

Training Guide #3: Performance Measurement



Where are we going? How will we get there?



WHAT IS PERFORMANCE MEASUREMENT?

Broadly defined, performance measurement involves collecting and analyzing real data to determine whether an MRC unit has achieved (or made progress toward achieving) its goal(s) and objectives. Program outcomes are compared against pre-established targets (i.e., unit goals and objectives) or benchmarks to assess how well the unit is performing. Leaders can use this information as a basis for future strategic planning activities and to demonstrate the value of their unit to community partners, funders, government agencies, and volunteers.

Get Ready ...

... Get Set ... Go!

Five Stages of Performance Measurement:

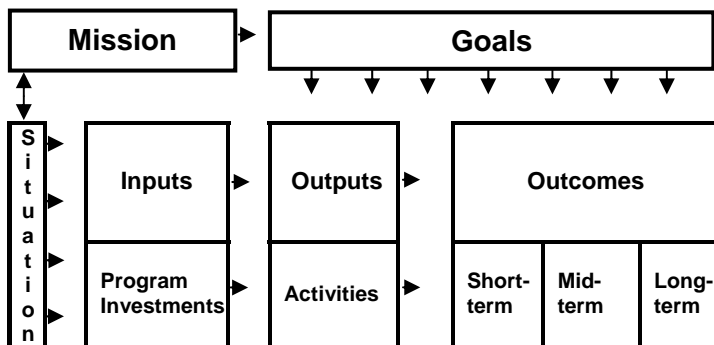
1. Review your strategic plan and logic model
2. Define relevant measures
3. Identify data sources
4. Data collection and analysis
5. Interpret the data and report the findings

BENEFITS OF MEASURING PERFORMANCE

- Determine whether progress has been made toward achieving goals and objectives
- Provide data-driven feedback to volunteers and stakeholders
- Identify and characterize successful components of your MRC
- Identify and characterize areas for program improvement
- Provide factual evidence of the value of your MRC

Performance measurement builds directly on the work of the logic model (see *Guide #2: Logic Models*). Recall that the logic model is a visual representation of the linkages or relationships between a unit's inputs (resources), outputs (activities), and outcomes.

Basic logic model:



Reading from left to right, the model shows how the MRC unit expects to use its inputs to achieve its objectives and make progress toward its overarching goals (long-term outcomes). Performance measurement can be useful at each step in the logic model. It allows leaders to check the validity of these expected linkages and measure progress toward goals and objectives. For example, if short-term outcomes are being achieved, but intermediate outcomes are not at the expected level, MRC leaders should reexamine the expected link and revise their plans accordingly.

Types of Performance Measures: Performance measurement can assess how an MRC unit works (process measures) or the results an MRC unit achieves (outcome measures):

- **Process measures** assess the general operations of an MRC unit. The focus is on the ability of the unit to carry out its work and may entail examining whether the necessary inputs (e.g., funding, volunteers, and equipment) are in place to do what the unit has planned.
- **Outcome measures** assess changes or benefits that result from the unit's activities. Typically, quantifiable measures are used to determine if the unit has achieved a certain level of performance. As you may recall from *Guide #2: Logic Models*, outcomes may be short-term, intermediate or long-term effects.
 - *Short-term outcomes* are associated with your program's outputs. For example, a short-term outcome may be additional patient throughput at points of dispensing (PODs) as a result of volunteer staffing. These types of outcomes are typically the most straightforward to measure and often involve simple counts.

- *Intermediate outcomes* are changes resulting from applications of short-term outcomes. Continuing with the POD example, an intermediate outcome might be the effect on regional capacity of using MCR volunteers to augment POD staffing. These types of outcomes are more difficult to measure as they may require additional data collection or estimation.
- *Long-term outcomes* are changes resulting from the benefits accrued through the intermediate outcomes. A long-term outcome of an MRC unit augmenting POD staffing might be the impact on regional readiness for handling a major disaster. Long-term outcomes are generally the most difficult to measure and often require collecting additional data or conducting a simulation.

Process Verses Outcome Measures – Which to Use?

Often we want to understand both if a program is working as intended and the effect the program is having. Therefore, we use a mix of process and outcomes measures to make our assessments. Measuring both process and outcomes also allows an MRC to examine the linkages in its logic model and identify any assumptions or expectations that are not justified. A new MRC unit that is still in the early development stage, however, may not have yet undertaken enough activities to have an effect on outcomes. For new units, focusing initially on process measures may make the most sense. Conversely, an established, successful MRC unit will likely have some effect on outcomes, and an evaluation can and should include outcome measures.

Take the Time: Commitment to performance measurement should start at the top and be communicated to all those involved, including MRC volunteers and external partners. Gaining the support of constituents and stakeholders is critical to success in measuring your unit's performance. It is also important that your volunteers know their individual efforts are not being judged, but rather the focus is on how the program as a whole operates.

Generally, it is best to have a team of key MRC personnel involved in the performance measurement activities. This helps to minimize the burden on any one staff member while at the same time creating a broader sense of ownership over the process.

Performance Measurement Alone ≠ Program Evaluation

Program evaluation describes a systematic and objective process by which an MRC unit establishes goals and objectives (i.e., conducts strategic planning), charts a course to achieve its goals and objectives (i.e., the activities it will perform) by developing a logic model, and then assesses its performance. The third component – performance measurement – focuses on what occurs as a result of an MRC unit’s activities, but does not ask “why” or “how” it occurs.

Program evaluation is the broader analysis that takes additional steps to answer the “how” and “why” questions. Findings derived through performance measurement are essential to a complete program evaluation and will inform future strategic planning and program development.

STEP-BY-STEP PERFORMANCE MEASUREMENT

As with strategic planning and logic model development, performance measurement is an iterative process that involves several steps.

STEP I: REVIEW YOUR STRATEGIC PLAN AND LOGIC MODEL

Your strategic plan and logic model serve as the foundation for performance measurement. It is imperative that your MRC unit has clearly defined its goals and objectives and that these are quantified wherever possible. Without these, there is nothing to measure your performance against. If the goals and objectives are not clear, measuring your performance will be premature and provide little useful information to benefit your unit’s development.

STEP II: DEFINE RELEVANT MEASURES

Determine what measures or indicators you will use to assess the work of your program. The goals and objectives listed in your strategic plan, as well as the desired outputs and outcomes identified in the logic model, will help define meaningful measures. The first major decision to make is whether your self-evaluation will focus on process or outcomes or both.

Process measures: Process measures apply to the outputs (activities) of your MRC unit. In developing process measures, you are trying to determine if your inputs and activities are being used and executed as

intended. For example, most MRC units are engaged in recruiting volunteers. A relevant process measure for this activity is likely to be the number of volunteers recruited over a set number of months. In developing relevant process measures, keep in mind the types of data you have or can likely easily collect. The table below provides some example process measures for common MRC unit activities.

Example Process Measures

Output (Activity)	Example Process Measures
Recruiting	Number of volunteers recruited over X months
	Capabilities of the volunteers recruited over past X months
Training	Number of training events the MRC unit participated in over X months
	Number of volunteers participating in at least 1 exercise over X months
	Number of training hours executed over X months
	Percentage of volunteers rating training event ‘good’ or ‘excellent’ (on 5-pt. scale)
	Number of volunteers completing specific training/certifications related to MRC mission
Develop community partnerships	Quality of the training events over past X months
	Number of partnerships established over X months
	Diversity of partnerships established over X months
	Number of meetings with partners over X months
Purchase equipment	Specifics of partnership agreements (e.g., resources and information agreed upon to provide, plans for future work together)
	Number of units purchased over X months
	Total number of units currently available

Your MRC unit may want to explore these processes in more detail, especially if you are having difficulty meeting the objectives that may be associated with a particular activity. For example, you may be using a combination of recruiting strategies such as emails, fliers, and personal phone calls. To assess these sub-activities, you could first measure the volume of each type of recruiting activity to determine if you are using your inputs as you had intended. For example, how many volunteers were referred by other volunteers, how many emails were sent, and how many calls were made over the past X months? Second, you could measure the effect of each of the sub-activities by looking at the number of recruits who join by the source of the contact.

The main point is that your unit can construct process measures for both the overarching activity (e.g., how many volunteers were recruited overall) as well as the component sub-activities to assess the effectiveness

of your recruiting process. By measuring the volume and effect of each sub-activity you can determine whether recruiting outreach activities are effective, which ones are yielding the most recruits, and which outreach activities are most efficient.

Measures Can Be Descriptive or Numerical

Descriptive measures describe the activities that are expected to be in place or the quality of these activities and achievements. An example might be the quality and nature of the collaborative partnerships an MRC unit has formed with local Emergency Management and other agencies.

Numerical measures define a quantifiable level of achievement. For example, an MRC unit seeks to provide support to a flu vaccination campaign. A numerical measure of performance might be how many hours of service MRC volunteers contribute in the flu clinics. The target for an MRC unit might be 500 hours of volunteer service during flu season.

Note: Both process and outcome measures can be either descriptive or numerical, and while it is generally more common to find descriptive process measures and numerical outcome measures, this does not have to be the case.

Outcome measures: Outcome measures capture whether an MRC unit is achieving the desired impact and can be short-term, intermediate, and long-term. Short-term outcome measures typically capture the direct results of the outputs (i.e., activities) of your unit, while intermediate outcome measures reflect changes the unit is affecting and long-term outcomes demonstrate sustained broad impacts. Short-term outcome measures tend to measure concrete results (i.e., number of people served) and therefore are the easiest measures to develop. They often involve simple counts. In contrast, long-term outcomes, which can be very broad in nature, are generally the most difficult to measure. Finally, it should be noted that MRC outcome measures will vary from unit to unit based on the units' outputs and their ultimate goals. The following table provides some examples of possible outcome measures for several different MRC unit outputs (activities).

Example Outcome Measures

Output (Activity)	Short-Term	Inter-mediate	Long-Term
Recruiting and training volunteers to increase medical surge capacity	Number of fully trained volunteers available and the quality of their training/credentials	Throughput capacity in readiness exercises	Ability to provide medical care in a disaster, measured in a large-scale exercise or real event
Educational outreach activities to increase healthy eating	Number of people who attended outreach activities	Community awareness of importance of healthy eating	Rate of obesity and diabetes within the community
	Number of brochures distributed	(Same as above)	(Same as above)
MRC participation in local emergency preparedness exercise	Post-exercise evaluation of medical support; number of "victims" treated by volunteers	Quality of community plans that coordinate emergency medical care; improvement after exercise	Community readiness for actual emergencies, measured in a large-scale exercise or real event
Gather supplies and train volunteers needed to staff an alternative care center	The appropriateness of triage in emergency preparedness exercises	MRC unit's ability to use alternative care center for a variety of purposes (e.g., medical care for fire fighters)	Ability to provide effective alternative care, measured indirectly through the currency and completeness of supplies, volunteers, and training

Measure attributes: Finally, irrespective to the type of performance measures you use – process or outcome; short-term or long-term – they ideally should have certain attributes as described in the following call-out box.

KEY ATTRIBUTES OF PERFORMANCE MEASURES¹

- **Validity:** a valid measure captures the essence of what it professes to measure.
- **Reliability:** a reliable measure has a high likelihood of yielding the same results in repeated trials so there are low levels of random error in measurement.
- **Responsiveness:** a responsive measure should be able to detect change.
- **Functionality:** a functional measure is directly related to objectives.
- **Credibility:** a credible measure is supported by stakeholders.
- **Understandability:** an understandable measure is easily understood by all, with minimal explanation.
- **Availability:** an available measure is readily available through the means on hand.

¹ Lichiello, P. "Turning Point: Guidebook for Performance Measurement." University of Washington Turning Point National Program Office, December 1999.

STEP III: IDENTIFY DATA SOURCES

As you define key measures, consider the types of data you will need to collect, potential sources of data (both internal and external), and a methodology for data collection and analysis. You may find that you cannot readily support some of the measures you defined in Step I, and you may have to modify these measures if you cannot reasonably collect the necessary data. Start by thinking about what data you have readily available.

Process measures: Typically, process measures will be based on data the MRC unit collects itself on its volunteers and activities.

EXAMPLE #1: The MRC unit has an objective "to increase the number of clinical volunteers by 20% over current levels within the next 12 months." The data needed is simply the number of new clinical volunteers who joined over the previous 12 months. The data source is the unit's volunteer registry or database. If the database contains the month volunteers join, it can be queried to determine how many clinical volunteers joined over the last 12 months.

Short-term outcomes measures: Short-term outcome measures can rely on data the MRC unit collects as well. Data and information can also come from your partners or the recipients of your unit's services (e.g., via surveys, interviews, and focus groups).

EXAMPLE #2: The MRC unit has an objective "to increase the number of people vaccinated by clinical volunteers by 20% over current levels within the next 12 months." In this case, the data needed is simply the number of people vaccinated by MRC volunteers in the past and over the next 12 months. A simple calculation shows if the unit reached its objective.

MEASURES FOR ASSESSING "READINESS"

Many MRC units will identify, as a general goal, the desire to "enhance the readiness of their community to respond to a major emergency or disaster." The identification of meaningful performance measures can be difficult when assessing the emergency preparedness function of an MRC unit because the notion of what constitutes an appropriate measure of "readiness" is difficult to define.

One key in assessing MRC "readiness" is to define the role that the MRC unit and volunteers will play in the event of specific types of emergencies. Based on the unit's anticipated role and how this fits with the roles played by other community organizations, the needed inputs can be defined and measured (e.g., does the unit have a sufficient number of volunteers with the appropriate skill sets and training?). Alternatively, an MRC unit may evaluate their readiness based on their effectiveness and efficiency in exercises and simulations.

Intermediate and long-term outcomes measures: You may find that much of the data or information that is needed to conduct performance measurement is already being collected elsewhere. Program leaders and others engaged in performance measurement should work with their partners to identify efficiencies for gathering and organizing data.

EXAMPLE #3: The MRC unit identified the need to augment staff at PODs during a bioterrorism incident to reduce the time dispensing medication prophylaxis. Volunteers receive training and participate in an exercise conducted by the county's health department, which collects data on patient throughput for its exercise evaluation. These data may be useful to the MRC unit when measuring its performance, as it could be analyzed to demonstrate the effect MRC volunteers had on how quickly patients received their medication.

CONTEXTUAL FACTORS

In defining performance measures, consider the influence of external or contextual factors on the unit's ability to achieve its goals and objectives. Variables beyond the unit's control can positively or negatively affect desired outcomes. Thus, candidate performance measures should be something your program has control over. Otherwise, the measures will probably not provide an accurate reflection of your program's effects.

STEP IV: DATA COLLECTION AND ANALYSIS

Collection: Based on the measures and data sources defined in Steps II and III, individuals involved in performance measurement need to collect the necessary data and examine how their unit is doing. This may require setting up data collection spreadsheets or modifying existing data your MRC unit collects. Typically, data collection should be carried out after sufficient time has passed to allow the activities' effects to be captured in the data.

EXAMPLE #4: An MRC unit seeks to reduce the incidence of seasonal flu by helping to administer flu shots in the community. Before the unit can begin to assess the impact of this action (e.g., impact on the incidence of flu), it will need to wait until all case data are reported to the local health department after the flu season.

Analysis: For most MRC units, particularly those in early stages of development, the types of analysis needed to measure performance will be basic. Analyses are likely to involve simple trend assessment or comparing current levels to target levels (e.g., those specified in unit objectives). MRC units might also consider comparing their outcomes to those of other MRCs that are collecting the same measures.

EXAMPLE #5: An MRC unit calculates the percentage of volunteers who received Basic Life Support (BLS) certification during the previous six months and compare this to a target figure the MRC hoped to achieve.

In analyzing performance measures, an MRC unit may also want to estimate the monetary value of its contributions by translating some performance measures into their dollar value.

EXAMPLE #6: An MRC unit calculates the total number of volunteer hours contributed to a certain activity and translates this into labor costs. This is a

simple and effective way to demonstrate the cost-savings benefit provided through the donation of volunteer labor.

STEP V: INTERPRET THE DATA AND REPORT THE FINDINGS

Once data are collected and analyzed, the next step is to interpret what the results of that analysis reveal about program performance and whether objectives have been met. If specific objectives are not being met, the evaluator should consider "why". Revisit your logic model and assess if there is a problem with your unit's outputs (activities) or inputs. Ultimately, you may conclude that your goals and objectives were initially unrealistic given your units circumstances and you need to revise your strategic plan.

Findings should be formally documented so there is a record by which an MRC unit can measure progress during subsequent assessments. This can also promote continuity within the unit if there is a change in leadership.

At this stage, consider how the program will disseminate its findings and to whom. Not all recipients will be interested in the same issues, so the format to communicate results will vary based on the intended audience. Be sure to provide the audience with context so they can easily understand and appreciate what you are reporting. This may include key information about the program (e.g., goals and objectives), why you chose these measures (e.g., based on the unit's logic model), and why the results look the way they do. Depending on the audience, you may want to include an updated action plan to show that this is not an endpoint, but another step in the program development process.

It is important to remember to provide feedback to the volunteers in your MRC unit. The performance measurement findings can serve as a validation of their efforts and provide motivation to continue work in the program. Where gaps or shortcomings are uncovered, this feedback can help refocus efforts and perhaps motivate those who did not participate in certain activities to become more actively engaged in the program.

Congratulations on completing your self-evaluation

This is the third in a series of training guides for MRC programs. Combined, the guides describe the steps for conducting self-evaluation of your MRC unit. These guides are available at the Medical Reserve Corps website at www.medicalreservecorps.gov