Presenting a live 90-minute webinar with interactive Q&A

Medicare and Medicaid Audit Sampling Strategies
Creating Sampling Plans and Challenging Flawed CMS Audit Samples

THURSDAY, JULY 7, 2011
1pm Eastern  |  12pm Central  |  11am Mountain  |  10am Pacific

Today’s faculty features:

Patricia L. Maykuth, Ph.D, President, Research Design Associates, Decatur, Ga.
Edward M. Roche, Ph.D., J.D., Director of Scientific Intelligence, Barraclough Ltd., New York

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Presenters

Pat MAYKUTH, Ph.D.
Research Design Associates, Inc.

Edward M. ROCHE, Ph.D., J.D.
Barraclough Ltd.
Medicare Audits
The problem of Medicare fraud
Agenda

🧳 Introduction (ER)
🧳 Statistics (PM)
🧳 Appeals Checklist (ER)
🧳 Discussion
What is a Recovery Audit Contractor (RAC)?

- Subcontractor to the Federal Government
- Auditor of Medicare claims
- Paid as percentage of what is recovered
- Method used to select targets is "trade secret"
Problems

• Most health care providers have a doctorate in medicine, not in bureaucracy, or coding, or in documentation

• Health care provider is unaware of the dangers of extrapolation

• Failure to seek legal counsel soon enough -- tries to do early stages of appeal by self

• Financing of litigation - is there a calculated market "sweet spot"?
Typical violations

• Medical necessity
• Documentation
• Cloning
• Missing
• Inaccurate or insufficient documentation
How estimation of overpayment is done
## Calculated Statistics of Sample

<table>
<thead>
<tr>
<th>Before claim review</th>
<th>After claim review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choice of methodology</strong></td>
<td><strong>Calculate overpayment</strong></td>
</tr>
<tr>
<td>Simple</td>
<td>Per claim</td>
</tr>
<tr>
<td>Stratified</td>
<td>For sample</td>
</tr>
<tr>
<td><strong>Sample size determination based on</strong></td>
<td><strong>Proportion of claims in error</strong></td>
</tr>
<tr>
<td>Universe size</td>
<td><strong>Calculate point estimate</strong></td>
</tr>
<tr>
<td>Standard deviation or probe</td>
<td>Mean</td>
</tr>
<tr>
<td>Precision</td>
<td>Error rates</td>
</tr>
<tr>
<td>Confidence interval</td>
<td>Precision for confidence interval</td>
</tr>
<tr>
<td></td>
<td>Upper and lower CI</td>
</tr>
</tbody>
</table>
When an auditor may use Inferential Statistics

- Sustained or high level of payment error determined by:
  - Error rate determinations by MR unit, PSC, ZPIC
  - Probe samples, Data analysis, Provider/supplier history
  - Information from law enforcement investigations
  - Allegations of wrongdoing by current or former employees of provider or supplier
  - Audits or evaluations conducted by the OIG

Medicare Program Integrity Manual § 3.10.1.4
Overview of the sampling process

- Universe (who; why; what data)
- Frame (dates; units; criteria)
- Sample Definition (simple; stratified)
- Sample Size
- Seed & Random Numbers
- Pick Out Sample
## Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universe</td>
<td>All claims that were submitted to Medicare</td>
</tr>
<tr>
<td>Sampling Unit</td>
<td>What was sampled: by claim, by patient, etc.</td>
</tr>
<tr>
<td>Frame</td>
<td>A part of the universe</td>
</tr>
<tr>
<td>Sample</td>
<td>A randomly chosen set of (usually) claims</td>
</tr>
<tr>
<td>Overpayment Extrapolation</td>
<td>How much the health care provider must pay back</td>
</tr>
<tr>
<td>RAT-STATS</td>
<td>DHHS software often used to make calculations</td>
</tr>
</tbody>
</table>
Basic statistical terminology

- Mean (average) the arithmetic sum of all scores divided by the number of cases

- Median – the middle most real score

- Mode the score that occurs most frequently in the data set (does not have to be unique – sometimes more than 1 value is equally likely)

- Measures of variability, precision and confidence interval
Normal Distribution

Normal, Bell-shaped Curve

<table>
<thead>
<tr>
<th>Standard Deviations</th>
<th>Cumulative Percentages</th>
<th>Percentiles</th>
<th>Z scores</th>
<th>T scores</th>
<th>Standard Nine (Stanines)</th>
<th>Percentage in Stanine</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4σ</td>
<td></td>
<td>0.1%</td>
<td>1</td>
<td>20</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>-3σ</td>
<td></td>
<td>2.3%</td>
<td>5</td>
<td>30</td>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>-2σ</td>
<td></td>
<td>15.9%</td>
<td>10</td>
<td>40</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>-1σ</td>
<td></td>
<td>50%</td>
<td>20</td>
<td>50</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>84.1%</td>
<td>30</td>
<td>60</td>
<td>5</td>
<td>20%</td>
</tr>
<tr>
<td>+1σ</td>
<td></td>
<td>97.7%</td>
<td>40</td>
<td>70</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>+2σ</td>
<td></td>
<td>99.9%</td>
<td>50</td>
<td>80</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>+3σ</td>
<td></td>
<td></td>
<td>60</td>
<td></td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>+4σ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4%</td>
</tr>
</tbody>
</table>
Confidence Interval
### Precision and Lower Bound

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point estimate</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Precision amount at 90% two-tailed confidence</td>
<td>$140,000</td>
</tr>
<tr>
<td>Lower bound at 90% two-tailed confidence = Point estimate minus Precision amount</td>
<td>$860,000</td>
</tr>
<tr>
<td>Precision percent = Precision amount divided by Point estimate</td>
<td>14%</td>
</tr>
</tbody>
</table>
The point estimate, precision and lower bound

Point Estimate

Refund Demand

Confidence Interval

Point Estimate

Normal, Bell-shaped Curve

-4σ -3σ -2σ -1σ 0 +1σ +2σ +3σ +4σ

.13% 2.14% 13.59% 34.13% 34.13% 13.59% 2.14% .13%
Stratification
(numbers are illustrative only)

Universe File
All claims for the provider for audit time period
152,480 claims

- **Stratum 1**: $>10 <$68
  - 107,466 claims
- **Stratum 2**: $>69 <$200
  - 30,387 claims
- **Stratum 3**: $>201 <$500
  - 10,969 claims
- **Stratum 4**: $>501
  - 3,658
RAT-STATS Sample Size Determination

<table>
<thead>
<tr>
<th>#</th>
<th>Strata RATIO</th>
<th>MEAN</th>
<th>STD.DEV.</th>
<th>UNIVERSE</th>
<th>RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;$150</td>
<td>76.37</td>
<td>43.97</td>
<td>8,882</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>$150-$350</td>
<td>216.06</td>
<td>55.08</td>
<td>3,070</td>
<td>20%</td>
</tr>
<tr>
<td>3</td>
<td>$350-$600</td>
<td>482.87</td>
<td>91.72</td>
<td>1,370</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>&gt;$600</td>
<td>962.65</td>
<td>253.59</td>
<td>681</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>- TOTALS -</td>
<td>189.87</td>
<td>227.17</td>
<td>14,003</td>
<td></td>
</tr>
</tbody>
</table>
RAT-STAT Defined Proportion

Stratum 1: 45%
Stratum 2: 20%
Stratum 3: 15%
Stratum 4: 20%

Sample Proportion Used in Audit

Stratum 1: 25%
Stratum 2: 25%
Stratum 3: 25%
Stratum 4: 25%
The statistical extrapolation

The tremendous magnification is why the statistics must be so accurate

The Extrapolation
- multiple years of claims
- interest and penalties
- US Treasury is the collection agent
- "In case you are filing for bankruptcy" forms included with all demand letters

The Sample
$978.00.

$1,369,000.
The appeals strategy
The appeals process

<table>
<thead>
<tr>
<th>Contractor</th>
<th>QIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination</td>
<td>Re-Determination</td>
</tr>
<tr>
<td>Re-Consideration</td>
<td></td>
</tr>
</tbody>
</table>

ALJ
The Administrative Law Judge

• Federal administrative law

• Medicare Program Integrity Manual (MPIM)

• Not adversarial hearing

• Discovery Rules -- use of FOIA (Freedom of Information Act)
The appeals strategy

- Attack extrapolation
- Dispute claims review
Checklist to “audit the auditors”
When Auditor Uses Expert

* Obtain the statistical experts’ written approval of the methodology (dated)

* Obtain the policies and procedures for auditors processes and quality controls

* Obtain evidence that anyone examined the appropriateness of the findings (signed)

* Obtain complete written notes statements and documentation of any statistician used by QIC
Data Necessary for Statistical Review

- Audit methodology and logs, signed & dated

- Readable electronic data files for universe, frame, sample selection, sample and overpayment at claim line level

- Sample selection methodology, size estimation, seed, file sorted as applied and output

- Sufficient information to collapse data into CCN, strata or overpayment at every level
A few typical problems with claims

- Overly restrictive interpretation of the MPIM
- Making up rules
- Failure to account for similar language used for patients with the same condition
- Complexity -- it is doubtful anyone can do completely compliant coding
- Frequent missing and disorganized files
A few typical problems with extrapolation

- Sample size
- Incorrect use of formulas
- Use of wrong formulas
- Use of inapplicable methodology
- Non-representative sample
- Exclusion of zero paid claims
- Accuracy outside of recommended range
Common excuses from contractor

- MPIM does not forbid it
- Those are data/methods are proprietary
- The statistic weights the result
- The results are projected within the strata
- “a probability sample and its results are always “valid.” MPIM, Chap. 3, § 3.10.2
- 30 is the smallest sample size we use and we increased the sample size so it is fine.
Dirty tricks

- Withhold information
- Provide information in unusable form
- Provide information or assessment at last minute so provider does not have time to respond
- Insert reports into record after the hearing
- Failure to give proper notice
Outcomes

Extrapolation validated

- All or most claims reversed
- Some denials are reversed
- No denied claims are reversed

Extrapolation invalidated

- Never happens
- Aim here
- Happens often
Discussion
Contact Information for Presenters

Pat Maykuth, Ph.D.
President
Research Design Associates
www.researchdesignassociates.com
721 E. Ponce de Leon Avenue
Decatur, GA 30030-2033
(404) 373-4637 phone
pm@researchdesignassociates.com

Edward M Roche, Ph.D., J.D.
Director of Scientific Intelligence
Barraclough Ltd.
www.medicare-audit-defense.com
New York, NY
(646) 416-6592 phone
eroche@barracloughltd.com
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