Engaging people in activities required for their participation in human services programs is a persistent problem for agencies across the country. The Colorado Works program (Colorado’s version of Temporary Assistance for Needy Families) is not alone in its struggle to engage those eligible for cash assistance (that is, parents with little to no income) in employment services. Counties throughout the state, each of which administers its own version of Colorado Works, have tried a variety of strategies, including financial incentives, to promote engagement. Yet, the initial engagement rates—that is, the proportion of parents who followed through on required up-front activities such as orientation, initial meetings, and creating a plan—generally remain around 50 percent statewide. This problem threatens to further destabilize vulnerable families who face their cash assistance being revoked if they fail to comply with program requirements. It also creates an administrative burden on program staff who spend time trying to reengage parents, issuing sanctions, and closing cases.

A growing body of research in the behavioral sciences has documented some facets of human behavior relevant to this problem:

- Individuals rely more on intuitive, reflexive thinking than on deliberate, effortful thinking.
- The mind’s attention is finite and highly selective.
- Self-control is an exhaustible cognitive resource.³

Moreover, research has demonstrated that living under the stress of insufficient physical resources complicates a person’s ability to navigate everyday tasks, and this difficulty can inhibit follow-through on intended or expected behaviors.⁴

Drawing on this body of research, a team from Mathematica, in partnership with the Colorado Department of Human Services (CDHS) and agencies from three counties, used a behavioral science lens to identify the factors that contribute to low engagement. The team then co-created evidence-informed solutions and tested them to see whether they improved participants’ up-front program engagement. This brief summarizes the experience of Mesa County’s Colorado Works program. We describe the county’s efforts—which were guided by the Learn, Innovate, Improve (LI²) framework—to design, test, and learn from a research-informed solution to this common engagement challenge (see Box 1).

**Box 1. Learn, Innovate, Improve**

LI² is an evidence-informed analytic process designed to guide innovation and improvement of human services programs.

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.

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.

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.
Learn

Our work began with understanding and documenting the factors that have contributed to low up-front engagement in the Colorado Works program. The CDHS Employment and Benefits Division defines and measures parents' initial engagement in the Colorado Works program as (1) the parent agreeing to create and follow a “road map” outlining their goals and work-related activities (such as job search or vocational education) and (2) the parent reporting completion of at least one hour in a work-related activity. Through a series of interviews with staff in 10 counties across the state, our team found considerable variation in how counties communicate and track engagement within their agencies. In addition, counties use a variety of approaches to engage parents in employment services, some of which are more onerous than others. Despite these differences, counties of varying sizes and with various Colorado Works models reported similar challenges communicating with families and completing referrals to employment providers.

To start participating in Colorado Works, parents in Mesa County must visit the office for three separate appointments: first, an eligibility interview; second, a group orientation session; and finally, a meeting with a case manager. Eligibility specialists provided little to no instruction or information about the Colorado Works program to parents during their initial eligibility interview. Historically, fewer than half of parents who received a referral to a Colorado Works group orientation attended their scheduled session, and just about half of those who attended orientation went to their first appointment with a case manager. Based on their experiences working with parents, staff hypothesized that a more positive and motivating up-front experience might help to address parents’ ambivalence, lack of understanding, or forgetfulness with respect to attending the required orientation session and subsequent case management meeting. Staff noted that parents often express confusion about the purpose of Colorado Works in relation to their benefits.

The Mesa County team decided to focus on improving engagement at the first two stages of enrollment in Colorado Works—the initial eligibility interview and the orientation session. Parents seeking cash assistance first attend an eligibility interview, in which they complete their application and receive a determination either approving or denying the requested benefits. Once parents are approved for benefits, their eligibility specialist asks them to choose an orientation session to attend the following week. Mesa County holds two hour-long group sessions per week for Colorado Works orientation, facilitated by a case manager. The session times are set in advance, and parents are required to attend one of the two sessions in person. (If they do not show up to their scheduled session or if they preemptively reschedule, their case is referred back to the eligibility specialist for potential closure.) Following their orientation session, parents are asked to call their assigned case manager within 48 hours to set up their first case management appointment. That case management appointment takes place during another in-person visit, typically within about one week of the orientation session.

Innovate

To address some of these challenges to up-front engagement, the Mesa County team and Mathematica co-created a new two-part strategy. The team decided to try a more positive, motivating, and clear approach to encouraging parents’ participation in the orientation session and attendance at the first case management meeting. Using a road map for change, the county defined their strategy, their targets for change, the anticipated outcomes, and potential moderators of the strategy’s success (see Exhibit 1).

The team’s approach involved two interventions. The first intervention, implemented at the eligibility interview, was designed to increase client motivation and engagement right out of the gate. To achieve that, Mesa County partnered with a Colorado nonprofit, Parent Possible, to provide parents with an opportunity to engage with Vroom (see Box 2). The second intervention was a revamped, shorter, and more positive orientation experience. We describe both interventions here.

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Exhibit 1. Mesa County’s road map

<table>
<thead>
<tr>
<th>Strategies What we will do</th>
<th>Targets What we will change</th>
<th>Outcomes What success will look like</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>At the eligibility interview</strong></td>
<td>Motivation</td>
<td>Parents more positive, motivated, and clear on next steps upon leaving eligibility interview</td>
</tr>
<tr>
<td>• Create a more positive, motivating eligibility experience; use positive parenting videos by <strong>Vroom</strong></td>
<td>• We will tap into parents’ caring about being good parents and providing for their kids.</td>
<td>Increased attendance at orientation session and first meeting with a case manager</td>
</tr>
<tr>
<td>• Suggest clear next steps; use Next Steps video by Mesa County</td>
<td><strong>Understanding</strong></td>
<td>• Higher participation in program and work-related opportunities</td>
</tr>
<tr>
<td><strong>At the orientation session</strong></td>
<td>• Parents will have clarity about the program and their action steps.</td>
<td>• Higher job placement</td>
</tr>
<tr>
<td>• Reduce time by 50%; give simple message on next steps</td>
<td><strong>Attitude</strong></td>
<td>• Reduced “cycling” (participants’ repeated sanctioning or case-closing and reapplying)</td>
</tr>
<tr>
<td>• Focus on support for parents’ goals</td>
<td>• Parents will feel more positive and affirmed as participants in Colorado Works; also they will feel part of a collaboration with the program staff.</td>
<td>• Adoption and application of Vroom in the home</td>
</tr>
<tr>
<td>- Emphasize “let’s work as a team” instead of “this is your job”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Positive, motivating, visually appealing PowerPoint presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use engaging activity, such as local school food program</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Moderators**

Factors that may affect our strategies, targets, and outcomes

- Staff maintain fidelity to new positive messaging at eligibility interview and orientation session
- Participants and staff have entrenched habits
- Some customers may not connect regardless of what the program does
- Target population is those who are open to change, “middle of the road” people, and those “on the fence” about engaging

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**A clearer, more motivating eligibility interview experience.** The eligibility interview typically takes about 70 minutes, including about 10 to 20 minutes of unstructured time for parents while the eligibility specialist processes paperwork. Historically, during this waiting time, parents were not engaged in any structured activity. Mesa County opted to use Vroom as a productive way to engage parents during the waiting time. Selected eligibility specialists suggested that parents could watch one or two preselected Vroom videos on a tablet available in the interview office; the specialist explained that Vroom is designed to inspire and equip parents to turn everyday moments with their children into brain-building moments. The eligibility interview room also had Vroom posters on the walls and key-ring

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**Box 2. What is Vroom?**

Vroom turns cutting-edge science on children’s brain development into easy tips and tools that parents can use to help support their child’s brain development during the critical time before they reach age 6. An application for a mobile phone, videos, posters, flip cards, and other resources give parents access to easy brain building tips they can use in every day interactions that take only minutes. The Bezos Family Foundation works with non-profit partners to share Vroom with the community in every state.
flip cards on the desks with brain-building tips for parents. Finally, after the parents watched the Vroom videos, eligibility specialists asked them to watch another video on the tablet designed by Mesa County and Mathematica for this intervention. This three-minute video provides a clear, positive description of the goal of participating in Colorado Works and explains the benefits of an orientation session as the next step in the parent’s journey. Following these videos, the eligibility specialist asked the parent to select a time to attend their orientation session and provided a paper reminder of that appointment time.

**A streamlined orientation session.** The Mesa County and Mathematica teams revised the program’s orientation structure by shortening it from 60 to 30 minutes, removing nonessential information that might distract from the message about the benefits of engaging with Colorado Works. The revised content, based on lessons learned in an evidence-informed intervention in Ramsey County, Minnesota, focused on developing goals and making connections to resources for achieving those goals. Mesa County case managers developed notes for presenters that maintain a positive and motivating tone. Immediately following the orientation session, parents took part in a short community service activity, filling backpacks with nonperishable food items for area children.²

**Improve**

Mesa County staff were committed to understanding whether these interventions improved client engagement, as measured by attendance at the orientation session and the first case management meeting. Beginning in April 2018, every parent applying for Colorado Works was randomly assigned to an eligibility specialist who provided either the Vroom-based eligibility session or the “business-as-usual” approach.⁸ Random assignment, when implemented with fidelity, provides the strongest possible evidence of the impact of the new approach (see Box 3).

As Mesa County was developing its intervention, staff realized that the revamped approach to the orientation session was beneficial to all clients.

**Box 3. Why random assignment?**

A random assignment approach involves placing parents into at least two groups: one that receives the intervention and one that does not. Because the assignment is done at random, we can reliably conclude that any resulting difference in outcomes between the two groups is the effect of the intervention. In other words, the outcomes of the two groups would have been the same if not for the intervention. Randomly assigning parents to receive either the intervention or “business as usual” is the best way to test and know—with a high degree of certainty—that any resulting difference in outcomes is due to the intervention.

Moreover, because orientation sessions were held with groups, it was impractical to implement the new approach while simultaneously maintaining the old one. Therefore, regardless of the randomly assigned approach to eligibility, all parents received the newly revised orientation session. Figure 1 depicts the up-front engagement process for Colorado Works in Mesa County after April 2018.

**Understanding the results.** The interventions were designed to affect two outcomes—(1) the revamped eligibility interview was designed to improve the likelihood of attendance to the orientation session, and (2) the revamped orientation session was designed to improve the likelihood of attendance to the first case management meeting. Because parents were randomly assigned to receive either the revamped eligibility interview or the business-as-usual eligibility interview, we were able to test statistically whether there was a difference between the two approaches in the rate of attendance to the orientation. Because everyone received the revamped orientation, we could not use the same statistical test. Therefore, we describe anecdotal takeaways from staff about the revamped orientation session.
Mesa’s eligibility interviewers sometimes faced technological challenges with the tablets used to implement the revamped eligibility interview. When the tablets were not working, the parents did not see the Vroom videos or the short video describing next steps in Colorado Works. In these cases, the eligibility interviewers described Vroom to the parents; shared hard-copy Vroom resources, such as informational brochures or the set of flip cards with Vroom tips; and described the next steps in Colorado Works. To help us understand how these technological challenges might have affected outcomes for orientation attendance, Mesa County identified, in their data, the parents who did not receive the full revamped eligibility interview. We were able to test separately the effects of the intervention on this revamped “light” eligibility group, and present them separately from the revamped “full” eligibility group, who saw the videos.

**Results.** The revamped eligibility interview experience showed promising signs of increased up-front engagement (see Box 4 for a description of who participated). Comparing the engagement rates of the group who received the revamped eligibility interview to those of the group receiving the business-as-usual approach (with the unstructured waiting time), we found that the new approach led to improved outcomes (Figure 2). Three out of four (75 percent) parents receiving the full revamped eligibility intervention attended an orientation session within 30 days, compared to 58 percent of parents who received the business-as-usual approach. Sixty-nine percent of parents who received the light revamped eligibility intervention attended an orientation session within 30 days, but this was not statistically different from the rate of the control group.

**Box 4. Who participated in the experiment?**

Between April 17 and October 12, 2018, Colorado Works conducted 319 eligibility interviews with parents who randomly received either the revamped eligibility interview or the business-as-usual eligibility interview. Of those 319 parents, 130 (or 41 percent) were assigned to the intervention group and received the revamped eligibility interview intervention. Of those assigned to the intervention group, 56 (or 18 percent of all parents) received the full revamped eligibility interview, and 74 (or 23 percent of all parents) received the light revamped eligibility intervention. Of those assigned to the control group, 189 parents (or 59 percent of all parents) were assigned to the control group and received the business-as-usual eligibility interview. All parents who subsequently attended an orientation session received the revamped version of the orientation session.
eligibility interviewers was intended to achieve an even split between the intervention and business-as-usual groups, it did not. As we noted previously, some parents randomly assigned to the intervention group received a light version of it, creating a third study group. In addition, operational challenges unrelated to the parents’ being randomly assigned impeded Mesa’s ability to randomly assign parents consistently to one of the study groups. For example, some of the staff delivering the revamped eligibility interview went on leave during the summer. In addition, one eligibility staff member was not trained to deliver the revamped eligibility interview until several months into the intervention. As a result, the full intervention group is much smaller than the business-as-usual group, and the findings could be influenced by unmeasured nonrandom factors.

**Staff insights**

Feedback from Mesa County staff supports the promise of both the revamped eligibility interview experience and the streamlined orientation session.

**Revamped eligibility interview.** Eligibility supervisors and staff said they thought the Vroom videos and hard-copy resources provided a positive connection to the program and that the next steps video provided clear and motivating guidance for parents to attend the orientation session and the first case management meeting. Staff members said that it was sometimes challenging for parents to focus on the Vroom videos, perhaps because of the competing focus on filling out eligibility paperwork and waiting to learn what benefit amount they would receive. In addition, there were persistent technological challenges with using tablets to view videos. Staff members said that additional technical support and easier access to the videos would improve fidelity to the intervention. Staff and supervisors both suggested that Vroom could likely have a greater impact on parents’ motivation and engagement if it were integrated into the case management process as well, as parents meet with their assigned case manager.

Anecdotal evidence supports these findings. Staff indicated that some parents appeared engaged in the eligibility intervention’s videos and asked for more information about Vroom and other program resources. Supervisors and staff believed the next steps video at the eligibility interview was particularly effective in communicating expectations clearly and with a positive tone.

**Interpreting the results.** Operational challenges suggest caution should be taken when interpreting the findings from this experiment. Although the model of randomly assigning parents to trained eligibility interviewers was intended to achieve an even split between the intervention and business-as-usual groups, it did not. As we noted previously, some parents randomly assigned to the intervention group received a light version of it, creating a third study group. In addition, operational challenges unrelated to the parents’ being randomly assigned impeded Mesa’s ability to randomly assign parents consistently to one of the study groups. For example, some of the staff delivering the revamped eligibility interview went on leave during the summer. In addition, one eligibility staff member was not trained to deliver the revamped eligibility interview until several months into the intervention. As a result, the full intervention group is much smaller than the business-as-usual group, and the findings could be influenced by unmeasured nonrandom factors.
Streamlined orientation session. Anecdotally, supervisors overseeing the orientation session said parents had a positive response to the revised format and content. They attributed the new orientation session’s success to its simple and positive message and reduced time commitment. Supervisors said it was easy to train staff on presenting the new orientation session, and staff were enthusiastic about offering a more positive tone and clearer takeaways for parents. Although we do not have rigorous evidence to suggest that the revamped orientation session increases parents’ attendance to a first meeting with a case manager, staff members felt this was a promising practice and decided to continue using the revamped orientation session.

Learning and innovating continues

Given the evidence generated through this short experiment, the Mesa County team is rolling out the next steps video at the eligibility interview and the revised orientation session for the entire caseload of the program, with the hope of increasing attendance rates across the board. The Mesa County team has been thoughtful about the promise of integrating Vroom at other points during the Colorado Works program but, because of staffing constraints, did not plan to do so as of the writing of this brief. The experience in Mesa County shows (1) how the LI² process and key insights from behavioral science can be used to address a persistent problem faced by the agency and (2) how the program used findings from this process to inform its decision making.

Endnotes

1 Mathematica, Washington, DC.
2 The Colorado Works Program, Mesa County, Colorado.
5 Based on historical data on 42 cases from September 2017 to November 2017, which are consistent with trends throughout 2017, according to Mesa County staff. The limited availability of historical data prevents a more robust comparison.
6 Eligibility specialists presented Vroom videos only to parents of children ages 6 or younger because that is the target age for Vroom’s brain-building tips. Any comparisons of attendance rates between the two groups of parents (those who received the revamped eligibility interview and those that received business as usual) made in this brief are limited to families with children in this age range, which represent about 60 percent of Mesa County’s caseload.
7 This activity is not part of the new orientation approach; it has been an existing practice for some time and has continued as part of this experiment.
8 Operationally, Mesa County found it most practical to assign eligibility specialists to either do or not do the eligibility intervention. Because parents are randomly assigned to eligibility specialists when they come through the door, assignment to the intervention was not influenced by parents’ characteristics or other factors. Our analyses control for potential variations in the way eligibility workers interact with parents.