Measurement & Monitoring Using Electronic Health Records

Measurement and monitoring of performance is the longest phase in the Social Impact Assessment (SIA) cycle. During this phase, a team manager should track performance related to pre-determined goals and objectives, and continually monitor performance to maximize end results and outcomes. This factsheet describes monitoring and measurement with a real-world example of how GDAHC used Electronic Health Records (EHRs) to make a strong impact within a community.

Monitoring & Measurement

Measurement
Measurement is not the same as metrics. Metrics are the target of an organization or project and a response to goals or objectives. Measurement is concerned with how progress on metrics is tracked, and requires a team to determine the following:

- what data and information need to be documented along the way,
- how data will be captured,
- how data will be recorded, and
- how progress will be tracked and reported.

As performance measurement begins, it may be valuable to implement tools to track both outputs and outcomes, keeping in mind that the outcomes are most important and most difficult to identify. Only outcomes provide a true measure of success for social impact, and it is important to focus on measuring outcomes that can be influenced. Attempts to measure global outcomes outside the scope or control of the project may create stress and predispose the project efforts to failure.
Monitoring

The purpose of monitoring is to improve a project’s efficiency and effectiveness by keeping track of actual performance. Performance monitoring is the systematic gathering and analysis of information in parallel with the accomplishment of the task. In order to monitor performance:

- both the goals and metrics aligned to each goal must be known,
- tools and methods must be identified, and
- appropriate and sufficient resources must be available and in place.

Plan, Do, Check, Act (PDCA)

While PDCA is a valuable tool during the measurement and monitoring step, the features of PDCA are viable during the project ideation process and through implementation, monitoring, and reporting. PDCA can verify that the process is performing as expected, and ongoing troubleshooting creates a cycle of continuous improvement. This is best exhibited when a project’s course must be corrected due to a process breakdown, or when a new opportunity is identified.

With PDCA:

- changes are implemented on a small versus a grand scale;
- checks are put in place to analyze results and determine if the change was successful;
- if successful, changes are implemented on a wider scale; and,
- if changes are not successful, then the check step (analysis) starts over.

Measurement Using Electronic Health Records: EPIC Pilot for Prediabetes

Using the tenets of SIA and PDCA, GDAHC identified a gap in the ability to efficiently identify prediabetes patients, refer them to a Diabetes Prevention Program (DPP), and engage in follow-up. Therefore, GDAHC, Henry Ford Health System Macomb, and the American Medical Association leveraged a Chronic Disease Coordinating Networks grant to collaborate on an EPIC EHR pilot project to build a clinical prediabetes program for EPIC’s prediabetes registry.

The pilot enabled participating organizations to develop workflows, alerts, and a customized referral order. It prioritized ease of use, clinician satisfaction, and effectiveness of both decision support and the feedback mechanism. Additionally, an evaluation tool with metrics was developed to help measure utilization of the system and ensure the program’s ongoing efficiency and effectiveness.

The pilot was implemented in January 2017 and has been an important tool to transition prediabetes patients into a DPP.