Data Collection
EasyPI

Data Collection Tips

- Look at how others have collected data to assess your intervention. Learning from literature or other physicians/practices can simplify your project and avoid frustrating challenges.

- Collect your pre-intervention data prior to starting the intervention so you are sure that you are able to collect the data desired.
  - If your initial numbers are significantly different than expected, review how the numbers are calculated to be sure that there is not an error in the calculation or the measure.

- It is easiest to use data that is already collected by your EHR.

- Consider using externally collected data (such as information collected by insurance companies) if valid data exists for your measures.

- Whenever possible, use discrete data as it will make data collection much easier and make it possible to use your entire patient population.

- Whenever possible, use measures that are used by local, state, or national organizations (including practice groups, hospitals, or insurance companies).

- Consider the impact of the data collection on workflow.

- Consider and address barriers to appropriate documentation of the data.

- Make sure that the data you need for your measure is being collected in the same way by all team members.

- Make sure that all team members understand why the data is important for patient outcomes.

- Make sure that the data for the measure is easy to interpret (try not to make it something that is subjective).

- Try to limit confounding factors when selecting your data collection criteria.
  - Pre/post intervention data collection periods (for example, comparing flu immunization rates in July to November)
  - Populations (for example, selecting an age range that includes two different groups with different recommendations)

- If you are using a limited number of charts (either paper charts or data that can only be obtained by chart review), use a valid method to randomly select charts (such as sequential visits for a defined age group for a certain condition).

- When possible, save a query in your electronic record or set up your measure as a dashboard so you can track your progress.

- Recognize that for short-term projects, there may not be a significant improvement in outcomes. This does not mean that the intervention will not improve patient's health; it may just be too soon to see it. For example, it may take a year or two to make a significant change in colon cancer screening rates and may take a decade or more to measure a decrease in the rate of colon cancer deaths.

- While a simple comparison of the percentage of patients meeting a quality measure before and after the intervention is sufficient to meet the ABFM requirements, a more sophisticated analysis will give better information about how your practice is doing. For more information see:

  Brady, P. W., Tchou, M. J., Ambroggio, L., Schondelmeyer, A. C., & Shaughnessy, E. E. (2018). Quality Improvement Feature Series Article 2: Displaying and Analyzing Quality Improvement Data. *Journal of the Pediatric Infectious Diseases Society*, *7*(2), 100–103. https://doi.org/10.1093/JPIDS/PIX077