements of Network Evaluation

ICD-10 Pop Quiz:

Guess the correct ICD-10 code for the following occupational injury

A. T33.90: Frostbite
B. S61.24: Puncture wound of finger
C. W56.21XA: Bitten by Orca, Initial Encounter

Source: M&C Saatchi
Essential Elements of Network Evaluation

Primary Providers from 1\textsuperscript{st} Month through Closure

Percent of Claims with One or More Changes in Primary Provider

<table>
<thead>
<tr>
<th></th>
<th>Medical-Only</th>
<th>Lost-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Provider</td>
<td>94.7%</td>
<td>74.8%</td>
</tr>
<tr>
<td>Change in Provider</td>
<td>5.3%</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

Source: CWCI 2015

2012–2014 California Injuries
Essential Elements of Network Evaluation

Primary Providers Influence from 1\textsuperscript{st} Month through Closure

Percent of Claims with One or More Changes in Primary Provider

<table>
<thead>
<tr>
<th></th>
<th>Medical-Only</th>
<th>Lost-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same Provider</td>
<td>$1,095</td>
<td>$17,809</td>
</tr>
<tr>
<td>Change in Provider</td>
<td>$3,811</td>
<td>$41,128</td>
</tr>
</tbody>
</table>

2012–2014 California Injuries

Source: CWCI 2015
CWCI Research: The Changing Nature of Physician Networks

2003: Volume-Based Outcomes: Does Practice Make Perfect?

Lessons from Group Health

- Clinical literature (Luft et al.)
- Improving outcomes through select network providers
### Percentages of Providers and Claims by Experience Category

**California Claims with DOI 1993–2000**

<table>
<thead>
<tr>
<th>Claim Volume Category</th>
<th>Providers</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38.5%</td>
<td></td>
</tr>
<tr>
<td>2-4</td>
<td>25.7%</td>
<td></td>
</tr>
<tr>
<td>5-29</td>
<td>25.6%</td>
<td></td>
</tr>
<tr>
<td>30-49</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>50-99</td>
<td>2.9%</td>
<td></td>
</tr>
<tr>
<td>100-199</td>
<td>1.8%</td>
<td></td>
</tr>
<tr>
<td>200-499</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>500-999</td>
<td>0.5%</td>
<td></td>
</tr>
<tr>
<td>&gt;=1000</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

**2003: Volume-Based Outcomes (aka, Practice makes Perfect)**

Source: CWCI 2015

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**Note:**
- Provider and claim percentages may not sum to 100% due to rounding.
- The chart displays the percentage distribution of providers and claims across different claim volume categories.
2003: Volume-Based Outcomes (aka, Practice makes Perfect)
California Claims with DOI 1993–2000

Percentages of Providers and Claims by Experience Category

Source: CWCI 2015
2003: Volume-Based Outcomes (aka, Practice makes Perfect)
California Claims with DOI 1993–2000

Adjusted Average Medical Paid by Experience Category

- 1: $35,307
- 2-4: $30,221
- 5-29: $28,613
- 30-49: $27,097
- 50-99: $24,018
- 100-199: $22,962
- 200-499: $19,368
- 500-999: $18,876
- >=1000: $15,943

Source: CWCI 2015
Volume-Based Outcomes in Workers’ Comp

Claims managed by providers with higher levels of experience were associated with:

- Lower medical costs
- Faster return-to-work (TD days)
- Less attorney involvement
- Faster claim resolution
CWCI Research: The Changing Nature of Physician Networks

2015 PPO/MPN study

Changes in physician network use across 3 eras:

1. PPO (DOI 2000–2002)
2. PPO/MPN Transition (DOI 2003–2008)
3. MPN (DOI 2009–2011)
2015: The Changing Nature of Physician Networks

MPN as Primary Treating Provider

- PPO (2000–2002): 55.4%
- PPO/MPN (2003–2008): 70.0%
- MPN (2009–2011): 79.5%

Source: CWCI 2015
2015: The Changing Nature of Physician Networks

MPN as Primary Treating Provider

<table>
<thead>
<tr>
<th></th>
<th>PPO</th>
<th>PPO/MPN</th>
<th>MPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network</td>
<td>$9,321</td>
<td>$9,843</td>
<td>$13,654</td>
</tr>
<tr>
<td>Non-Network</td>
<td>$11,065</td>
<td>$10,290</td>
<td>$14,061</td>
</tr>
</tbody>
</table>

-16%  -4%  -3%

Source: CWCI 2015
CWCI Research: The Changing Nature of Physician Networks

2018 Study: Variation in MPN Outcomes (Preliminary Results)

- Variation on network outcomes
  - 11 distinct medical provider networks
- California Claims with DOI from 2011–2014 developed through 2017
- Case-mix adjusted results on cost and medical utilization
2018: Variation in Medical Provider Networks (Preliminary Results)

MPN as Primary Treating Provider
California Injuries: 2000–2017

- PPO (2000): 55.4%
- PPO/MPN (2004): 70.0%
- MPN (2010): 79.5%
- MPN (2017): 89.3%

Source: CWCI 2015
2018: Variation in Medical Provider Networks (Preliminary Results)

Continuity: Percent of Network Services Per Claim
California Indemnity Claims at 36 Months

<table>
<thead>
<tr>
<th>Region</th>
<th>Pcnt Network Srvcs (36M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Counties</td>
<td>78.5%</td>
</tr>
<tr>
<td>Sierras</td>
<td>83.4%</td>
</tr>
<tr>
<td>Valleys</td>
<td>84.1%</td>
</tr>
<tr>
<td>Bay Area</td>
<td>88.5%</td>
</tr>
<tr>
<td>Central Coast</td>
<td>82.9%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>82.5%</td>
</tr>
<tr>
<td>Orange/Inld Emp</td>
<td>84.8%</td>
</tr>
<tr>
<td>San Diego</td>
<td>88.9%</td>
</tr>
<tr>
<td>Total</td>
<td>85.1%</td>
</tr>
</tbody>
</table>

Source: CWCI 2018
2018: Variation in Medical Provider Networks (Preliminary Results)
Access: Average Distance from Injured Worker to Primary Provider
Indemnity Claims at 36 Months

Source: CWCI 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Avg Miles To Primary Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Counties</td>
<td>14.1</td>
</tr>
<tr>
<td>Sierras</td>
<td>19.6</td>
</tr>
<tr>
<td>Valleys</td>
<td>21.5</td>
</tr>
<tr>
<td>Bay Area</td>
<td>13.2</td>
</tr>
<tr>
<td>Central Coast</td>
<td>18.8</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>12.8</td>
</tr>
<tr>
<td>Orange/Inld Emp</td>
<td>21.9</td>
</tr>
<tr>
<td>San Diego</td>
<td>21.7</td>
</tr>
<tr>
<td>Total</td>
<td>17.6</td>
</tr>
</tbody>
</table>

Source: CWCI 2018
2018: Variation in Medical Provider Networks (Preliminary Results)

Adjusted Average Cost Per Claims
California Indemnity Claims at 36 Months

Source: CWCI 2018
2018: Variation in Medical Provider Networks (Preliminary Results)

Adjusted Average Cost Per Claim Across MPNs
California Indemnity Claims at 36 Months

Overall Adjusted Average Medical
All MPNs

$21,137
-2%

Variation in Adjusted Average Medical
Across MPNs

Min 25th 50th 75th Max

$13,944 $20,322 $21,08 $21,774 $25,376

Source: CWCI 2018
2018: Variation in Medical Provider Networks (Preliminary Results)

Adjusted Average Medical Benefits
California Indemnity Claims at 36 Months

![California map showing adjusted average medical benefits per region]

<table>
<thead>
<tr>
<th>Region</th>
<th>Avg Med Paid (36M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Counties</td>
<td>$18,808</td>
</tr>
<tr>
<td>Sierras</td>
<td>$19,729</td>
</tr>
<tr>
<td>Valleys</td>
<td>$17,476</td>
</tr>
<tr>
<td>Bay Area</td>
<td>$18,327</td>
</tr>
<tr>
<td>Central Coast</td>
<td>$19,358</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>$24,102</td>
</tr>
<tr>
<td>Orange/Inland Emp</td>
<td>$24,503</td>
</tr>
<tr>
<td>San Diego</td>
<td>$17,902</td>
</tr>
<tr>
<td>Total</td>
<td>$21,137</td>
</tr>
</tbody>
</table>

Source: CWCI 2018
2018: Variation in Medical Provider Networks (Preliminary Results)

Adjusted Average TD Days Per Claim
California Indemnity Claims at 36 Months

Variation in Adjusted Average TD Days Across MPNs

Source: CWCI 2018
Variation in MPN Outcomes

2018: Variation in Medical Provider Networks (Preliminary Results)

Cost Drivers

Adjusted Variation in Closure Rates, Attorney Involvement and Opioid Use
California Indemnity Claims at 36 Months

<table>
<thead>
<tr>
<th></th>
<th>MPN</th>
<th>Non-MPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closure Rate</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>Attorney Involvement</td>
<td>53%</td>
<td>54%</td>
</tr>
<tr>
<td>Opioids</td>
<td>48%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: CWCI 2018
## 2018: Variation in Medical Provider Networks (Preliminary Results)

Outpatient Service Utilization by Fee Schedule Section
California Indemnity Claims at 36M

<table>
<thead>
<tr>
<th>Fee Sch Desc</th>
<th>MPN Claims</th>
<th>Non-MPN Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg Visits</td>
<td>Pcnt MPN</td>
</tr>
<tr>
<td>Physical Medicine</td>
<td>28.7</td>
<td>83%</td>
</tr>
<tr>
<td>Eval &amp; Mgt.</td>
<td>15.5</td>
<td>88%</td>
</tr>
<tr>
<td>Radiology</td>
<td>4.1</td>
<td>79%</td>
</tr>
<tr>
<td>Medical Treatment</td>
<td>3.8</td>
<td>73%</td>
</tr>
<tr>
<td>Lab/Path</td>
<td>3.5</td>
<td>59%</td>
</tr>
<tr>
<td>Surgery</td>
<td>3.4</td>
<td>76%</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>1.4</td>
<td>86%</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>1.3</td>
<td>79%</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>0.2</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61.8</strong></td>
<td><strong>82%</strong></td>
</tr>
</tbody>
</table>

Source: CWCI 2018
Changing Nature of Medical Provider Networks: Lessons Learned

- High rate of network use: 90% is now average
- Not all networks are created equal
- Location matters
- Manage managed care networks

What’s next in medical provider networks?
What’s Next: Shared Risk – Alternative Payment Models

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

FFS is considered the least efficient, most costly delivery model.

Fee for Service

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

- “Tournament-style”
- Group health measures (BP & cholesterol monitoring, immunization, smoking cessation) marginally relevant to WC

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

- Attempted to grow incentives of FPs
- Transforming a practice is difficult
- Mixed results

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

- A middle ground between capitation & incentives
- Blends FFS payments and a target budget

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

Value-Based Care/Prospective Paid Bundles

- “Medical episodes”
- Focusing on the patient, provider and payer
- Challenge to define/contain an episode

Source: HC3I: Why Incentives Matter
Shared Risk – Alternative Payment Models

- From the 19th century railroad towns
- Revenue based on patient volume and risk profile
- Strong incentive to manage patient care

Source: HC3I: Why Incentives Matter
THANKS FOR LISTENING.

The Changing Nature of
California’s Medical Provider Networks

Alex Swedlow
President
California Workers’ Compensation Institute