The Art of Benchmarking Risk
Without Needing a Statistics Degree

What We Are Going To Cover

1. Why Benchmark to Begin With?
2. The Analyses You Should Consider
3. How to Identify Outliers
4. How to Build Your Audit Plan
Why Benchmark to Begin With? Reactive Auditing Trend

- The current reactive approach to auditing and monitoring
  - Just responding to audit requests
  - Conducting documentation reviews entirely in random
  - Benchmarking without a set action plan
- Reasons why this reactive approach is still being used
  - Data issues
  - Understanding benchmarking
  - Restricted FTE and tech resources
  - Fear of knowing

Becoming Proactive with Provider Benchmarking

- Develop benchmarking and data analytic capabilities that mirror methods being used by the OIG, DOJ, CMS etc.
- Focus your limited auditing and monitoring resources towards providers based on risk
- Reduce workload on the auditing team
- Provide transparency throughout the organization and increase the effectiveness of strategic planning
- Due diligence of new practices
### Who is Auditing Healthcare Providers

**An Example: Illinois**

<table>
<thead>
<tr>
<th>Type</th>
<th>Contractors</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare Administrative Contractors (MACs)</td>
<td>National Government Services</td>
<td>• Process claims and provider payments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reduce payment error rates</td>
</tr>
<tr>
<td>Zone Program Integrity Contractors (ZPICs)</td>
<td>Cahaba Safeguard Administrators</td>
<td>• Focus on identifying fraud</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data mining and analysis</td>
</tr>
<tr>
<td>Supplemental Medical Review Contractor (SMRC)</td>
<td>Strategic Health Solutions</td>
<td>• Nationwide claim review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data mining and analysis</td>
</tr>
<tr>
<td>Comprehensive Error Rate Testing Contractors (CERT)</td>
<td>Multiple contractors</td>
<td>• Annual audits to determine PFS error rates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All provider types</td>
</tr>
<tr>
<td>Recovery Audit Contractors (RACs)</td>
<td>CGI Technologies (Medicare)</td>
<td>• Identify over and under payment errors</td>
</tr>
<tr>
<td></td>
<td>HNIS (Medicaid)</td>
<td></td>
</tr>
<tr>
<td>DHHS – Office of Inspector General (OIG)</td>
<td>N/A</td>
<td>• Audits and investigations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Annual Work Plan published</td>
</tr>
<tr>
<td>Department of Justice (DOJ)</td>
<td>N/A</td>
<td>• Enforcement actions under the False Claims Act</td>
</tr>
<tr>
<td>Medicaid Inspector General</td>
<td>IL Dept. of Healthcare and Family Services</td>
<td>• Aggressively using extrapolation for repayment liabilities</td>
</tr>
</tbody>
</table>

### Availability of Provider Data Online

How easy it is to find out who your outliers are online...

*Live Example*
What Analyses You Should Consider?

- E/M Distribution
- High Risk Modifiers
- Top Billed Procedures
- High Productivity Providers

Understanding Peer Group Data

- CMS Utilization Raw Data
  - Sub-Specialty Bias
  - Payer Mix Bias
- MGMA – Surveys and Benchmarking Data
  - Understand Volume of Data Included (Total / Specialty / Locality)
- CMS Utilization & Payments Data
  - Line Item Data Not Included on Services Performed on Small Number of Patients
Example of CMS Sub-Specialty Bias

- Understanding the make-up of the peer group data is critical when attempting to make determinations on the results

<table>
<thead>
<tr>
<th>CPT</th>
<th>Freq</th>
<th>U/H</th>
<th>UM</th>
<th>DIFF</th>
<th>UM</th>
<th>DIFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>99211</td>
<td>0</td>
<td>0%</td>
<td>0.3</td>
<td>-0.3</td>
<td>0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>99212</td>
<td>0</td>
<td>0%</td>
<td>11.36</td>
<td>-11.36</td>
<td>7.66</td>
<td>-7.66</td>
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<tr>
<td>99213</td>
<td>15</td>
<td>5.43%</td>
<td>42.07%</td>
<td>-56.46%</td>
<td>61.96%</td>
<td>-56.35%</td>
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<tr>
<td>99214</td>
<td>245</td>
<td>91.76%</td>
<td>25%</td>
<td>46.76%</td>
<td>28.36%</td>
<td>63.4%</td>
</tr>
<tr>
<td>99215</td>
<td>7</td>
<td>2.62%</td>
<td>1.23%</td>
<td>1.39%</td>
<td>1.98%</td>
<td>0.64%</td>
</tr>
</tbody>
</table>
High Risk Modifier Analysis
Focus On
• 24
• 25
• 58
• 59
• 62
• 63
• 75
• 78
• 80
• AS

All Services Billed (00100 - 99499)

<table>
<thead>
<tr>
<th>Rank</th>
<th>CPT</th>
<th>Description</th>
<th>Fee</th>
<th>Freq</th>
<th>Util</th>
<th>Gross Charges</th>
<th>Top Billed Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>99214</td>
<td>Office/outpatient visit est</td>
<td>$109.44</td>
<td>245</td>
<td>30.39</td>
<td>$26,812.50</td>
<td>3  6.66%</td>
</tr>
<tr>
<td>2</td>
<td>99204</td>
<td>Office/outpatient visit new</td>
<td>$167.40</td>
<td>147</td>
<td>18.22</td>
<td>$24,607.52</td>
<td>13  1.71%</td>
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<tr>
<td>3</td>
<td>99004</td>
<td>Postop follow-up visit</td>
<td>$0.00</td>
<td>122</td>
<td>15.13</td>
<td>$0.00</td>
<td>14  1.57%</td>
</tr>
<tr>
<td>4</td>
<td>73564</td>
<td>X-ray exam knee 4 or more</td>
<td>$40.32</td>
<td>104</td>
<td>12.93</td>
<td>$4,193.23</td>
<td>12  1.88%</td>
</tr>
<tr>
<td>5</td>
<td>73560</td>
<td>X-ray exam of shoulder</td>
<td>$29.88</td>
<td>32</td>
<td>3.97</td>
<td>$956.14</td>
<td>8   2.74%</td>
</tr>
<tr>
<td>6</td>
<td>29881</td>
<td>Knee arthroscopy/surgery</td>
<td>$561.59</td>
<td>24</td>
<td>2.97</td>
<td>$13,476.25</td>
<td>2  15.65%</td>
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<tr>
<td>7</td>
<td>29827</td>
<td>Arthrosec rotator cuff mcpr</td>
<td>$1,093.31</td>
<td>16</td>
<td>1.98</td>
<td>$17,492.92</td>
<td>1  1.655%</td>
</tr>
<tr>
<td>8</td>
<td>99213</td>
<td>Office/outpatient visit est</td>
<td>$74.16</td>
<td>15</td>
<td>1.86</td>
<td>$1,112.38</td>
<td>1 16.55%</td>
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<tr>
<td>9</td>
<td>29826</td>
<td>Shoulder arthroscopy/surgery</td>
<td>$183.24</td>
<td>14</td>
<td>1.73</td>
<td>$2,565.33</td>
<td>1 16.55%</td>
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<tr>
<td>10</td>
<td>29824</td>
<td>Shoulder arthroscopy/surgery</td>
<td>$490.83</td>
<td>12</td>
<td>1.48</td>
<td>$8,289.98</td>
<td>10 2.19%</td>
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</tbody>
</table>
Top Billed Procedures
Only Surgical Services Included

<table>
<thead>
<tr>
<th>Rank</th>
<th>CPT</th>
<th>Description</th>
<th>Fee</th>
<th>Freq</th>
<th>Util %</th>
<th>Gross Charges</th>
<th>Rank</th>
<th>Util %</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29881</td>
<td>Knee arthroscopy/surgery</td>
<td>$561.59</td>
<td>24</td>
<td>24.48%</td>
<td>$13,478.25</td>
<td>16</td>
<td>0.76%</td>
<td>23.72%</td>
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<td>2</td>
<td>29827</td>
<td>Arthroscopy rotator cuff rep</td>
<td>$1,093.31</td>
<td>16</td>
<td>16.32%</td>
<td>$17,492.92</td>
<td>14</td>
<td>0.88%</td>
<td>15.44%</td>
</tr>
<tr>
<td>3</td>
<td>29826</td>
<td>Shoulder arthroscopy/surgery</td>
<td>$182.24</td>
<td>14</td>
<td>14.28%</td>
<td>$2,565.33</td>
<td>10</td>
<td>1.05%</td>
<td>13.23%</td>
</tr>
<tr>
<td>4</td>
<td>29824</td>
<td>Shoulder arthroscopy/surgery</td>
<td>$690.83</td>
<td>12</td>
<td>12.24%</td>
<td>$6,289.98</td>
<td>25</td>
<td>0.52%</td>
<td>11.72%</td>
</tr>
<tr>
<td>5</td>
<td>27447</td>
<td>Total knee arthroplasty</td>
<td>$1,408.30</td>
<td>7</td>
<td>7.14%</td>
<td>$9,858.13</td>
<td>3</td>
<td>4.12%</td>
<td>3.02%</td>
</tr>
<tr>
<td>6</td>
<td>29888</td>
<td>Knee arthroscopy/surgery</td>
<td>$1,021.67</td>
<td>7</td>
<td>7.14%</td>
<td>$7,151.68</td>
<td>2</td>
<td>2.04%</td>
<td>$1,288.78</td>
</tr>
<tr>
<td>7</td>
<td>20610</td>
<td>Drain/inj joint/bursa w/o us</td>
<td>$61.92</td>
<td>6</td>
<td>6.12%</td>
<td>$371.51</td>
<td>1</td>
<td>41.01%</td>
<td>-34.89%</td>
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<tr>
<td>8</td>
<td>20985</td>
<td>Cptr-exst dir ms px</td>
<td>$153.36</td>
<td>3</td>
<td>3.06%</td>
<td>$460.07</td>
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<tr>
<td>9</td>
<td>29828</td>
<td>Arthroscopy biceps tenodesis</td>
<td>$943.19</td>
<td>2</td>
<td>2.04%</td>
<td>$1,886.37</td>
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<tr>
<td>10</td>
<td>29877</td>
<td>Knee arthroscopy/surgery</td>
<td>$644.39</td>
<td>2</td>
<td>2.04%</td>
<td>$1,288.78</td>
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</tbody>
</table>

$888,476
Orthopedic Surgery
1900 S 12 MILE RD SUITE 110 | WARREN, MICH.

Year   Total Payments   Number of Patients   Payments per Patient
2015   $888,476      1,227              $724
2014   $1,070,623    1,276              $839
2013   $1,136,984    1,156              $984
2012   $1,172,712    1,338              $876

Provider Comparison
NATIONALLY STATEWIDE
How compares to 677 other providers in Michigan specializing in Orthopedic Surgery:

2015  Total Payments: $888,476  Number of Patients: 1,227  Payments per Patient: $724
       100th percentile statewide

High Productivity Analysis
Medicare Payments
How to Identify Outliers: Use Risk Thresholds

- Creates a standardized approach to know when a provider is an outlier
- Streamlines the analysis process by filtering out the providers that are not a risk
- Scorecards can be created by combing multiple analysis thresholds together
How to Build Thresholds into your Analysis Results

View Excel Example

Creating an Audit Plan

- Understanding the Goal of the Audit
  - Yearly Compliance Coding Review
  - Due Diligence Project
  - Highly Compensated Providers
  - Outside Sources

- Build Prioritization Methodology
  1. What is the goal of the audit?
  2. What is your resource capacity?
  3. How do we operationally conduct audits?
     1. By Facility?
     2. Are auditors assigned specific groups of providers?
Actual Audit Plan Examples Utilized by Health Systems

View Excel Example

Using Benchmarking for Acquisitions – Due Diligence

• Benchmarking of data is key initial step in due diligence for physician employment or acquisitions
  - Identify potential risks prior to closing
    1. Go or No Go
  - Identify compliance issues
  - Identify opportunities for integration
    1. Education
    2. Coding and Billing Hold
Audit Odds & Ends

- Sampling process/consideration:
  - Retrospective claims (prior 3 months)
  - Non-statistical sampling e.g. judgment sampling
  - Population is stratified (stratums) based on benchmarking
  - Sample size – small samples based on risk
  - Extrapolation – NONE
    1. Since the sample size was controlled by the auditor it cannot be measured

- Analysis of Sample
  - Provider documentation in comparison to CPT codes
  - Accuracy of diagnoses
  - Accuracy of place of service codes
  - Functionality an use of the EMR system

Please reach out if you have questions or need help starting risk assessment benchmarking and building a proactive audit plans.

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