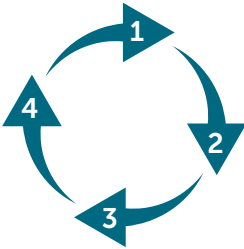# InFOCUS

Rapid
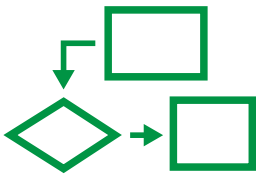Rapid identification of results

Cycle
Continuous improvement model

Evaluation
Rigorous evaluation techniques

Rapid-Cycle Evaluation

Small changes to operations or service delivery can improve the efficiency and effectiveness of public programs. Yet, decision-makers often lack timely and reliable evidence of whether such changes produce the expected results. Rapid-cycle evaluation is a low-cost way to determine, with a high degree of confidence, whether and for whom a program change causes the intended improvements or potentially results in other, unintentional consequences. Mathematica Policy Research is a leader in helping clients to use this rigorous approach as a decision support tool for continuous program and quality improvement.

WHAT IS RAPID-CYCLE EVALUATION?

Rapid-cycle evaluation is a process for testing changes to program operations and services in order to quickly know whether and for whom the change caused its intended improvement. The "cycle" in rapid-cycle evaluation refers to a continuous improvement approach in which a program builds evidence over time about what works best for whom and under what circumstances. Rapid-cycle evaluations:

Measure the impact of changes to program operations and services. Programs can use this approach to test strategies for improving participant engagement or follow-through, variation in when or where services are provided, different communications and messaging strategies, or different ways of providing services. Rapid-cycle evaluation focuses on improvements or enhancements to services or operations, as opposed to an entirely new program model or intervention.

Use rigorous research methods to identify a causal link between the change and the outcome. This approach employs experimental or quasi-experimental evaluation designs. A well-powered rapid-cycle evaluation can also precisely measure the size of any impact so that decision

makers have a high degree of confidence in the findings. Common methods include randomly created treatment and control groups (experimental) or treatment and control groups formed in a nonrandom way, such as through a matched comparison design (quasi-experimental).

Rely predominantly on existing program data to measure impacts. To ensure timely and low-cost analysis, rapid-cycle evaluation relies primarily on existing program data or integrated administrative data systems that span multiple programs. It is also important that the available data are highly accurate, valid, and reliable measures of the expected outcomes.

Focus on results that can be observed in a short timeframe. In order to achieve both a rapid analysis of the impact of a change as well as cycles of testing and refinement, the relevant results should be observable in the short term. The length of time necessary to observe a given result will vary depending upon the context, but in most cases should not exceed one year. For example, rapid-cycle evaluation might assess the impact of a text messaging reminder on program participation and engagement—the results of which could be observed within a few weeks—but would not attempt to address results such as earnings growth or job retention. Nevertheless, rapid-cycle evaluation does not preclude longer term follow-ups to assess these important outcomes.

USING RAPID-CYCLE EVALUATION FOR PROGRAM IMPROVEMENT

As decision-makers determine how best to use resources, rapid-cycle evaluation is well suited to provide the trustworthy and timely evidence to inform variety of practical decisions, such as:

- **Whether to buy a new software application to help students learn how to read.** School districts and principals routinely consider new educational digital tools or software packages, which have the potential to positively (or negatively) affect students' learning outcomes. Oftentimes, however, anecdotal experience or customer recommendations are the only information available to support these decisions. Mathematica is working with the U.S. Department of Education, Office of Education Technology on the development of a web-based, interactive toolkit that would guide decision-makers step-by-step through a low-cost, quick-turnaround evaluation to provide rigorous evidence on the effectiveness of such products.

- **The most effective outreach strategies for increasing program engagement and uptake of employment services resources.** A variety of government, private, and non-profit organizations across the country offer reemployment services to veterans. However, many of these resources are underused while unemployment rates among veterans remain higher than unemployment rates among nonveteran adults (Bureau of Labor Statistics 2015). In partnership with the U.S. Department of Labor and local agencies,

Mathematica designed and tested a series of personalized emails, informed by insights from behavioral science, to encourage stronger job-seeker engagement with reemployment services. Through a quick-turnaround study, we measured statistically significant increases in service take-up and program completion as a result.

- **Whether a new messaging approach, including proactive reminders, improves participants' timely submission of work activity participation hours.** Many local Temporary Assistance for Needy Families (TANF) and other public assistance programs struggle with on-time and accurate submissions of required participation documentation. In Colorado, Mathematica is partnering with a county workforce center to try out different nudges—email and postcard reminders—in an effort to improve the rate of timely reporting by participants.

In addition to these examples of our work, there are many other opportunities to use rapid-cycle evaluation to test changes intended to make programs more effective. Mathematica's program and policy experts are well-versed in the daily operational challenges faced by public programs. We can leverage this expertise to help decision makers use program data and rigorous evaluation methods to determine what works for whom.

For more information, contact Alexandra Resch at aresch@mathematica-mpr.com or visit our website at www.mathematica-mpr.com/our-capabilities/rapid-cycle-evaluation.