

4-Sampling Strategy

CSI required sampling strategy for PCMH Quality Metric Reporting (Draft—Dec 15, 2014)

Brief statement of required method: For a PCMH that opts to use a sample of patients rather than the entire patient population eligible for a quality measurement, the CSI requires the use of a random sample of patients with the number of patients in the final sample at least 400. [NOTE: If the population to be measured by a PCMH, e.g., the population of adults aged 18 to 85 years with Dx= hypertension, is less than 400 then the PCMH should include all the patients in the measurement population and not use a sample of the patients.] A PCMH opting to use a random sample should (?must?) contact the CSI prior to reporting to confirm that the intended random sampling method meets the CSI requirement. One practical strategy to select a random sample (random start, systematic sample) is described below.

Background: A systematic sample of patients can be identified by preparing a list of all eligible patients (e.g., all adults aged 18 to 85 with the diagnosis of hypertension), and then selecting every Xth patient (i.e., systematically). To avoid one possible bias in method the first patient selected from the list is identified at random. This method is simple to execute and assures the eligible patient population will be evenly sampled.

Step-by-step: A PCMH that opts to use a sample of patients could use the following steps to identify that sample for review.

1. Prepare a list of patients eligible for the measurement e.g., for the adult blood pressure control measure prepare list of all adult patients aged 18 to 85 years who have a diagnosis of hypertension.
2. Determine the systematic selection interval needed to derive a final sample size of at least 400. This can be done by counting the number of patients on the eligible list and dividing that number by 400. E.g., if the number of adult patients with diagnosis of hypertension were 1200, divide 1200 by 400 and the systematic selection interval would be every 3rd patient on the list.
3. Begin the systematic sample selection with a randomly selected patient. A quick, practical way to determine a random start for sample selection is to draw-a-number-from-the-hat where the numbers-in-the-hat are determined by the selection interval. E.g., if the systematic selection interval were 3 (i.e., select every 3rd patient) then use 3 small pieces of paper. Write 1 on one piece of paper, 2 on another piece of paper and 3 on another. Place these papers in a hat (or other container) and have someone draw one piece of paper from the hat. If the number on the paper drawn-from-the-hat were 2 then the sample selection would start with the 2nd patient on the patient list and proceed to every 3rd patient from that start point. If the systematic selection interval were 5 then 5 pieces of paper would go-into-the-hat; if the selection interval were 9 then 9 pieces of paper...

There are alternate strategies to determine a random start including use of software applications. As long as the systematic sampling process begins with a random start, the CSI requirement will be met. Consultation regarding methods to select a random sample is available from ...

4. Select the 400 (at least 400) patients whose medical records will be reviewed to establish the clinical performance measure.