

## Improving Family Nutrition with WIC

### ► WIC works, but uptake is lagging

Over 45 million Americans live in poverty,<sup>1</sup> including 1 in 5 children. Poverty hurts everyone, but especially kids. The long-lasting impact of childhood poverty is well-known.<sup>2</sup> Babies born into poverty are more likely to suffer from low birth weight, which is predictive of increased infant mortality and lower educational attainment.<sup>3</sup> In the absence of good nutrition, which can be expensive, both physical and mental health outcomes worsen.<sup>4</sup> Malnourished children have poorer immune status and worse cognitive functioning and learning capabilities.<sup>5</sup>

Fortunately, the Supplemental Nutrition Program for Women, Infants and Children, better known as WIC, has been improving the health and development of young children since 1972. WIC provides food, breastfeeding support, nutritional counseling, and education to low-income families with children under age 5. As of 2017, WIC serves 8 million families in any given month, and has served tens of millions of families over its history. The program improves babies' health at birth,<sup>6,7</sup> reduces health care costs,<sup>8</sup> and improves educational outcomes.<sup>9</sup> In short, WIC works.

WIC is only effective, however, when it is used. Fewer than 65% of eligible families access the program, and participation drops as children age. More than 20% of eligible participants exit WIC when their children turn one. What keeps families from fully utilizing this valuable resource? While some families may decide to opt out after a reasoned cost-benefit analysis, we believe that many families are not accessing WIC because of behavioral barriers, many of which can be overcome through policy and program changes, and some of which are caused by poverty.

### ► Lessons for the field from San Jose, California

We set out to investigate the WIC program using a behavioral lens. What features of the system could be better designed by incorporating knowledge about predictable human biases? We talked to experts including nutritionists, policymakers, researchers, WIC staff, and most importantly, WIC clients. Using these insights and our behavioral mapping process, we identified several behavioral barriers in the WIC program.

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<sup>1</sup> B. Proctor, J. Semega, M. Kollar. *Income and Poverty in the United States: 2015*. United States Census Bureau, 13 September 2016.

<sup>2</sup> J. P. Shonkoff, P. Deborah, *From Neurons to Neighborhoods: The Science of Early Childhood Development* (National Academies Press, Washington, DC, 2000)

<sup>3</sup> Strully, Kate W. *Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight*. *Am Sociol Rev*. 2010 August 11;75(4): 534-562.

<sup>4</sup> Brooks-Gunn, J. & Duncan, G.J. (1997). The Effects of Poverty on Children. *The Future of Children*. 7(2), 55-71

<sup>5</sup> Nelson, Michael (2000) Childhood Nutrition and Poverty. *Proceedings of the Nutrition Society* 59:307-315.

<sup>6</sup> Rush, D., Alvir, J.M., Kenny, D.A., Johnson, S.S., Horvitz, D.G. (1988) The National WIC Evaluation: Evaluation of the Special Supplemental Food Program for Woman, Infants and Children. III. Historical Study of Pregnancy Outcomes. *The American Journal of Clinical Nutrition*, 48(2), 412-428.

<sup>7</sup> Foster, M.E., Jiang, M., Gibson-Davis, C. (2010) The Effect of the WIC Program on the Health of Newborns. *Health Services Research*, 45(4), 1083-1104. doi: 10.1111/j.1475-6773.2010.01115.x

<sup>8</sup> Avruch, S. & Cackley, A.P. (1995) Savings Achieved by Giving WIC Benefits to Women Prenatally. *Public Health Reports*, 110(1), 27-34.

<sup>9</sup> Carlson, Steven & Neuberger, Zoe. (2017) WIC Works: Addressing the Nutrition and Health Needs of Low-Income Families. *Center on Budget and Policy Priorities*. Retrieved from <http://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families>

To devise potential solutions to those barriers, we also drew on behavioral research into poverty. Many WIC-eligible families live in poverty, which might also be conceived of as chronic scarcity: the ongoing lack of key resources like money, time or food. Our brains respond to scarcity by prioritizing the most pressing need. This cognitive tendency, called “tunneling,” can be useful in some situations. It allows laser-like focus for a fast-approaching deadline, for example. However, when our brain’s limited focus is consumed by a singular task, it is harder to process and act on everything else. Researchers equate the cognitive effects of scarcity to losing an entire night’s worth of sleep.<sup>10</sup> Unfortunately, to survive poverty, people are stuck in a cycle of tunneling on one emergent need after another. Our formative thinking about poverty, [Poverty Interrupted](#), described a set of design principles that human services agencies could use to mitigate or eliminate the effects of chronic scarcity, as well as the effects of other poverty-related social forces including racism, class discrimination, and systemic disempowerment. Below we consider several of our suggested changes to the WIC program, organized by the design principles they fall under.

## Cut the costs

Some aspects of WIC are unexpectedly costly to families in terms of time and mental energy. For example, under current WIC guidelines, participants must redeem paper vouchers for items from a list of pre-approved food items in specific quantities and brands.<sup>11</sup> Tracking down the correct foods among the many options can be confusing and time-consuming, especially for participants with hectic schedules and a child in tow. Additionally, while families appreciated the opportunity to learn about nutrition through WIC, clients reported having trouble absorbing and remembering to apply *all* of the lessons they learned at home. Lastly, many participants were initially unsure how to figure out if they were eligible to participate in the program in the first place and had to travel to the agency in-person to find out.

Here are a few of our suggestions for how the WIC program can cut back on the costs required for families to enroll and fully engage in the program:

- **Create a Planning Tool for WIC Foods:** Tools that enable participants to pre-plan what they are going to buy before a shopping trip may make food selection more accurate and quick, and save time and mental energy in the store.
- **Improve the Packaging Convenience of WIC Foods:** Increase the number and types of eligible foods that cater to families on the go. Single-serving and prepared foods can make it easier for busy families to eat healthy.
- **Use “Rules of Thumb” for Nutrition Education:** Translate complex concepts into simple rules of thumb in order to help families absorb and act on information more effectively. Better yet, offer visible reminders of these practices in the home. For example, create refrigerator magnets or placemats with portion sizes on them (rather than giving families an additional paper handout to keep track of).
- **Simplify Eligibility Requirement Information:** Using simple, straightforward language on the CDPH eligibility questions could help families to understand if they qualify to participate in WIC more quickly and easily.
- **Send Targeted Enrollment Messaging:** Families that participate in Medi-Cal or CalFresh are eligible for WIC. Sending these families messages about the opportunity to enroll may help them to enroll more quickly, without any hassles or confusion.

<sup>10</sup> Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341(6149), 976-980

<sup>11</sup> By 2020 all states will be required to switch to an Electronic Benefits Transfer (EBT) system, changing the paper voucher to a credit card with the benefits pre-loaded. Although this will reduce a few important bottlenecks, like making check out faster and less stigmatizing, but will introduce others like remove the built-in shopping list a paper voucher provides.

## Create slack

Though seemingly minor, small hassles can hamper follow-through on intentions. This is especially true when people don't have the extra time or resources—the slack—to compensate for small setbacks. Many participants struggled to consistently attend appointments due to setbacks like unpredictable commutes on public transportation, last-minute changes in work schedules, and wait times at the agency. Some participants were reminded to bring documents to their appointment just a day before it was scheduled, and were left without enough time to pull the paperwork together. Finally, unexpected daily interruptions, like a child getting sick, can lead to families missing their WIC appointment altogether.

WIC naturally helps families create slack by providing nutritious foods and information about staying healthy. However, certain parts of the program could be redesigned to help families maximize the benefits they are receiving while working with extremely limited amounts of time and mental energy. Below we introduce strategies for WIC to help clients avoid setbacks and remain financially secure during abrupt changes in need.

- **Ease Appointment Follow-Through with Text Reminders<sup>12</sup>:** Text message reminders about upcoming appointments are helpful. Make them more effective by including any necessary specific steps to prepare for the appointment (collecting or completing paperwork, scheduling logistics, etc.). This reduces the mental burden of remembering every appointment detail and, delivered with enough time to prepare, can help families manage appointment-related hassles.
  - **Offer Childcare During WIC Appointments:** Sparing families from having to seek out childcare before appointments, or be attentive to their child(ren) while they are at the WIC agency, could help to improve attendance and engagement of WIC appointments.
  - **Reduce Appointment Hassles:** Make it easier to attend appointments by offering walk-in opportunities, online booking, or simply reducing the number of necessary in-person visits. WIC can still ensure interpersonal connectedness by allowing people to select staff they meet with, and by offering two-way texting between visits.
- Use Messaging and Reminders to Spotlight Program Benefits:** Sending reminders that concretize the long-term benefits of WIC may help people stay in the program. Long-term participation can help families to remain secure in the event they experience any sudden income reductions down the line.
- **Develop a System of Benefits On-ramps:** Create data systems to alert WIC agencies when families who left the program become eligible again. This would allow the agency to reach out directly to these families, eliminating any uncertainty that they are eligible to re-enroll and boosting client participation rates.

## Reframe and empower

Subtle nuances about how a program is represented can trigger misperceptions that dissuade families from participating or fully engaging, despite the improvements the program can bring to their lives. For example, we found in interviews that people perceived the WIC program to be for families in a state of emergency, and not a resource for working families – even though there are many working families that are eligible for WIC. Additionally, we found that some families weren't introduced to options that worked best for them, like online appointments, or certain food package alternatives, until late in their program participation (or just learned about them during their interview with us!). Lastly, many mothers who intended to breastfeed their child

<sup>12</sup> Similarly, text reminders that alert families of upcoming food-voucher expirations can help participants to redeem all of their food benefits before they expire.

stopped because they were concerned that they weren't feeding their baby enough milk, and staff reported feeling uncertain about their role in guiding mothers' breastfeeding decisions.

Small tweaks in the way certain aspects of the WIC program are framed, or presented, can be used to improve enrollment and engagement in the program.

- **Provide Explicit Support for Working Participants:** Send the message that many working families participate in WIC, and help working families plan their appointments around their busy schedules.
- **Build Commitment and Identity Around Healthy Family Behaviors:** Have people write down their values and hopes for their children's well-being, and send them messages reminding them of their intentions throughout their duration in the program to help them persist in WIC and overcome hassles in the process.
- **Creating Points of Positive Feedback in Infant Feeding:** Use rules of thumb and other techniques to help new mothers feel more confident that their feeding routines are healthy, and thus promote more breastfeeding.
- **Help Staff Overcome Dissonance Related to Infant Feeding Advice:** WIC staff can use structured choice tools to help families make breastfeeding decisions that are right for them. This may preserve family autonomy while also helping WIC staff to feel more confident in their advice.
- **Personalize Class Recommendations:** Allowing families to choose nutrition classes according to their own preferences and needs may help them engage more; this can be done with some guided/structured choice activities. This may involve creating more diversity in the content of classes or channels that are available to people in (e.g. in-person, online).
- **Expand Food Choice Set:** Exposing families to various foods and preparation techniques early in their program experience may help them maximize value of their food package and redeem all of their benefits consistently. This can be done through recipe contests, tasting events, etc.

## ➤ Next steps

In our [full WIC white paper](#), we lay out over 40 design ideas like these that cover the full lifecycle of the WIC program for participants. These designs vary in complexity and can be implemented at the federal, state and local levels. In 2017, we are partnering with two local WIC agencies in California to co-design behavioral innovations based on these design ideas. While we expect to improve outcomes for clients in these two offices, we will also have an eye toward scaling our insights and designs across WIC agencies nationwide. These pilots will join our ongoing work in [applying behavioral insights to public benefit programs](#) offered the government. With continued testing and refinement, this work can make significant impacts on poverty, health, and well-being across the United States.