### MATHEMATICA Policy Research

# **PracticeBRIEF**

Jonathan McCay, Michelle Derr, Ann Person

### Using a "Road Test" to Improve Human Services Programs

#### Resources to support Ll<sup>2</sup> and build local capacity

This practice brief on road tests (a component of the Improve stage of the larger process) is part of a series of products designed to help program stakeholders understand and use Ll<sup>2</sup> to improve human services programs. A separate overview brief serves as an Ll<sup>2</sup> approach. Additional practice guides (similar to this one) for activities in the Learn and Innovate stages are forthcoming. Programs interested in using Ll<sup>2</sup> may consider partnering with a researcher who knows the process and has substantive program area.



DECEMBER 2017 OPRE Report #2017-107

MATHEMATICA-MPR.COM

Pilot testing is a common practice in human services programs, yet programs can often do more to maximize learning from the experience of trying something new. In particular, a more intentional focus on the underlying program design assumptions and the drivers of good implementation of a new strategy can clarify and strengthen the linkages between a program strategy and its anticipated outcomes. By systematically gathering feedback and analyzing data about the implementation of a new strategy or the contextual factors that might influence outcomes, programs can more precisely identify the necessary conditions for successful implementation.

Iterative, rapid prototyping involves multiple cycles of vetting, refining the design, and strengthening the implementation of a new strategy prior to scaling. In cases where a strategy or intervention is rolled out without using this intentional and incremental process, the program change might ultimately be abandoned due to complications or perceived ineffectiveness, resulting in wasted energy and resources and potentially contributing to change fatigue among program staff. Even evidence-based approaches are at risk of such failure if their piloting does not account for local context and build in time and space for necessary adjustments.

A **road test** uses rapid prototyping to offer a different approach to piloting. In a road test, a new strategy is implemented on a small scale, in a contained practice setting, with the goal of gathering formative feedback to improve the strategy's design and implementation. This brief serves to: (1) explain the road test process in the context of a larger systematic, evidence-informed framework for program change and improvement; (2) provide practical guidance to readers for using this approach in human services programs; and (3) describe concrete examples of road tests in human services programs.

### LEARN, INNOVATE, IMPROVE: A systematic yet flexible process for using and building evidence in program change

A meaningful road test relies upon a thoughtful diagnosis and design process which, when coupled with iterative and rapid prototyping, can offer programs a workable way to improve their approach. This process is known as "LI<sup>2</sup>": *Learn, Innovate, Improve* (see Figure 1). A road test is conducted during the Improve phase of the LI<sup>2</sup> process. It is important to note, however, that LI<sup>2</sup> does *not* have to be a linear process; depending on a program's readiness and learning goals, an organization may begin or end with any one of the three phases.

1

PRINCETON, NJ - ANN ARBOR, MI - CAMBRIDGE, MA - CHICAGO, IL - OAKLAND, CA - SEATTLE, WA TUCSON, AZ - WASHINGTON, DC - WOODLAWN, MD

#### Who can use LI<sup>2</sup>?

A broad array of public and private sector human services practitioners can benefit from and use the Ll<sup>2</sup> include the variety of programs designed to help people lead successful lives for example, workforce development and employment services, safety net programs, child welfare services, early childhood healthy family programs, among others.



The first phase (Learn) focuses on clarifying the motivation for change, identifying the issue or problem to be addressed, and understanding contextual factors that may support or inhibit the outcomes of interest. The second phase (Innovate) focuses on identifying and prioritizing potential strategies for improvement. The Innovate phase intentionally draws upon and is informed by research evidence, behavioral and social science, and practice wisdom. The result of this phase is a road map for change-a detailed plan that articulates new strategies, targeted cognitive or behavioral changes among program staff or clients, anticipated outcomes, and con-

textual factors (or moderators) expected to shape program effectiveness. The third phase (Improve) encompasses the road test-described in the remainder of this brief-as well as increasingly more rigorous research and evaluation methods, focused on strengthening the implementation of new strategies and determining their impact on key outcomes of interest.

LI<sup>2</sup> is intended to be a highly collaborative process in which staff at all levels of an organization participate in the creation and refinement of the new strategy (Figure 2 offers an example). The process often involves strong partnerships

### LI<sup>2</sup> in action: Ramsey County's Lifelong Learning Initiative



Managers, supervisors, and frontline staff engaged with Mathematica Policy Research

in a participatory learning and diagnosis phase

to unpack and understand the motivation for redesigning Temporary Assistance for Needy Families (TANF) services. This involved targeted information gathering about existing service delivery practices and articulating the central issue to be addressed.



Building on insights from the Learn phase, staff and researchers began "co-creating" an executive skills-informed

coaching intervention and supportive tools for use in TANF employment services. This process involved working groups partnering with coaching and adult learning experts from the field to develop a practical model steeped in relevant research, behavioral science, and practice wisdom.



Three consecutive cohorts of frontline staff trained on the coaching IMPROVE model and use of new tools

over a 16-week period. Each provided formative feedback to refine and strengthen the training, tools, and intervention design as a whole. Following this rapid prototyping phase, all staff were retrained on a revised coaching model and suite of service delivery tools.

Figure 2

between practitioners and researchers (who may be external to the organization). When properly facilitated, the LI<sup>2</sup> process can build capacity for using and institutionalizing this analytic approach.

Underlying this entire approach is a goal to build the broader knowledge base for what works in serving targeted populations, thereby advancing the field as a whole while also improving practice in a particular setting.

### **OVERVIEW OF A ROAD TEST**

A road test is an iterative prototyping and learning process in which carefully selected new strategies are implemented in contained practice settings. Typically, small numbers of staff and clients participate over a short period of time (about four to six weeks) and provide formative feedback about their experience using the new strategy. Afterward, the team analyzes the data and feedback to yield concrete recommendations for refining or revising the strategy. Road tests typically include two or more of these feedback periods, known as learning cycles.

Road tests are grounded in the principle of "failing fast." They offer an opportunity to try new strategies in real-world service delivery settings while limiting the consequences if implementation does not go as planned, or outcomes are out of reach. The short timeframe of a road test facilitates rapid adaptation and refinement when program changes do not appear to be working as intended. Figure 3 depicts the general process with its multiple learning cycles, each of which focuses on refining a targeted strategy within a larger program change initiative. In some cases, multiple learning cycles may be used to refine a single strategy.

#### Managing a road test in Larimer County, Colorado

local workforce center received training on the use of a goal achievement intervention-mental contrasting with imple program manager set a vision for how the intervention would be used in service delivery and what the team hoped to learn through a road test of the new strategy. One of the frontline team members served as the coordinator and ensured that the rest of the team knew the schedule for trying select clients and providing targeted feedback.

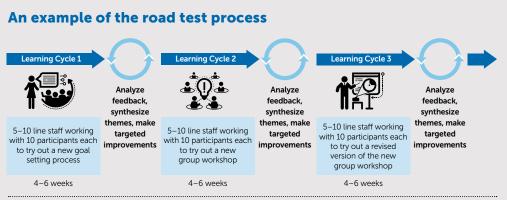


Figure 3

### GUIDANCE FOR CONDUCTING A ROAD TEST

This section of the brief offers detailed guidance to help practitioners use road tests in a program setting to manage change efficiently and try out new service delivery strategies on a small scale before full implementation. It can also be used as part of a continuous quality improvement process to ensure a program component is operating as intended. Although the road test process is designed to be flexible and practical for use in a variety of program settings, there are some core requirements for successful use of the technique, specifically: strong leadership, thoughtful planning, team involvement, and a commitment to learning and adapting based on insights from the feedback collected.

### 1. Commit to active leadership and efficient coordination

In order to streamline the process for staff participating in a road test, active leadership and efficient coordination are two critical ingredients. A program manager needs to oversee the process at a high-level, ensure timelines are met, and engage proactively with staff to communicate clear expectations about their participation as well as to gather their input. Secondly, a coordinator is needed to manage the day-to-day details of a road test: ensuring that staff have access to feedback forms, maintaining a schedule, and addressing questions in a timely fashion. This role can be filled by a member of the program staff team with strong organization skills, or by a member of an external research team. Leading and coordinating a road test requires dedicated attention, organization, and time management.

### 2. Anchor the road test in a detailed plan—a "road map"

A road map functions similarly to a logic model by specifying program strategies and activities, targeted changes, outcomes, and expected contextual influences, and drawing clear causal linkages between them. A road map differs from a logic model in that it targets a specific program component or strategy, rather than depicting the logic behind an entire program. Developing the road map is part of the Innovate stage, described earlier in this brief. The road map requires investing time in a thoughtful design process, spelling out the known and hypothesized causal connections between a given strategy and the targeted behavioral and cognitive changes expected among staff, clients, or both as a result. In the end, the road map should help to tell the story of why you logically believe that a given strategy will lead to targeted changes in people's behavior, attitudes, or skills, and therefore, measurable outcomes. Figure 4 offers an example of a road map for a county human services agency's plan to offer new incentives.

### Sample road map for change

Introducing incentives to improve program engagement				
Strategies	Targeted Changes	Outcomes		
Offer clients a \$50 incentive for attending orientation within 7 days of receiving scheduling request Offer clients a \$50 incentive for submit- ting work participation hours on time each month	Clients are responsive to program communications Clients are (extrinsically) motivated Clients initiate scheduling of the orientation Clients are more planful with respect to tracking and submitting their work participation hours	Engagement and enrollment in the program within 7 days of referral Work participation hours submitted on-time Increased work participation rate for the program Increased client take-up of program services and offerings		

Figure 4

### 3. Create clear learning questions to focus each cycle of a road test

Learning questions guide and shape the collection and analysis of formative feedback during a road test. Simply put, a learning question specifies what you hope to learn from a road test cycle. In considering a learning question, it is important to remember that a road test is *not* designed to reliably answer questions of effectiveness or impact (that is, does this strategy cause that outcome or change?); rather, a road test focuses on the quality of the implementation of a strategy and seeks to understand its feasibility and usability, as well as contextual factors that may be positively or negatively affecting implementation. A road test offers a preliminary look at the links between a specific strategy and the targeted behavioral or cognitive change. In other words, it examines whether the expected changes are showing up among staff or clients, even if it cannot be conclusive about the cause.

### 4. Articulate a timeline, including opportunities for discussion, to foster staff buy-in and ensure everyone is on the same page

Given the fast-paced nature of a road test, clear and consistent communication is the key to a smooth process. Consider creating a calendar to organize the schedule for each learning cycle, specifying dates and the steps for providing feedback. Be clear about who is providing

### Example learning questions to guide a road test

Four Colorado counties (three rural, one urban) recently implemented an online, mobileaccessible work participation hours reporting tool in their TANF programs. Before rolling the new tool out to everyone, the programs decided to road test it. Through the road test, they sought to understand two aspects of the tool's usability for clients:

### How do customers respond to the online Monthly Time Sheet? How do customers use the online Monthly Time Sheet?

Notice that these learning questions are not asking whether the Monthly Time Sheet improves timely and accurate reporting, or whether this new tool saves staff or clients time. Rather, the questions target customers' perceptions and usage of the new tool. With these learning questions in mind, feedback questions were directly tailored to address these topics.

feedback and how and when to do so. Ensure that there are clear processes in place for quickly responding to staff questions about implementing the new strategy or providing feedback.

### 5. Design a process to collect feedback in a way that aligns with the learning questions and can feasibly be implemented

Gathering helpful, formative feedback relies on asking the right questions, tied to what you hope to learn about a given strategy. Meaningful feedback questions are marked by a few key characteristics—they:

- Are short and specific
- Account for a range of relevant perspectives (for example, frontline staff, supervisory staff, clients, external vendors)
- Address implementation considerations related to *time* (how long did this take?), *process* (how did you use this tool?), and *response* (how did the client react to this process?)

There are a variety of methods that can be used to gather feedback from relevant stakeholders. With the characteristics described above in mind, consider which approach will be most efficient and work best for what you hope to learn. Common methods include:

- Questionnaires (forms)
- Interviews (one-on-one)
- Observations
- Focus groups

Every question asked—whether on a form, in an interview, or posed to a group—should answer one or more of the learning questions for the road test. Existing program data may also be a source of relevant information for a road test. For example, programs may be able to track attendance and participation information available in their administrative data systems.

Timing is everything. As programs plan the timing of a questionnaire or an interview, they should consider a frequency (biweekly, after each staff-client meeting, or maybe just once during the learning cycle) that aligns with the use of the new strategy. For example, if a new client assessment process is being road tested, it may make sense to ask for staff's feedback after each use; on the other hand, if a weekly client support group is being road tested, a midpoint and a final feedback questionnaire completed by clients might be more appropriate.

Given that staff and clients already have a lot going on at work and in their lives, collecting feedback should be as minimally burdensome as possible, and programs should consider how to streamline the feedback process. Using freely available online survey tools will allow programs to customize and deploy web-based questionnaires to both staff and clients; many of these tools also automatically organize the data graphically or in a spreadsheet, which may help to analyze the information more quickly.

## 6. After each learning cycle, analyze the feedback for common threads and themes

Once a program has collected feedback from relevant stakeholders such as supervisors, staff, and clients, it is time to analyze and interpret the information. Recall that the road test is not

### Designing the feedback collection process for a road test in California

The Kings County Department of Health and Human Services undertook a road test for their new California Work Opportunity and Responsibility to Kids (CalWORKs) service model. This complex redesign effort required a targeted approach to rolling out changes, coupled with strategically gathering feedback using the appropriate method at the appropriate time to improve the new strategies.

- For a new **housing search weekly group workshop**, frontline staff provided feedback about the approach in a short biweekly interview and clients provided feedback via a short questionnaire after each workshop session over the course of four weeks.
- For a new **client orientation and appraisal process**, select staff and clients provided feedback about two sessions per week via a short questionnaire.
- For a new **client "check-in" meeting approach**, select staff completed a very short daily questionnaire about the new check-in strategy (to understand how it affected their workload) and took part in two brief interviews to provide feedback over the course of four weeks.

meant to answer questions related to causal impact nor is it capable of doing so; therefore, the analysis step should not focus on interpreting data in this way. Rather, analysis should seek to identify *strengths* and *challenges* with respect to the implementation process as well as *opportunities* and *concrete suggestions* for improvement. Consider these thought questions in examining the feedback *for each group of stakeholders*:

- What seems to have worked *consistently* well and not so well? What was *inconsistent*?
- What, if anything, was surprising, given expectations about how the new strategy would work?
- Does the feedback suggest that a given strategy seems to be leading to the intended behavioral or cognitive changes in staff or clients? In other words, does the feedback suggest that staff or client attitudes, behaviors, or skills are changing?
- How might we build on and use our strengths (aspects that have worked well)?
- How might we address or resolve the challenges that arose (aspects that have not worked well)?

Program administrative data may also hold insights into how staff or client behaviors are changing with respect to attendance rates, meeting program requirements, taking advantage of new services, and so on. Any changes observed in the data should not be considered evidence that the new strategy *caused* the changes; rather, the data provide additional information to suggest whether the strategy holds promise, and whether it merits additional, more rigorous testing to ultimately conclude whether or not the strategy had an impact. Table 1 highlights takeaways from a road test on the incorporation of goal-setting practices into TANF service delivery in Ramsey County, Minnesota.

Depending on how the road test goes, it may be appropriate to consider whether a small-scale causal evaluation, known as an "opportunistic experiment," could be used to test a given strategy for effectiveness. An opportunistic experiment is a low-burden, randomized controlled trial in which administrative data is used to evaluate the impact of a program change on intermediate outcomes, such as engagement in program activities.<sup>1</sup>

### 7. Share and discuss the insights from each road test learning cycle

Once a program has identified the themes, trends, and key takeaways from the road test feedback, summary information should be shared (graphically, written, and/or orally) with the team involved in the road test. Use this discussion as an opportunity to engage staff in brainstorming concrete, practical solutions to the challenges and issues identified. Based on the suggestions offered, determine what changes are reasonable and consider these ideas in the context of the road map. *Does this change lead me to have greater confidence in the promise of possible causal connections between my strategy, targeted changes, and* 

<sup>1</sup> For more information, see OPRE's "Advancing Evidence-Based Decision Making: A Toolkit on Recognizing and Conducting Opportunistic Experiments in the Family Self-Sufficiency and Stability Policy Area" at https://www.acf. hhs.gov/sites/default/files/opre/ oe\_learning\_what\_works\_toolkit\_final\_2\_b508.pdf.

### Findings from a road test: Ramsey County, Minnesota

Road test insights and takeaways				
Activity	Learning cycle 1	Learning cycle 2	Learning cycle 3	
Meeting time (average)		52 min	78 min	
Time spent administering the executive skills questionnaire (average)		17 min	20 min	
Proportion of counselors who worked with the participant to identify and set a goal		69%	81%	
Time spent identifying the participant's goal (average)		16 min	15 min	
Proportion of counselors who referenced or used My Bridge of Strength		13%	44%	
Proportion of counselors who used the Goal Action Plan (GAP) and/or the My Task Plan (MTP) during the meeting		N/A	12% GAP 38% MTP 25% both 25% neither	
Proportion of counselors who used the Strategies for Success tools during the meeting	N/A	N/A	38% profile 6% guide 56% neither	

Table 1

*outcomes?* As the strategy is revised, be sure to document the changes in the road map.

Newly introduced or revised strategies, based on the decisions made following an initial learning cycle, may warrant additional road testing. It is also possible to decide to abandon a particular strategy altogether. At this stage in the implementation process, the stakes are much lower for a decision to change course—an important byproduct of the LI<sup>2</sup> process.

### Using road test feedback to improve services

The Ramsey County (Minnesota) Division of Workforce Solutions road tested a new coaching approach with TANF customers, emphasizing a goal-setting strategy expected to take place in every customer meeting (see Table 1). The road test feedback indicated that the goal-setting process was taking an average of only 15 minutes of the average 78-minute meetings. This finding led the team to dig deeper into exploring what other activities were taking up the balance of meeting times (such as paperwork, explaining program rules, connecting to supportive services) and to consider how staff workload could be adjusted to free up time during customer meetings for a greater focus on goal-setting.

### 8. Overall, keep in mind what LI<sup>2</sup> is and what it is not in order to get the most out of this process

*Learn, Innovate, Improve* is a collaborative and iterative program improvement process that relies on systematic and evidence-informed approaches to generate learning, both for program stakeholders and for the broader field. The road test is *not*, however, meant to be an in-depth research study; collecting and analyzing formative feedback should not be a cumbersome or lengthy process. Nevertheless, programs should consider partnering with external researchers if they do not have strong internal design and analysis capacity. In turn, a practitioner-research partnership could have long-term benefits for the program in building capacity to use LI<sup>2</sup>.

