Quick Guides

Non-Instructional Units: Analyzing Data and Using Results for Improvement

After collecting data and making sure that it is trustworthy (e.g., reliable and accurate), data should be compiled and shared with colleagues/stakeholders. Results should be presented in a clear and meaningful way so that all interested parties can easily understand them. This may entail using tables or charts to present data graphically, counting or aggregating data, or calculating percent changes.

Once data has been organized/compiled, it should be disseminated to department colleagues and any others who are involved in assessment processes to ensure a thorough evaluation. Collaborate with colleagues to consider changes that will lead to improvements in service methods, resource availability, scheduling, or other areas. Improvements may be substantial or incremental.

Data Analysis

Listed below are some helpful guidelines/questions to consider as evaluation of assessment results proceeds:

**Compare the results with the performance expectations.**
- Did actual performance meet performance (achievement) expectations? Why or why not?
- Were improvements made over the last assessment cycle?
- Where do the results show areas of strength or weaknesses? Do the results show that additional attention is needed to correct problems or issues?
- Were any strategies in use that were intended to improve performance? If so, were they successful? What strategies were not successful? Should a strategy change or new strategies be developed to further improve performance?

**Review the expectations of achievement set during planning.**
- Are the established standards adequate, or was the bar set at the wrong height? If all expectations were achieved, should expectations be set higher?
  
  *Note: Even if a department is achieving all expectations, there is always room for improvement. Continuous, strategic assessment allows pinpointing of weaknesses in order to make thoughtful, data-driven decisions that lead to improvements.*

**Evaluate the assessment instruments, rubrics, and methods.**
- Did the tools chosen for assessment (customer satisfaction survey, average wait time, average service time, website hits, financial audit reports, ranking against peer organizations, etc.) provide enough information to make informed conclusions about the effectiveness of the functions, services or processes of the department?
- Are areas of strengths and weaknesses apparent?
- Does a different metric or instrument need to be used?

Using Results for Improvement

The purpose of assessing outcomes /key performance indicators (KPIs) is to provide meaningful information that will help determine where modifications are needed (or wanted) to improve those outcomes/KPIs. Development of an action plan (a strategy or intervention) to make improvements in performance is the next step.

Each problem or issue that is identified during data analysis represents a need to improve and must have an action to correct or improve performance. Every outcome/KPI for which expectations of achievement were successfully
met or exceeded represents an opportunity to further improve, and requires an articulated action or strategy to do so. If an outcome/KPI is repeatedly assessed and results continue to show the expectations are achieved or exceeded, it may be prudent to choose a different outcome/KPI for assessment.

Listed below are some helpful guidelines/questions to consider during development of an action plan:

**Make sure that action plans:**
- Are developed for each outcome/KPI.
- Are based on findings reported in the results.
- Are feasible given available resources and time.
- Appear likely to lead to continuous improvement.

**Identify strengths and weaknesses in department performance, services or processes.**
- What changes need to be made?  
  *Determine the kinds of corrective actions that will have the greatest potential to lead to significant increases in performance. Such actions and strategies may be*
  - Operational – modifying what is done or how it is done (e.g. improving a process)
  - Organizational – modifying organizational structure or work assignments
  - Strategic – modifying a mission, functional responsibilities, or outcomes.
- What additional data are needed? Is modification of metrics or method of data collection needed?

**Develop a plan of action that includes what is to be done, the person or persons who will implement the change(s) and by what metrics will be used.**
- What is the timeline for implementation and completion?
- When will data be collected to assess the impact of the changes?
- What resources are needed?
- Who is responsible?
- What actions need to be taken?  
  *Make sure these actions are aimed directly at improving performance (not simply changing assessment measures), and that performance expectations are set.*

**Monitor changes after implementation of the action plan.**
- Ideally, the same or similar assessment strategy as used in the previous cycle (when no interventions were in place) should be used. The new data can then be compared to the data from the previous cycle.
- Analysis of the results after implementation of the action plan should proceed as outlined above and will demonstrate if interventions are having the desired effect on outcomes/KPIs. If not, perhaps a different action plan should be implemented or other changes made (such as allowing a longer period of time for changes to become evident).

**Report the results.**
- The final assessment report needs to tell the story of what happened. Include a description of the evidence of improvement (or no improvement), why it happened, what was learned from it, and what changes will be made for future improvement.

Assessment is an ongoing process. For continuous improvement to be achieved, each department must look at its goals and outcomes/KPIs on a regular basis and determine if there are better ways to operate. Assessment results are meant to be used to improve effectiveness and inform decision-making, and they should be utilized in preparation of departmental budgets and changes to funding or resource allocation. An effective assessment plan should be routinely reviewed and modified to reflect best practices in measuring performance.