## **Department of Human Services**

**Proposed Permanent Rules for Surveillance and Integrity and Review: Monetary Recovery; Random Sample Extrapolation** 

## 9505.2220 MONETARY RECOVERY; RANDOM SAMPLE EXTRAPOLATION.

[For text of subpart 1, see Minnesota Rules]

Subp. 1a. **Definitions.** For purposes of this part, the following terms have the meanings given them.

<u>A.</u> "Extrapolation" means estimating an unknown population value by projecting, with a calculated margin of error, the results from a random sample to the population from which the random sample was drawn. The form and computations for the extrapolation and its confidence interval depend on the method of random sampling.

<u>B.</u> "95 percent confidence interval" means an interval estimate, or estimate with a margin of error, for a population parameter computed using a procedure that produces intervals that contain the true parameter for 95 percent of all random samples.

<u>C.</u> "Population" or "population of claims" means a defined set of paid claims for a specified time period that exist at the time of the audit or investigation.

D. "Probe sample" means a limited initial random sample of at least 50 units which can be used to provide guidance in selecting the sample size for a full random sample.

<u>E.</u> "Random sample of claims" means a subset of claims chosen from a population of claims using a random sampling method including simple random sampling, stratified sampling, probability proportional to size sampling, cluster sampling, or any other sampling methods that are generally accepted amongst statisticians.

<u>F.</u> <u>"RAT-STATS" refers to the primary statistical software used by the Office of</u> <u>the Inspector General of the United States Department of Health and Human Services and</u> the Centers for Medicare and Medicaid Services.

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G. "Sampling plan" means the combination of the identified population, the random sampling method, the sample size, and the technique for implementing the random sampling method on the population.

H. "Statistical analysis system" or "SAS" means an analytics and statistics software system.

## [For text of subpart 2, see Minnesota Rules]

Subp. 3. Statistical method. The department shall use the methods in items A to D in procedures in this subpart when calculating the amount of monetary recovery by random sample extrapolation from the audit results of a random sample of claims. The federal share of overpayment determined by the federal government under a federal random sample extrapolation method shall be recovered by the department from a medical assistance vendor according to Minnesota Statutes, section 256B.0641, subdivision 1, clause (1).

A. Samples of a given size shall be selected in such a way that every sample of that size shall be equally likely to be selected, these samples are called simple random samples. The department may choose to employ other sampling designs, such as the stratified random sampling, if it determines that those designs are more likely to lead to greater precision, or a closer approximation to the population mean. The department shall tell the provider the sampling method the department is using prior to drawing the sample. The sampling plan and extrapolation shall be chosen and performed according to generally accepted statistical standards and practices, which includes guidance from the Centers for Medicare and Medicaid Services.

(1) The sampling plan shall include a probe sample.

(2) The department shall use tools that include RAT-STATS, SAS, or any other generally accepted sampling software and methods.

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B. Samples shall only be selected from claims for health services provided within the interval of time that coincides with the interval during which money allegedly was overpaid and for which recovery will be made. The vendor shall be required to pay an overpayment identified under this part only if the overpayment identified has a 95 percent confidence interval that does not contain zero dollars.

C. The sampling method, including drawing the sample, calculating values, and extrapolating from the results of the sample, shall be performed according to statistical procedures published in the following text: W. Cochran, Sampling Techniques, John Wiley and Sons, New York 3rd Ed. (1977). Sampling Techniques is incorporated by reference and is available through the Minitex interlibrary loan system. Samples must consist of at least 50 claims. Each stratum in a stratified sample must contain at least 30 claims or, if a population stratum contains less than 30 claims, all of the claims in that population stratum.

D. The vendor shall be required to pay the department the estimated overpayment only if the null hypothesis that the mean overpayment is less than or equal to zero can be rejected with probability less than 0.05. The amount owed to the department shall be the mean overpayment multiplied by the number of claims in the population. With simple random samples, the mean overpayment is the sum of all differences between correct and actual charges in the sample, divided by the number of claims in the sample. With stratified samples, the mean overpayment is the sum of the products of the mean differences within strata and the proportion of all claims in the population that are in the strata.

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