



Wiring WIC

Technology Innovations to Strengthen the Special
Supplemental Nutrition Program for Women, Infants,
and Children (WIC)

EXECUTIVE SUMMARY

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New America
MIT Media Lab

Harvard T.H. Chan School of Public Health
DEPARTMENT OF NUTRITION

WE BELIEVE:

*Creating a technologically enhanced WIC for all state agencies can provide more ways to reach participants and meet their diverse needs, helping to **boost participation and retention in the program.***

What is WIC?

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a critical federal food assistance initiative established in 1974 to help reduce food insecurity and hunger in America. It's the third largest federal nutrition program in the United States behind SNAP and the National School Lunch program.

For nearly five decades, WIC has served as an important safety net program, providing **nutritious foods** to supplement diets, **nutrition education**, and **healthcare referrals** for eligible low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five who are medically or nutritionally at risk.

WIC's biggest challenge:

- Out of all eligible pregnant women in America, only 53% are enrolled in WIC.
- While 98% of eligible infants are enrolled in WIC, less than 25% of eligible four-year-olds participate, reflecting a significant drop in participation by the time children age out of the program.

Benefits of WIC

- Every \$1 spent on a pregnant woman in the WIC program produces between \$1.77 to \$3.70 in Medicaid savings during the first 60 days after the infant's birth, and helps reduce the risk of premature birth and associated costs.^[1, 2]
- Additionally, every dollar spent on WIC more than doubles (\$2.48) the return on investment.
- Research has demonstrated positive health outcomes for pregnant WIC participants and their infants, including reductions in pre-term births, fewer low birth weight babies, lower infant mortality rates, and a greater likelihood of receiving prenatal care.^[3]
- Participation in WIC reduces obesity, hunger, and malnutrition in children ages 2–4.^[4]
- Other positive health outcomes associated with WIC participation include lower rates of child abuse and neglect, higher rates of breastfeeding initiation, less iron deficiency anemia in children, and improvements in both children's access to dental care services and reading scores.^[3, 4–6]
- Through distribution of food package benefits, WIC is also helping to support the work of our nation's farmers, food manufacturers, and grocery store vendors.^[1, 7]

Wiring WIC Health and Technology Initiative

The *Wiring WIC: Health and Technology Initiative* is a collaboration between New America, the MIT Media Lab and the Department of Nutrition at the Harvard T.H. Chan School of Public Health.

The Initiative convened a multidisciplinary team of public health, nutrition, technology, and design experts across public and private sectors who conducted the following activities:

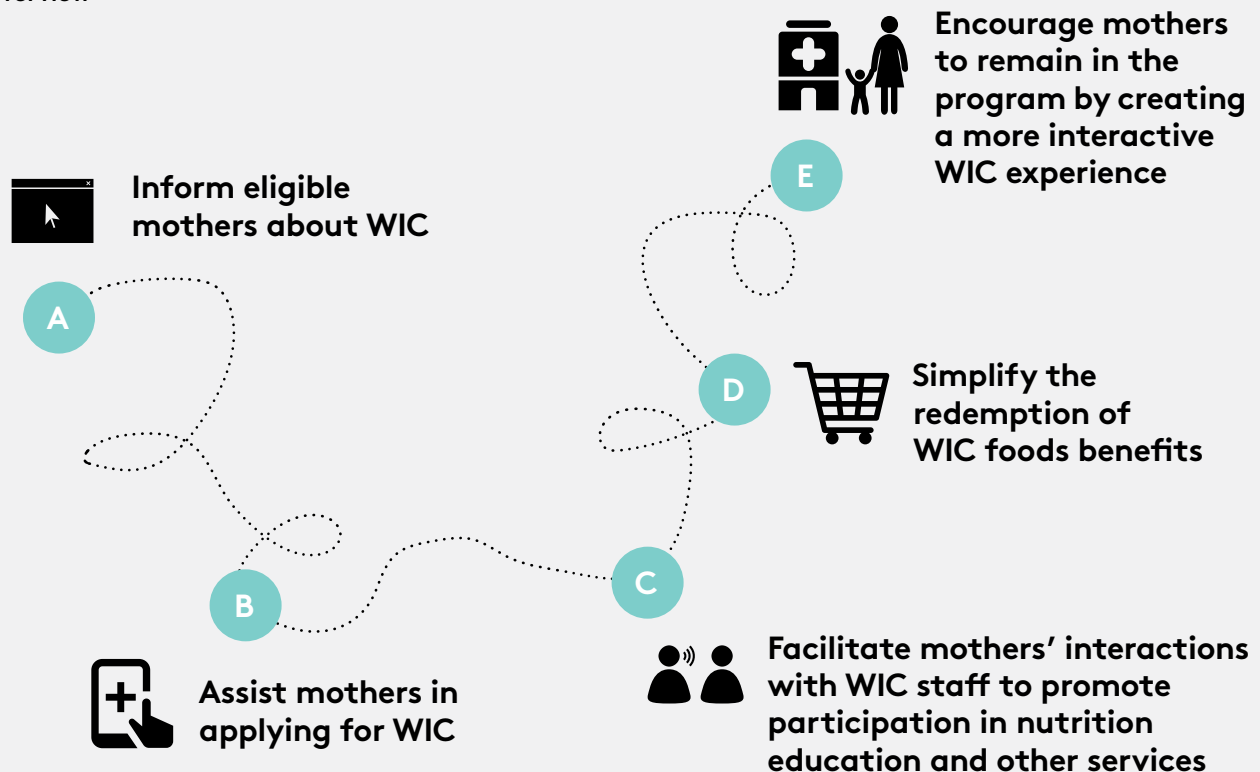
- Prepared a comprehensive scientific literature review of technology use in WIC.
- Convened a national summit with multidisciplinary experts and WIC agency directors and participants to explore strategies for modernizing WIC with technology to better meet the needs of beneficiaries, especially in the areas of program enrollment and retention.
- Produced recommendations for creating a technology-enhanced, user-centered WIC experience.

How can technology help boost enrollment and retention in the WIC program?

Menu of Recommendations

Part I. Recommendations for Technology Innovations Along a Mother's Journey through WIC

An Overview





Inform eligible mothers about WIC

1. Conduct WIC outreach through other federal assistance programs. Approximately 80% of current WIC participants are enrolled in one or more of these adjunctively eligible programs.

- Support WIC agencies' efforts to perform digital outreach to inform eligible mothers already enrolled in Medicaid, TANF, SNAP, and other federal and state assistance programs, about the benefits of

WIC and provide them with necessary enrollment assistance. Build an interactive digital platform to seamlessly cross enroll eligible people in WIC and other federal assistance programs with little or no administrative barriers.

- Enhance and facilitate implementation of digital educational campaigns about WIC benefits and enrollment procedures in partnership with hospitals, community health clinics, retail stores, Early Head Start and Head Start, and other places where pregnant women and mothers of infants and young children visit.

2. Use social media to conduct WIC outreach and recruitment

- Expand the use of social media in WIC outreach campaigns to increase enrollment. Social media with a targeted outreach algorithm is a powerful tool for identifying and connecting with WIC eligible mothers. Enhanced national social media outreach

strategies and campaigns conducted by the USDA, NWA and other organizations would continuously develop resources and tools to help WIC's local agencies across America identify and enroll eligible participants.



Assist mothers in applying for WIC

3. Update the application and certification process

- Utilize tools such as digital portals and interactive, customizable mobile- and web-based apps that simplify the WIC application process by allowing applicants to upload and submit certification documents virtually.

- Create a digital wallet to facilitate and streamline cross-enrollment strategies with Medicaid, TANF, SNAP, and other federal and state assistance programs. If, for example, an applicant is already qualified for SNAP or Medicaid, she would be cross-enrolled in WIC without needing to upload the same eligibility documents separately.
- Explore technologies to efficiently upload infant formula prescriptions by a physician, nurse, or other medical provider to help expedite the review of documentation prior to certification appointments.



Facilitate mothers' interactions with WIC staff to promote participation in nutrition education and other services

4. Modernize the clinic and education experience

- Integrate app and web-based technologies, including telehealth services, to provide a more personalized nutrition education experience and breastfeeding support for WIC participants, i.e. "myWIC."
- Allow the remote service provision in WIC by permanently waiving the physical presence requirements.
- Reduce in-clinic waiting times by offering appointment scheduling through web-based and text messaging applications.
- Foster a hybrid in-person and virtual WIC experience.



Simplify the redemption of WIC food benefits

5. Explore digital innovations to improve the shopping experience

- Implement eWIC with the use of high impact, creatively designed WIC shopping and education mobile apps that create an easier and more innovative shopping experience.
- Create a virtual reality shopping environment to train new participants about how to identify WIC-authorized vendors, check balances, scan food products for eligibility, purchase WIC eligible foods, and address any issues if an EBT card is rejected in the checkout process.
- Allow online ordering, mobile pay, in-store/curbside pickup, and home delivery for WIC participants.
- Expand partnerships with online vendors for ease of food benefit redemption.
- Develop digital tools that will help participants locate specific WIC eligible foods during emergencies such as the pandemic or infant formula recalls and shortages.



Encourage mothers to remain in the program by creating a more interactive WIC experience

6. Reduce WIC attrition rates with engaging, user-friendly apps, texting, teleconferencing and other digital services

- Create WIC online ordering platforms to allow participants to redeem benefits virtually with options for curb-side pickup or home delivery.
- Form social network groups as virtual co-ops for WIC mothers to share WIC participation experiences, breastfeeding support, parenting tips, and child-care information.
- Employ video chat and texting between WIC participants, counseling, and nutrition education staff.
- Use social media and texting to promote the importance and value of WIC services for parents of infants and children between the ages 1–4.

Part II. Recommendations for Program and Policy Actions



Establish public-private sector partnerships

7. Leverage partnerships to enhance the client experience and improve program administration

- Foster partnerships between the government, experts in technology, policy, design, public health, EBT vendors, app developers, and researchers to identify barriers that exist to WIC enrollment and retention.
- Propose and implement innovations to boost program participation and retention.

- Use innovative digital services that are targeted to clients' needs and help families with children to access health referrals, healthy foods, and nutrition education.
- Permit mobile-based transactions at Farmers' Markets to enable greater access to fresh produce.
- Work with venues, such as museums and public transportation, to recognize WIC EBT cards as an electronic pass to access services, cultural institutions, and events at a reduced cost.



Enhance research, data collection, and program evaluation

8. Establish a national WIC technology assistance center (TAC) for research and program improvements.

- Collaborate with the research community to design a national technology assistance center (TAC) with a cross-agency data warehouse for routine uploads of de-identified administrative, health outcomes, and eWIC data, including participant retention and food benefit redemption information.
- Develop technical guidelines and protocols to increase compatibility across WIC management information systems (MIS), databases, apps, and other technology tools and platforms to create an open ecological system for a variety of technology users, researchers, and vendors.
- Leverage WIC MIS and other data sources to

identify patterns in program enrollment, retention, and attrition.

- Conduct regular evaluations of technology tools on WIC's impact, and upload these findings to the USDA's website for stakeholders to review.
- Provide technical assistance to all WIC agencies and conduct research to demonstrate how local agencies can use existing WIC data to boost retention and decrease attrition.
- Conduct surveys through WIC shopping and education apps and create a database for evaluation of participant satisfaction.
- Create a USDA database of research studies alongside partner organizations to evaluate the effectiveness of digital technologies in boosting enrollment and reducing attrition from WIC.
- Increase research on the use of cutting-edge technologies, including artificial intelligence, big data, virtual reality, and machine learning, to build next-generation tools for WIC operations and service delivery.



Wire WIC's program culture and ensure equity in the program

9. Involve participants and staff in WIC program modernization

- Ensure WIC participants and staff perspectives are included in efforts to design technology innovations, conduct research, ensure inclusivity, and improve service delivery and education.
- Provide staff training to build proficiency with new digital tools to help create a cultural shift that supports the use of technology innovations in combination with in-person services to enhance WIC's mission and strengthen program results.

- Develop online and mobile app surveys for WIC participants to identify and implement technology enhancements that work best for participants.
- Ensure equity in access to digital tools and services that are modernizing WIC as well as health service delivery.
- Provide technological assistance and training to help reduce health disparities and avoid any extra administrative barriers across sociodemographic groups.



Expand the WIC technology focus at the USDA

10. Focus on participant-centered technology at the USDA

- Establish USDA Food and Nutrition Service (FNS) special task forces to identify, test, and expand mobile, online ordering, and other technology innovations that can benefit all 89 WIC agencies.
- Apply human-centered design to produce user friendly tools for WIC participants and staff.
- Permanently allow WIC local agencies to use approved telehealth technology as a complement to in-person services for enrollment, certification, education and counseling, among other operations.
- Ensure privacy and security guidance for technology use in the program to safeguard participants from harmful data sharing or technology misuse.

- Conduct an annual survey and mapping of the spectrum of technology tools being used across the 89 WIC agencies.
- Develop tutorials, guidance, and templates to assist local WIC agencies and clinics in developing social media outreach campaigns to boost program enrollment and reduce attrition.
- Design a section of the USDA's FNS website to serve as a technology resource hub with guidance on using apps and social media for outreach to WIC participants.
- Share innovations across federal food assistance programs.



Increase resources for WIC technology innovation and coordination

11. Dedicate funding for modernizing WIC technology infrastructure and innovations

- Increase resources in the Congressional appropriations process for WIC technology innovations so that all 89 agencies can use and benefit from these advances.
- Support the design and implementation of a universal, open-source digital ecosystem with USDA-developed standards, guidelines and protocols so that agencies and vendors can facilitate system integration across technology providers.

- Increase support for digital pilot programs such as online ordering, delivery services, and mobile pay, with the goal of improving client satisfaction and participation.
- Boost funding for research on technology innovations in WIC and their evaluation.
- Enhance coordination of digital platforms between the USDA and the US Department of Health and Human Services (DHHS) to enable information sharing between federal assistance programs.
- Increase the availability of affordable broadband and mobile internet access to enable participants to easily access remote services, particularly in underserved areas.



Envision a national resource of online nutrition education for parents and families across America

12. Design a national online education resource hub and toolkit available to all parents with actionable information to promote healthy pregnancies and a healthy start in life for their children.

- Provide nutrition education, healthy eating information, breastfeeding guidance, and childhood development tips to all families in America through a national online platform and mobile app that is available to all parents regardless of WIC eligibility.
- Advertise this resource during prenatal classes, on maternity wards at hospitals, in doctor's offices, parent's, children's, and advocacy organizations, as well as community health clinics.
- This comprehensive digital education resource hub would reflect a national commitment to improve the health and nutrition of all families with children during the critical period between birth and age 5 and importantly help advance maternal health as well.

Modernizing WIC as a technology enhanced, participant-centered program is an opportunity to improve the nutrition, health, and economic security of millions of people in the U.S., reduce health care costs linked with hunger and obesity, and as a result, strengthen America's future now and in the years ahead.

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COLLABORATING INSTITUTIONS:



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