Learn, Innovate, Improve (LI²): Lessons from the Colorado Works Innovation Initiative

This case study is a report on how a group of Colorado counties have partnered with Mathematica Policy Research to use an evidence-informed analytic process—Learn, Innovate, Improve, or LI²—to guide their innovation and improvement of human services programs. We begin with a brief overview of the process and the initiative, then describe how participating counties worked with Mathematica through each phase of the LI² process to assess their programs (Learn), develop targeted change strategies (Innovate), and test and refine the strategies (Improve). In each phase, the counties applied a systematic, analytic approach to decision making. This case study offers a concrete example of how research and practice can come together to make human services programs better.

LI²: LINKING RESEARCH AND PRACTICE TO SUPPORT INNOVATION

Most human services practitioners would like to use empirical evidence when they develop their programs, but the research they need is not always relevant or accessible, and when it is, even the savviest practitioners may not have the capacity to apply it to their own work. In response to this disparity, Mathematica Policy Research, in partnership with the Administration for Children and Families' Office of Planning, Research and Evaluation (OPRE) and the Harvard Center on the Developing Child, developed a framework for changing and improving programs that embeds analytic methods into the process of designing and implementing the program. LI² supports collaboration between practitioners and applied researchers through a series of replicable, evidence-informed activities. LI² brings social science theory, research evidence, and practice wisdom together, resulting in innovations that are not only informed by evidence, but also practical, effective, scalable, and sustainable as a result of the systematic design and refinement process.

THE COLORADO WORKS INNOVATION INITIATIVE

The Colorado Department of Human Services (CDHS) Employment and Benefits Division is partnering with Mathematica in the Colorado Works Innovation Initiative (CWII). The partnership’s goal is to improve Colorado Works, which is the state’s Temporary Assistance for Needy Families (TANF) program. Building on earlier work with three counties selected by the state, the CWII includes 19 counties that chose to participate. It is designed to foster innovation that gets staff and clients more engaged in Colorado Works programming. Mathematica is using the LI² process to guide participating counties through an iterative and co-creative program design process, through which each county is developing, implementing, refining, and scaling new strategies to improve its Colorado Works programming. The initiative culminated in an on-site conference in June 2017, with all participating counties sharing insights and lessons learned from the experience. The CWII launched in September 2016 at a two-day workshop in Breckenridge, during which Mathematica introduced counties to the LI² process and began the Learn phase in earnest.
**STEP 1. LEARN: UNDERSTANDING THE MOTIVATION AND CONTEXT FOR CHANGE**

The objective of the Learn phase is to clarify the underlying reasons for a program change and build a common understanding of the problem to be solved. This phase typically involves assessing the program environment, clearly articulating the problem statement, and examining program stakeholders’ readiness for change. Information gathered through the Learn phase feeds into a “road map” for change in the Innovate phase and a “road test” of the program change in the Improve phase.

**Approach to the Learn phase**

The CWII kicked off at an on-site workshop in Breckenridge with a facilitated exploration and learning process to identify possible ways to change practices at the county level and get participants more engaged in the Colorado Works program. The Mathematica team led participants through a set of interactive exercises designed to first arrive at a shared definition of engagement and then to pinpoint a specific problem or challenge each county would address.

**Box 1. Pueblo County**

identified staff engagement as the problem it would address. To explore the issue in depth, the Mathematica coach conducted a one-day site visit and facilitated focus groups with staff. The objectives of the visit were threefold: (1) gather input from frontline staff about their perceptions of how the Pueblo County program mission is communicated, and the degree to which they buy in to the mission; (2) understand specific challenges and opportunities related to staff morale; and (3) identify additional opportunities for strengthening staff training and support. During the visit, the coach also held a debriefing meeting with administrators and supervisors to discuss preliminary themes and takeaways from the focus groups.

**Results of the Learn phase**

Table 1 lists each county’s area for improvement as addressed in its problem statement. The counties sought to define their problem and vision for change in simple statements that could be clearly linked to a programmatic solution through the Innovate phase. Although the counties in the CWII transitioned to the Innovate phase, learning continued throughout the initiative as counties revisited their motivations for change and the contexts in which they work.

Through these activities, counties examined their policies and procedures, workplace culture, and service delivery structures, then zeroed in on a specific area to improve. In addition to articulating a clear problem statement, counties sought to identify “one simple thing” they hoped to achieve through the innovation initiative—this gave them a vision for success beyond the nine months of the initiative. Throughout the workshop, counties shared ideas, identified common challenges, and discussed opportunities for collaborative learning. At the end of the first day, each county articulated a clear problem statement and described the simple thing it hoped to achieve; the county refined this vision for change by the end of the second day.

Following the Breckenridge workshop, each county held regular calls with a designated Mathematica coach to refine its scope and begin generating ideas for innovations that could get participants to be more engaged with the program. These coaching sessions helped people generate ideas and were an opportunity to ask questions and connect county teams to Mathematica’s broad array of research and other resources. The coaching calls also led to additional technical assistance opportunities in some counties (Box 1).

**STEP 2. INNOVATE: CO-CREATING EVIDENCE-INFORMED SOLUTIONS**

The objectives of the Innovate phase of LI² are to generate and prioritize ideas for program change and document a clear road map for change. As with all brainstorming activities, it is important to allow enough space for many ideas to emerge. However, participants are then tasked with homing in on a solution that is directly linked to the problem identified during the Learn phase. Participants emerge with a detailed description of how the proposed program change will directly address the specific problem.
Approach to the Innovate phase

Counties partnered with their coaches throughout fall 2016 and winter 2017 to think through evidence-informed strategies that could help them improve in their chosen area. In addition to ongoing coaching, Mathematica organized and facilitated an “Ask the Experts” webinar series for CWII counties. Topics included incentives design, executive skills coaching, and poverty and toxic stress. This initial brainstorming work prepared counties for a second on-site workshop in January 2017 that focused on solidifying their innovation ideas. At this workshop, Mathematica coaches helped counties draft road maps for change that were similar to program logic models. The road maps can also serve as a framework for ongoing improvement and evaluation of the program change.

In late January 2017, counties participated in one of two daylong road map workshops, again facilitated by Mathematica. During the workshops, counties refined their road map for change, outlining at least one specific strategy that could be road tested during the Improve phase. The road maps identified (1) concrete strategies for affecting change, (2) the specific skills and behaviors of staff or clients that the strategies would be designed to change, (3) the expected short and long-term outcomes; that is, measurable results that indicate success, and (4) any factors outside the county’s control that might support or obstruct the planned strategies, intended targets, or expected outcomes. In addition, counties developed detailed timelines with steps for implementing their program innovations.

<table>
<thead>
<tr>
<th>County</th>
<th>Target area for improvement</th>
<th>Innovation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>Collaboration and integration between TANF and the Workforce Innovation and Opportunity Act</td>
<td>Improving access to training resources by co-enrolling TANF clients in workforce programs</td>
</tr>
<tr>
<td>Arapahoe-Douglas</td>
<td>Improved coordination for TANF families involved with the child welfare system (one family, one plan)</td>
<td>One Family, One Plan streamlines services and strengthens families involved with TANF and child protective services creating a more holistic, responsive approach to serving vulnerable families</td>
</tr>
<tr>
<td>Archuleta</td>
<td>People taking the TANF program seriously</td>
<td>n.a.</td>
</tr>
<tr>
<td>Boulder</td>
<td>Improve client engagement by solidifying client pathways approach</td>
<td>n.a.</td>
</tr>
<tr>
<td>Eagle</td>
<td>Customer engagement</td>
<td>Giving clients incentives to attend orientation within seven days of a referral and submit the Monthly Time Sheet (MTS) on time</td>
</tr>
<tr>
<td>El Paso</td>
<td>Staff skill-building and engagement</td>
<td>n.a.</td>
</tr>
<tr>
<td>Elbert</td>
<td>Improve community image</td>
<td>Using a newly developed checklist and the state’s quality assurance tool to ensure high-quality data entry, including documenting the changes staff make and monitoring the reduction in case entry errors over time</td>
</tr>
<tr>
<td>Frontier Counties</td>
<td>Improve service delivery and implement new online coaching; develop technology to increase client contact in rural communities</td>
<td>Implementation of TuaPath’s Your Path to Success (YPTS), an online platform through which clients can remotely access program resources and goal-related content</td>
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Table 1
## County issues and strategies (continued)

<table>
<thead>
<tr>
<th>County</th>
<th>Target area for improvement</th>
<th>Innovation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson</td>
<td>Staff training and engagement in a goal-directed environment</td>
<td>Redesigned orientation and a new 3-page assessment that the case manager completes with clients at the first appointment to spur engagement and more conversations around goal-setting</td>
</tr>
<tr>
<td>La Plata</td>
<td>Coaching + empowerment = self-sufficiency</td>
<td>Offering “mobile power sessions,” a longer block of time (2-3 hours) to select clients who could benefit from intensive support (including transportation assistance) to make progress on a specific goal or task; coaching occurs in the car as staff transport clients to access needed supportive services such as nutrition assistance</td>
</tr>
<tr>
<td>Larimer</td>
<td>Top-notch technology</td>
<td>Embedding the MST into YPTS to give clients an easy, online way to record and submit their work participation hours in real time to their coach, with built-in verification available</td>
</tr>
<tr>
<td>Logan</td>
<td>Build successful children</td>
<td>Targeted youth mentoring initiative focused on goal-setting and building financial management skills</td>
</tr>
<tr>
<td>Pueblo</td>
<td>Improving internal support for staff and staff engagement</td>
<td>Staff-focused goal-setting and stress management routines designed to improve staff engagement and morale</td>
</tr>
<tr>
<td>Routt</td>
<td>Integrating Routt to Work</td>
<td>Environmental changes to the lobby/reception area to make it a more inviting and welcoming atmosphere; changing how lobby staff greet, interact with, and interview customers in order to deliver a positive customer experience</td>
</tr>
<tr>
<td>Weld</td>
<td>Internal and external messaging</td>
<td>An informational flyer that clearly tells clients what steps they need to take after their eligibility interview, emphasizing orientation attendance in particular with a behavioral planning prompt, and another informational flyer that clearly explains the MTS and the expectations for completing/submitting it monthly, including a behaviorally informed warning designed to encourage the participant to protect her benefits</td>
</tr>
</tbody>
</table>

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**Note:** n.a. = not applicable. Archuleta, Boulder, and El Paso Counties withdrew from the CWII after the January workshop because they did not have the staff capacity to keep to the initiative’s prescribed timeline.

* Eagle did not participate in the first workshop. Its one simple problem to focus on was developed during coaching calls.
* El Paso did not participate in the first workshop. Its one simple problem to focus on was developed during coaching calls.
* The Frontier Counties include Prowers, Crowley, Otero, and Kiowa. The Frontier Counties did not participate in the first workshop. Their one simple problem was developed during coaching calls.
**Results of the Innovate phase**

After the January workshops, counties kept working with their Mathematica coaches to refine their road maps and solidify their implementation plans. During this time, many of the counties’ discrete strategies evolved. The far right column of Table 1 summarizes the strategies that each county eventually settled on. More examples of the results of the counties’ innovation efforts come from Jefferson County (Box 2) and Eagle County (Figure 1).

**Eagle County’s problem statement** focused on increasing customer engagement, which prompted the team to develop two types of incentives to promote engagement. Figure 1 highlights the county’s incentives, intended targets, and expected outcomes. Using internal planning and ongoing coaching from Mathematica, Eagle County identified the specific distribution mechanisms, timing, amount, and messaging approach for its new incentives.

**Table 1**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Targets</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer incentive for coming to orientation within 7 days</td>
<td>Early customer engagement</td>
<td>Engagement and enrollment in Colorado Works within a week of referral</td>
</tr>
<tr>
<td>Offer incentive for submitting timesheet on time</td>
<td>Client motivation, planning, task initiation, and organizational skills</td>
<td>Tracking sheets completed and submitted on time</td>
</tr>
</tbody>
</table>

By the conclusion of the Innovate phase, CWII counties had created detailed road maps outlining concrete strategies to address the problems they identified during the Learn phase. These strategies targeted behavior changes in staff and clients, and they mapped to measurable outcomes. Counties also revised their implementation timelines, including plans for road testing at least one strategy by June 2017.

**STEP 3. IMPROVE: ROAD TESTING NEW STRATEGIES**

The primary objective of the Improve phase of LI² is to conduct a series of small pilots, or road tests, to gather feedback and refine the program innovation. A second objective is to help build program staff’s capacity to collect, analyze, and use data for everyday program decisions and continuous improvement. The Improve phase begins with trying out a new strategy in a contained practice setting in order to gather feedback about its design and implementation. Timely, formative information generated through the road test is then used to refine and strengthen the strategy’s design and implementation.

**Approach to the Improve phase**

CWII counties began road testing new engagement strategies in spring 2017, building on the road maps developed in the Innovate phase. Each road test varied in terms of its formality, scope, structure, and timing, based on the agency’s needs and capacity. Mathematica coaches met regularly with county teams to guide them through the discrete steps of the Improve phase: (1) specifying learning questions, (2) designing and implementing feedback loops, and (3) analyzing feedback.

**Specifying learning questions: What do we hope to learn?** A critical first step is the creation of specific learning questions, which frame and organize the road test. Learning questions also help to focus the feedback so that the information can be used to improve the strategy. Two counties offer exemplary learning questions (Box 3).
Box 3. Learning questions from two counties

Adams County focused its road test on the implementation of a new service referral form for use by the Colorado Works program and the local workforce center—one of four new strategies under the county’s umbrella of integrating Workforce Innovation and Opportunity Act (WIOA) activities into its program. With the rollout of the new referral form, Adams County identified three primary learning questions: (1) Are referrals happening? (2) Are the referrals appropriate? and (3) Are clients co-enrolled? These learning questions provided a frame for collecting feedback from case managers about the use of the new referral form.

Jefferson County focused its road test on two strategies: a redesigned Colorado Works orientation and a new goal-oriented assessment process for clients. In partnership with their coach, the Jefferson County team identified four learning questions to guide their road test, two per strategy: (1) Does the new orientation format feel engaging to clients? (2) Do clients leave orientation with a clear understanding of Colorado Works’ expectations? (3) Does the three-page assessment help case managers focus their first session with clients? and (4) Do clients feel they receive support on a goal that is meaningful to them? This set of specific learning questions directly informed the design of the feedback collection process with staff and clients—ensuring that the information gathered would be useful for vetting and refining the strategies.

Designing feedback loops: Gathering formative input from clients and staff. Once counties specified a set of learning questions, coaches helped them create mechanisms for gathering feedback about the new strategies. These were typically short online questionnaires or in-person questions to clients and staff participating in the road test. Several counties provide helpful examples of feedback collection strategies (Box 4).

Analyzing feedback: What do the data tell us, and how can we improve? At the conclusion of each cycle, Mathematica coaches tabulated the data and debriefed with the county teams to discuss the data, identify themes and trends, and decide how to improve or change the strategies based on the data. Findings from a few road tests reveal the array of approaches counties took to analyzing feedback.

- **Pueblo County** road tested a self-care intervention designed to improve staff productivity and wellness and thereby enhance engagement. Following an on-site training in early May—facilitated by Mathematica—the Pueblo County Colorado Works case management team began using strategies they learned in the training to manage and reduce their own stress and to practice setting personal goals. About two weeks after the training, staff were asked to complete a brief questionnaire designed to gather information about how, with whom, and to what extent staff were using these strategies.

- **Weld County** road tested two new messaging interventions intended to improve client “show rates” at the workforce program orientation and encourage on-time submission of the MTS (a required report of hours spent in work activities). Eligibility technicians used a random assignment tool to select clients who would get the new flyers at their eligibility interview for Colorado Works. Clients selected to receive the reminder flyer about attending the workforce orientation also received a second reminder flyer about submitting the monthly tracking sheet when they attended that orientation. The staff team used administrative data to track attendance rates at workforce orientation and submission rates of the monthly tracking sheet for May 2017. Although the timing and program capacity did not allow for an adequately powered impact analysis, four weeks of data collection and analysis indicated that clients receiving the flyers were attending orientation at a rate of 75% (compared to 50% among clients not receiving the flyers). Testing of the flyers continued at the time of publication.
Box 4. Feedback collection strategies

**Larimer County** road tested a new MTS for recording work participation hours, which was integrated into the county’s online case management platform, Your Path to Success. The purpose of the new time sheet was to make reporting easier for clients and to reduce the amount of time staff spend collecting clients’ monthly sheets. To understand the experiences of both clients and staff who were using the new tool, the county created two short feedback questionnaires, which were also embedded in the platform. Between the two learning cycles, the feedback system generated a wealth of data and information for the team—more than 153 responses from 123 unique clients using the MTS tool.

**La Plata County** road tested a change to its case management approach. Selected clients were offered “power sessions” with their case manager: two or more hours of dedicated meeting time to address a critical issue or task. Unique to their approach was that the coaching sessions were held in the car while transporting the client to obtain necessary supportive services or resources (e.g., Women, Infants and Children; getting a driver’s license). The coach and case managers used monthly check-ins (March–June) to gather feedback about how the approach was working for staff, specifically with respect to workload and value added by the approach. To understand what clients thought about the power sessions, case managers asked them two questions after each session that focused on the value of the session and whether it solved a problem for them. The Mathematica team helped the county understand and apply the feedback via teleconferences held after each of two six-week learning cycles.

**Logan County** road tested a youth-mentoring initiative focused on helping TANF youth to develop good goal-setting habits and financial management skills. The Logan County Colorado Works program offers students in a TANF household the opportunity to earn up to $400 per quarter for consistent school attendance and good grades. The mentoring initiative was born out of a desire to intentionally pair the performance-based incentive with an opportunity to build youths’ financial management skills. The initiative represented a marked shift in how services were delivered, so the county wanted to understand its perceived value for the youth, the parent, and the staff. Focusing on a single family with two middle school-aged children, the self-sufficiency program manager followed up with the children about the goals they set and whether they found the process helpful. Similarly, the manager checked in regularly with the parent about the value of the mentoring and goal-setting for her children. Finally, the manager offered feedback during biweekly Mathematica coaching sessions about the initiative’s value for her and her team.

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**Results of the Improve phase**

The road testing process is iterative, involving cycles of testing, refinement, and retesting to improve program innovations. Between April and June 2017, most counties completed a single learning cycle, including six to eight weeks of data collection; a few counties completed two learning cycles. The road tests yielded rich information about implementation practices and different stakeholders’ (staff, clients) experiences using the new strategies. Upon completing their road tests, each county had high quality information to refine its program innovation and improve its implementation. Indeed, although the CWII officially ended in June 2017, several counties continued road testing to keep innovating and identifying new strategies for increasing engagement. Moreover, after road tests, new strategies can be scaled up or tested for efficacy with greater confidence that their design and implementation have been thoroughly vetted and strengthened.

**CONCLUSION**

The CWII was designed to be an incubator for innovative and evidence-informed ideas, with the goal of getting clients engaged in Colorado Works programming. Through the co-creative LI² process, counties partnered with CDHS and Mathematica, taking a “bottom-up” approach to developing, implementing, and improving programs. The experience yielded rich information on promising engagement practices for the statewide Colorado Works program, as well as for the broader field interested in an evidence-informed approach to improving human services programs. Counties are continuing these promising practices and measuring progress toward the goal of increasing client engagement in Colorado Works. The CWII experience with LI² demonstrates how research and practice can be linked to support innovation and continuous improvement in human services programs.