

## Using Extrapolation in Investigations

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**Darrell Langlois, CPA, AHFI, CIA**

*VP, Compliance, Privacy & Fraud, Blue Cross Blue Shield of Louisiana*

**M. Suzanne Moody, PhD**

*Chief Statistician, CGS*

**Christopher Hunter, Esq.**

*Sr. Dir., SIU, WellCare Health Plans, Inc.*

### Preliminary Observations about the Use of Sampling in Investigations

- Some plans don't use it at all
- Some plans use a modified approach
- Some plans use a full blown statistically valid approach
- Key is what is your organization willing to support and what your audit targets will say about your approach

## Preliminary Observations, cont'd

- Perhaps more than any other aspect of a health care fraud investigation, sampling and extrapolation requires advance planning;
- Decisions you make today can affect your case three years from now;
- We have organized this presentation chronologically, beginning with pre-investigation topics and taking it through litigation.

## Best Approach for your SIU

- Only what you can support via hard evidence
- Targeted approach that leads to consensus
- Broad approach that may draw comment and questions
- Making this decision should come before building your sampling policies and procedures
- You need to periodically assess these decisions as court cases evolve, Board's tolerance for fraud and your own performance changes

## Pre-Investigation: Policies, Procedures, Tools

- SIU-specific sampling policy, procedure, or step action document recommended
  - Consider using an expert to help craft policy
  - Ensure such policies include multiple relevant court cases to demonstrate the validity of sampling to internal stakeholders. (Start with the references we've provided).
  - Incorporate some flexibility
  - Address document retention and follow the retention requirements
  - Identify data sources and processes by which data may be altered or modified before sampling
- Tools: Identify the program or software that you will use

## Case Initiation and Investigation

- Identify the codes or claim types of interest
- Determine whether there are relationships between different codes
- Decide upon the purpose of the sample(s)
  - Understand the tradeoffs between complexity and immediate usefulness
  - “Probe” samples and comprehensive samples
- Maintain a pristine copy of original data set

## Case Initiation and Investigation

- Remember that results must be susceptible of exact replication
- Document “seed number” or functional equivalent of “seed number”
- Document all steps related to data compilation (preferably following policy):
  - Data sources and processes
  - Exact time frames
  - Criteria for data inclusion and exclusion

## Know Your Data

- Know whether your company or agency has changed claims processing systems or vendors
  - E.g., a change in PBM will always result in before-and-after changes in pharmacy claims data
- Examine data for aberrations and understand why they may have occurred
- Did reimbursement or coding rules change at any time during the sample period?

## Pre-Litigation Discussions

- No legal prohibition on providing a narrow, targeted sampling for purposes of negotiation
- Be prepared to answer the usual responses:
  - “Sample is too small”
  - “You cherry-picked the worst examples”
  - “Dr. Smith fired his old billing coordinator last year”
- No reason not to be transparent with how you conducted sampling

## Case Study: Settlement of False Claim Act Case

- Attribute sampling is used to determine how frequently an event or type of transaction occurs in a given population.
- A sample size estimation procedure was conducted using the Attribute Sample Size Determination module in RAT-STATS Version 2007. Sample Size = 95 lines.
- A random sample of claim lines was drawn and each claim line in the sample was to be reviewed, resulting in a determination of either correct or false.
- Calculate the point estimate which is the percentage of false claim lines in sample x the number of claim lines in frame
- The 95% confidence interval lower bound was calculated to be 88.24% which was 3,406 claim lines in error
- Note that the point estimate is not in the center of the confidence interval because the Attribute estimation procedure is based on the exact hypergeometric distribution, rather than the normal approximation.
- Settlement of \$1.1 Million reached

## Litigation: Civil

- Statistical sampling is generally accepted by courts as evidence.
- *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 51 S.Ct.248, 75 L.Ed. 544 (1931). Once established that a person had sustained some damage, it would be “a perversion of fundamental principles of justice to deny all relief to the injured person” merely because the damages were not susceptible of exact calculation. Although it is improper to determine damages by mere speculation, it would be sufficient “if the evidence show[ed] the extent of the damages as a matter of just and reasonable inference, although the results be only proximate.”
- Will almost always require an expert witness who can testify to the appropriateness and meaning of the sampling methodology.
- Good, consistent documentation will insulate sampling from attack.
- Conversely, poor documentation or failure to follow policies and procedures leaves sampling vulnerable to attack.

## Litigation: Civil

- Most courts considering the issue have recognized sampling-based extrapolation as admissible evidence for purposes of estimating the size of larger populations. *See, e.g., Ratanasen v. California*, 11 F.3d 1467, 1471 (9th Cir. 1993) (“We now join the other circuits in approving the use of sampling and extrapolation as part of audits in connection with Medicare and other similar programs, provided the aggrieved party has an opportunity to rebut such evidence.”).
- Courts will, however, reject extrapolation and sampling if parties do not follow policies, do not document, fail to proffer an adequate expert, or otherwise do things to call into question the accuracy of the sample. *See, e.g., HCA Health Services of Kansas, Inc. v. State of Kansas*, 21 Kan. App. 2d 141 (1994) (rejecting government’s attempt to use sampling to calculate damages due to failure to follow statistical sampling policies).

## Litigation: Criminal

- Statistical sampling will not be adequate for purposes of proving criminal culpability
- In health care fraud cases, proper sampling can be used to determine loss for sentencing purposes

End

Questions? Answers?

We've provided a supplement with lots of case citations.