

Building on Strength: Keeping Young Children Connected to WIC

The Special Supplemental Nutrition Program for Woman, Infants, and Children (WIC) is a federally funded program for pregnant, postpartum and breastfeeding mothers and infants and young children up to age five. WIC was developed to ensure that women and children receive nutritional supplements and counseling needed for good health. Research has shown that prenatal WIC receipt helps mothers give birth to healthy, full-term babies. WIC contributes to a healthier diet and decreases the risk of costly health problems and developmental delays.ⁱ A study by the US General Accounting Office found for every dollar spent on WIC, \$1.77 to \$3.13 was saved in Medicaid costs for newborns and mothers within the first 60 days after birth.ⁱⁱ

Minnesota has historically had an excellent track record of enrolling and retaining mothers and children in WIC. Though Minnesota ranks fourth in the nation in WIC participation rates, 26.8 percent of eligible mothers and children are not enrolled.ⁱⁱⁱ In this study, we focused on those who previously participated but whose participation ended. We did not analyze mothers who may have been eligible but never enrolled in WIC. Understanding more about when, why, and which families leave WIC can help point to potential improvements for better health and development for young Minnesotans.

We found health differences between children who formerly participated compared to those currently participating in WIC. The prevalence of overweight and not being considered a 'well child' was higher among those who formerly received WIC than those who currently received WIC. Former WIC participants focused primarily on logistical reasons provided for leaving the program, including inconvenient WIC office hours, missed appointments resulting in ineligibility, challenges with transportation, lack of knowledge of the program, and confusion caused by residential moves.

Ensuring a healthy start in life for all young children

Science demonstrates the foundation for children's future health and cognitive potential begins prior to birth and continues during the first years of life.^{iv} A healthful, nutritious diet during pregnancy and early childhood protects the growing bodies and brains of millions of American children.



"I get WIC
so I always have
enough for fruit."

WIC Participant, Minnesota

Summary of Findings

1. Children of Former WIC participants were less frequently considered 'well children' and were more frequently overweight than children of Current WIC participants.
2. Office hours, missed appointments, lack of access to transportation and residential moves were among barriers reported by Former WIC participants.
3. Former WIC participants sought continued participation; one-third reported their application was in process or had plans to re-apply.
4. Potential improvements to boost program retention: strengthen communication about children's eligibility up to age 5, consider expanded evening and weekend hours, and support changes at the federal level to expand options for electronic/telephone appointments, nutrition education and recertifications.



www.childrenshealthwatch.org

Children's HealthWatch is a nonpartisan network of pediatricians, public health researchers, and policy and child health experts that conduct primary research to inform public policies that impact children's health.

WIC participation improves:

- Babies' chances of being born full-term and with healthy weightsⁱ
- Breastfeeding initiation and duration^v
- Children's physical health^{vi}
- Cognitive development of infants and children^{vii}
- Children's likelihood of having a healthy height and weight for their age^{vi}
- Diet and diet-related outcomes for children, such as increased consumption of key nutrientsⁱ
- Consumption of iron-rich foods, reducing the risk for iron deficiency^{vii}
- Household food security—families have access to enough food for all members to lead active, healthy lives

Young Minnesotans benefit from a strong WIC program. Historically, Minnesota has ranked as one of the top states in serving the most WIC-eligible families. Minnesota has done a better job than many states of enrolling children in the program, ensuring that their age-specific nutrition needs are met throughout childhood.^{viii} For instance, pregnant women in Minnesota who participated in WIC for three or more months had healthier babies and fewer low birth weight babies than non-participants.^{ix} WIC participation in Minnesota promotes healthy weight for mothers and children and prevents the development of obesity.^x

Research results – comparison of current and former WIC participants in Minnesota

From November 2007 to June 2014, 4,213 caregivers of young children under the age of four were interviewed in Hennepin County Medical Center's pediatric primary care clinic. The sample was divided into two groups—caregivers and children currently receiving WIC (Current WIC) and caregivers and children who had previously participated in WIC, but were no longer enrolled in the program (Former WIC). All participants who reported being ineligible or not needing WIC were excluded from the analysis.

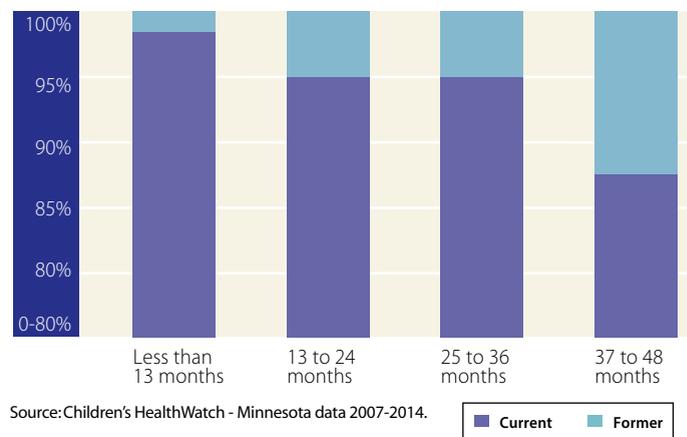
Caregivers and children in both groups were alike in many ways. Mothers in each group were between 28 and 29 years old, on average, and had comparable education levels. They also had similar participation rates in the Supplemental Nutrition Assistance Program (SNAP)—(44 percent Current WIC vs. 47 percent Former WIC). There were also some differences noted when comparing mothers and children in each group (shown below).

Table 1. Key differences between current and former WIC participants

Maternal	Current WIC Participants	Former WIC Participants
WIC participation during pregnancy	91%	81%
Married/living with partner	56%	43%
Employed caregiver	30%	38%
Child	Current WIC Participants	Former WIC Participants
Average child age	15 months	24 months
Child care participation	6%	11%

Most striking difference in children was their age revealing a concerning trend to disengage from the program as the child grows older.

Figure 1: Older WIC-Eligible Children More Likely to Leave WIC than Younger WIC-Eligible Children



Source: Children's HealthWatch - Minnesota data 2007-2014.

Former Minnesota WIC participants seek continued participation in program

The top 5 reasons for leaving WIC reported by Former WIC participants:

- **Has applied or plans to re-apply to WIC or did not recertify (32%)**
The finding that one-third of the respondents discussed re-applying indicates the appeal of the program and the benefits perceived by participants. Many former participants appear to wish to continue participating in WIC.
- **No knowledge of program (26%)**
Some former participants may not be aware that WIC serves children beyond infancy.
- **No transportation (10%)**
Without adequate access to transportation, WIC participants are challenged to attend WIC appointments, including those required for recertification in the program.
- **Moved (8%)**
Moving, particularly between states, significantly impacts participants' ability to attend appointments and recertify. It is also possible that postal mail communication from the WIC office would not reach the family, affecting their knowledge of deadlines and other key information.

On Same-Day Scheduling

"I stopped getting WIC because when he was like about one...he had me up all night ... they said I had to reapply and so I had to get up at like 7:30 in the morning and call them and make an appointment so every time I woke up I couldn't get it because I was calling too late or something."

WIC Participant, Minnesota

On Transportation Challenges

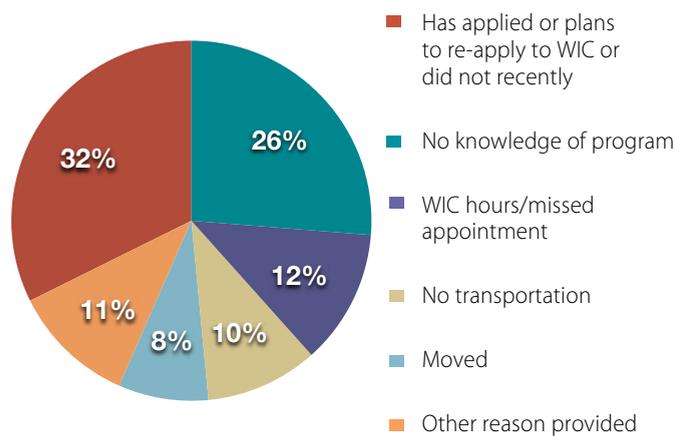
“...I don’t drive, so that’s probably why it’s so hard for me to do stuff... and I don’t like taking him on buses because ... too many people getting shot on the bus so... I’d rather just stay at home unless I need to catch a cab to an important appointment.”

Former WIC Participant, Minnesota

Children’s health suffers from WIC discontinuation

In analyses of relationships between health and WIC participation, the prevalence of poor child health outcomes was significantly higher among children of Former WIC participants compared to Current WIC participants. **Children in the Former WIC group had a higher prevalence of overweight than children in the Current WIC group (24 percent vs. 16 percent). In addition, children in the Former WIC group were less frequently considered to be ‘well’ than those in the Current WIC group (36 percent vs. 47 percent).**¹ A ‘well child’ is what every parent hopes for—a child who is in good or excellent health, is not at risk for developmental delays, has not been hospitalized, and has a healthy weight and height for his/her age. Given the higher prevalence of poor health findings in this group, it is concerning that these children are no longer receiving the nutritional and health benefits of WIC though the WIC package is designed to meet the nutritional needs of children up to age 5 years.

Figure 2: Former WIC Participants –Reason for No Longer Participating



Maternal health was also affected—**mothers in the Former WIC group had a higher prevalence of being in fair or poor health than mothers in the Current WIC group (33 percent vs. 24 percent).**

Nationally, eligible children who do not receive WIC are more likely to be underweight, short for their age, and perceived as having fair or poor health, compared to WIC participants. Earlier and longer WIC participation may also improve household food security overall, particularly for vulnerable groups.^{xi} Older children, particularly those between ages four and five, tend to lose their connection to WIC. When participation in the program drops, fewer children receive proven benefits, putting them at greater risk of food insecurity and negative health outcomes.^{xii}

¹These findings are unadjusted comparisons.

Increasing program access and participant retention

Given the proven benefits of WIC and the results of this research, Minnesota has the opportunity to further increase the reach and impact of WIC. Recommendations include:

- Enhancing outreach efforts to potentially eligible pregnant women; ongoing participation rates are 10 percentage points higher among those who enrolled in pregnancy
- Strengthening communication with WIC participants about children’s eligibility for WIC up to age five, with particular focus on current enrollment status and the process for certification and recertification
- Assisting participants with recertification process during regularly scheduled nutrition appointments and check-ups
- Considering extended office hours at WIC offices that currently are not open on evenings and weekends. Some WIC offices close between 5 and 6:45pm at least one day per week, but hours vary at each office
- Accommodating WIC participants without access to transportation through phone or electronic nutrition education and recertification processes
- Coordinating the transfer of participant records between WIC offices for families that move, especially from out of state
- Partnering with licensed childcare facilities to screen families for WIC eligibility, to better serve student or employed parents

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- ⁱ U.S. Department of Agriculture, Food and Nutrition Service. (2015). How WIC helps. Retrieved from: <http://www.fns.usda.gov/pd/wic-program>
- ⁱⁱ Devaney, B. L., Bilheimer, L. T., & Schore, J. (1991). The savings in medicaid costs for newborns and their mothers resulting from prenatal participation in the WIC program: addendum.
- ⁱⁱⁱ U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. (2015). National and state-level estimates of special supplemental nutrition program for women, infants, and children (WIC) eligibles and program reach, 2012. Retrieved from: <http://www.fns.usda.gov/sites/default/files/ops/WICEligibles2012-Volume1.pdf>
- ^{iv} Martyn, C. N., Gale, C. R., Sayer, A. A., & Fall, C. (1996). Growth in utero and cognitive function in adult life: follow up study of people born between 1920 and 1943. *Bmj*, 312(7043), 1393-1396.
- ^v Minnesota Department of Public Health. (2012). Breastfeeding in Minnesota's WIC Program. Retrieved from: <http://www.health.state.mn.us/divs/fh/wic/statistics/bffactsheet0312.pdf>
- ^{vi} Gayman, A., Ettinger de Cuba, S., Cook, J., March, E., & Coleman, S. Children's HealthWatch. (2010). *WIC improves child health and school readiness*. Available at: http://www.childrenshealthwatch.org/wp-content/uploads/WIC_brief_January2010.pdf
- ^{vii} U.S. General Accounting Office, "Early Intervention: Federal Investments Like WIC Can Produce Savings," Document HRD 92-18, Washington, D.C., April 1992.
- ^{viii} Huynh, D. Amherst H. Wilder Foundation, Wilder Research. (2013). Women, infants and children (WIC): Awareness, experience and access. Available at: <https://www.wilder.org/Wilder-Research/Publications/Studies/Minnesota%20Department%20of%20Health%20-%20WIC%20Program/Women,%20Infants,%20and%20Children%20%28WIC%29%20-%20Awareness,%20Experience,%20and%20Access,%20Full%20Report.pdf>
- ^{ix} Minnesota Department of Health (2015). Birth outcomes in Minnesota WIC children.
- ^x Minnesota Department of Health. (2013). Obesity and overweight status in Minnesota WIC children. Retrieved from: <http://www.health.state.mn.us/divs/fh/wic/statistics/wtstatus/factsheet0513child.pdf>
- ^{xi} Metallinos-Katsaras, E., Gorman, K. S., Wilde, P., & Kallio, J. (2011). A longitudinal study of WIC participation on household food insecurity. *Maternal and child health journal*, 15(5), 627-633.
- ^{xii} McGinnis, A. U.S. nutrition program for mothers, infants sees falling demand. Reuters, September 19, 2014 Available at: <http://www.reuters.com/article/2014/09/19/us-usa-poverty-nutrition-idUSKBNOHE1AF20140919>

