

A Strategy for Drawing a Random Sample

Purpose: To evaluate performance on quality measures, it is necessary to have a random sample that reflects an unbiased selection of older adults.

This outline provides one of many possible approaches for drawing a random sample for the purpose of auditing. Please note that a facility-wide random sampling strategy likely would *not* be appropriate for frequent tracking of a facility's internal quality improvement efforts; for this purpose, the sampling approach should be simplified. **Sampling Goal for Each Facility:** To complete chart review on 20 randomly-sampled older adults with pain from throughout the facility. The number 20 can be changed to a lower or higher number depending on the facility size.

Sampling Instructions: Using a Computer-Generated List of Older adults With Pain

1. Using your MDS software system, generate a list of older adults with less than daily (J2a = 1) or daily (J2a = 2) pain. Alphabetize or randomly order the names of the older adults before printing. (*This step is important to ensure a random sample.*) This list will be referred to as the "Pain List". If your facility does not have the capability to generate a Pain List by computer, then skip to the next section entitled "Screening For Pain By Hand".
2. Take the total number of older adults on the Pain List. Divide this number by the desired sample number of 20 and round to the nearest whole number. The resulting number shall be designated as "n". For example, if there are 150 older adults on your Census list, $n = (150/20) = 7.5$, which rounds up to 8. An alternate to this for a smaller facility: Take the total number of older adults on the pain list and divide by the desired sample number of 10.
3. Select every "nth" (or in the above example 8th) name on the Pain List to be in the sample. Continue until you have selected 20 older adults or desired sample number. Complete chart abstraction tool on each sampled older adult.
4. If your nursing home has a very small number of older adults with pain (≤ 20), you may choose to audit and track all older adults who have pain.

Screening For Pain By Hand

1. If your facility does not have the capability to generate a Pain List by computer, then use your Census List of total older adults in the facility. You will have to screen each sampled older adult by hand using the most recent MDS assessment form to determine if that older adult has pain or not.
2. Determine the total number of older adults on the Census List. Divide this number by 20 and round to the nearest whole number. The resulting number shall be designated as "n". For example, if there are 150 older adults on your Census list, $n = (150/20) = 7.5$, which rounds up to 8.
3. Count down to the "nth" name (8th in above example) and screen older adult to determine if he/she is eligible to be in the sample. Pull the chart of this older adult and examine section J2a of his/her most recent MDS.
 - If Item J2a = 1 or 2 [less-than-daily or daily pain]:
 - This older adult MAY be included in the sample. Put a "check" by his/her name on the list.
 - Put the chart aside for chart review (abstraction).

- If Item J2a = 0 [no pain]:
 - This older adult is NOT eligible for inclusion in the sample. Cross off his/her name on the list.
- Pull the chart of the next older adult on the list and determine if he/she has pain. If yes, put a check by his/her name and put the chart aside for abstraction. If no, cross off his/her name and continue down the list until an older adult with pain is found. Put all older adult's charts with pain aside for chart abstraction.

4. Continue the above steps until you have the desired sample for the audit. Once you have selected the correct number of older adults to be in your sample, complete the chart abstraction tool on each sampled older adult.