

Compliance Today – October 2018 Probe samples for healthcare audits, self-disclosure, and CIAs

by Chris Haney, CPA, CFE, CHC, and Chip Hancock, Esq.

Chris Haney (christopher.haney@forensus.com) is a Managing Director in the Richmond office of the Forensus Group, LLC in Richmond, VA. **Chip Hancock** (chancock@hancockdaniel.com) is an Attorney in the Richmond office of Hancock Daniel, PC in Glen Allen, VA.

Statistical sampling is routinely used in audits, investigations, and self-disclosure filings when seeking to reach conclusions about large volumes of data in a cost-effective manner. Compliance auditors and investigators also regularly use sampling analysis to monitor compliance objectives and to quantify potential repayment obligations. As organizations strive to minimize the cost and effort involved in these analyses, probe samples are an increasingly common tool used to improve efficiency and to reduce administrative burden.

A probe sample can be helpful in identifying risk and quickly evaluating whether a full statistical sampling is required. More importantly, when planned and implemented properly, a probe sample can be incorporated as part of future sampling analysis to eliminate duplicated efforts and to further minimize cost and effort. This article addresses the role of probe samples, their proper design and implementation, and considerations for developing valid and defensible analyses of healthcare claims.

Statistical sampling overview

It is worthwhile to understand the purpose and role of statistical sampling in the first place. Statistical sampling analysis is most commonly used when one seeks to infer useful information about a relatively large population of data without examining every unit in the population. Instead, sampling analysis examines only a subset of the population (i.e., a sample). As part of the analysis, estimation or extrapolation is the procedure by which measured characteristics of the sample yield estimates, inferentially, about the population from which the sample was drawn. The term “probability” or “statistical” sampling arises from the fact that the sample is selected in a manner that is predictable in terms of the laws of probability, which eliminates both conscious and unconscious selection bias on the part of individuals who perform the sample selection. The sample must be obtained in a particular way (i.e., randomly) to be objective and defensible.

Statistical sampling has a variety of applications in the healthcare compliance context. For example, internal auditors routinely use sampling to render reasonable conclusions about a set of transactions or patient claims where a complete analysis of those items might otherwise require unrealistic expense or effort. Similarly, the Centers for Medicare & Medicaid Services (CMS) routinely uses sampling to conduct audits of payments, and corporate integrity agreements (CIAs) commonly include sampling provisions as part of periodic claim review procedures.

The use of statistical sampling in litigation is a growing field as well. Testifying experts routinely use sampling techniques to estimate commercial damages, overpayment amounts, and other characteristics of relevant data. Beyond compliance and litigation, sampling is also frequently used by business leaders to increase efficiency and improve quality in internal operations. Sampling may also be used in a variety of other business contexts, such as to help estimate inventories, to evaluate the rate of work output, to estimate the length of equipment life, or to perform a variety of other forms of operational research.

A “full” statistically valid sampling analysis may involve the selection of several hundred or even thousands of sample units (e.g., patients, claims) in order to achieve results within a specified degree of uncertainty, typically described in terms of confidence and precision. A full sampling may be simpler than reviewing 100% of the population, but the analysis may still be time-consuming and expensive, especially if the objectives of a particular audit are somewhat uncertain. For example, a hypothetical analyst who is auditing a healthcare system with 12 facilities and 45 providers may need to sample more than 300 patient records to conduct a “full” sampling analysis in order to estimate treatment coding or billing errors. This can be cost prohibitive, particularly for routine audits where the risk of errors or overpayments may be low.

This document is only available to members. Please log in or become a member.

[Become a Member Login](#)