

WIC Online Ordering: Opportunities and Issues to Consider During the COVID-19 Pandemic

Healthy Eating
Research

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Introduction

The United States Department of Agriculture (USDA) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal nutrition assistance program serving women, infants, and children with low incomes up to their fifth birthday. Challenges to WIC food benefit redemption are well documented and have been exacerbated during the COVID-19 pandemic. This report describes opportunities for online ordering to address challenges to WIC shopping and benefit redemption, and issues for researchers and retailers to consider when implementing WIC online ordering in their community.

The considerations presented are based on findings from the Click & Collect Pilot Study for WIC online ordering conducted by researchers at the University of Tennessee, in partnership with a local WIC vendor (grocery retailer), prior to the COVID-19 pandemic. The Click & Collect model is a three-step process for placing a WIC grocery order online, then picking it up and paying for it at the store, which many retailers can implement with existing e-commerce technology and minimal costs. Additionally, Click & Collect is compliant with regulations for WIC online ordering as it does not require waivers to federal WIC requirements, making it a sustainable solution during the COVID-19 pandemic and beyond. The pilot study found that this online ordering model was feasible and acceptable to both WIC participants and WIC vendor staff, who both offered suggestions to enhance practicality of the process. The WIC vendor in this pilot study also found this to be sustainable and scalable, and reported offering similar services to other stores after the study completion.



About WIC

WIC participants redeem monthly benefits for specific brands and sizes of approved products at WIC-authorized vendors, who are retailers that supply eligible WIC products to WIC participants and receive reimbursement from WIC agencies. The WIC food package is based on nutrition science, and different food packages are provided to participants based on their life-stage. The food package includes breakfast cereal, whole grain products, 100 percent fruit and vegetable juice, eggs, legumes and peanut butter, canned fish, dairy products (e.g., milk, cheese, yogurt) and some approved dairy-substitutes (e.g., soy milk, tofu), as well as cash value benefits (CVB) to purchase fresh fruits and vegetables.

Background

Participation in the WIC program is positively associated with diet quality, but there are barriers to redeeming WIC food benefits. Some barriers to WIC food benefit redemption include feelings of stigma and shame, particularly when paying with WIC benefits in the checkout lane,¹ challenges with WIC vendor program management (e.g., limited shelf tags and cashier training),² difficulty locating and identifying WIC-approved items in the store,¹ and transaction errors.^{2,3} The COVID-19 pandemic exacerbated existing barriers to benefit redemption and introduced new challenges such as limited stock, reduced store hours, and social distancing guidelines⁴ (Table 1).

In response to the challenges created by the COVID-19 pandemic, the USDA and Congress made policy, regulatory, and programmatic changes in the operations of federal nutrition assistance programs to improve access to food benefits for participants, as well as to minimize disease transmission. The USDA has primarily implemented WIC program flexibilities in the form of waivers granted to state WIC agencies. For example, many state WIC agencies obtained waivers that allowed WIC participants to obtain different sizes of WIC-approved foods or select different milk fat types, and waived minimum stocking requirements for WIC vendors. Importantly, many states waived the physical presence requirement for WIC clinics, for example allowing food benefit certifications to occur via phone appointment or the issuance of food benefits to occur electronically, via drop box, or by mail. However, physical presence waivers for food benefit redemption are more limited. Some states received waivers for the requirement that transactions must occur in the presence of a cashier,⁵ allowing for the possibility of online, telephone, and other innovative services to emerge. However, these waivers only apply until 30 days after the COVID-19 public health emergency,⁵ and therefore do not provide the long-term certainty that most WIC vendors require to invest in the e-commerce technologies necessary for fully online WIC transactions.

Online WIC shopping options offer multiple opportunities to improve the WIC shopping experience during and after the pandemic. For example, placing an online order may decrease stigma felt by some participants (Figure 1). In addition, online shopping allows for enhanced social distancing, which was particularly important during the pandemic for the WIC population as pregnant women may be more at risk for severe illness from the coronavirus than non-pregnant women.⁶ As WIC vendors continue to adapt their practices to ensure a safe shopping experience both during and after the pandemic, the National WIC Association has urged communities to embrace innovative retail strategies such as online orders with curbside pickup and encouraged the USDA to implement a more long-term national solution around WIC online transactions.⁷

Online Orders vs. Online Transactions

Online Order: WIC participant places order for desired items online. Payment transaction and order pick-up occur simultaneously and in the presence of a cashier, either in the store or curbside. This is currently allowable in all states under federal regulations.

Online Transaction: WIC participant pays for WIC order using WIC EBT/eWIC card online (i.e., the WIC transaction occurs online). This could include entering their eWIC Personal Identification Number (PIN) online. Food may then be picked up (in-store or curbside) or delivered to the participant's home. WIC online transactions are being explored but are not currently allowable without a waiver of federal WIC requirements.

Figure 1.

Online ordering presents many opportunities to improve the WIC shopping experience.

In-Store Purchases	Online Orders
<p>STIGMA</p> <p>WIC participants experience stigma when shopping in-store.¹</p>	<p>PRIVACY</p> <p>Ordering WIC foods from the privacy of a phone/computer may decrease stigma.</p>
<p>CHECKOUT CHALLENGES</p> <p>WIC participants report issues at checkout.^{2,3}</p>	<p>STREAMLINED CHECKOUT</p> <p>Online orders can streamline the in-store checkout process.</p>
<p>CONFUSION</p> <p>WIC participants report difficulty identifying WIC items.¹</p>	<p>CLARITY</p> <p>Built-in features on websites and mobile phone applications can make it easier to identify and select WIC items.</p>

Table 1.

Barriers to WIC food shopping during the COVID-19 pandemic⁴

Barrier	Definition of Barrier	Explanation
Limited Stock	Limited stock of WIC items made it hard for WIC customers to redeem all WIC benefits in a given benefit cycle.	Disruptions to the food supply chain and <i>pandemic buying</i> (i.e., mass rush to stock up on staple foods) created shortages of WIC-approved food items. In addition, retailers' restrictions on the quantity of items that could be purchased (e.g., limit one egg carton per customer) made it challenging for WIC customers to redeem all WIC benefits in a single shopping trip.
Reduced Store Hours	Delayed opening and early closing of grocery stores.	Reduced store hours made it more difficult for working families to complete their shopping. With fewer hours for consumers to shop, stores were more crowded, making it difficult to distance from other customers.
WIC Vendor's COVID-19 Restrictions	WIC vendors implemented guidelines to facilitate social distancing, such as limits on the number of people per family allowed to enter the store.	Many WIC vendors developed guidelines intended to protect employees and patrons from contracting or spreading the virus while shopping at their store. However, some guidelines, like limits on the number of people per household permitted to enter the store, created additional childcare challenges for low-income and single-parent households.
Online Shopping Limitations	Federal regulations stipulate that WIC transactions must occur in the presence of a cashier (7 CFR § 246.12), ⁸ disallowing online WIC transactions. Some states received waivers to allow for alternative methods for shopping.	In the context of COVID-19, many shoppers chose options that allow them to shop in a socially distant way to keep themselves and their communities safe. Some WIC vendors offer socially distant services to WIC participants (e.g. online ordering, self-checkout) but these options are not available in all areas, limiting participants' ability to practice social distancing while shopping and creating equity issues.

The WIC Click & Collect Pilot Study in Tennessee

The WIC Click & Collect Pilot Study was a research study to test the feasibility and acceptability of WIC online ordering from both WIC participants' and WIC vendors' perspectives. This pilot was conducted at one full-service grocery store in Knoxville, Tenn., from June 2019 through February 2020 (pre-pandemic). The University of Tennessee (UT) partnered with Food City (K-VA-T Food Stores, Inc.), a regional full-service grocery chain, to implement the Click & Collect pilot. The Click & Collect model was designed to be implemented using Food City's existing resources (i.e., no new technology) and was cost-neutral to the retailer. Additionally, the Click & Collect model is compliant with federal regulations⁸ and Tennessee WIC vendor regulations⁹ before, during, and after the pandemic because it does not require a waiver for cashier presence.

A convenience sample of 25 WIC participants in Knox County, Tenn., was recruited to test the Click & Collect model. Participants completed an online ordering session and a follow-up qualitative interview. Participants received two \$25 gift cards for their participation in the study; one was provided after the initial online order session, and the second was provided after the follow-up interview. Qualitative interviews were also conducted with retail staff after the study was completed. Additional details about the study design have been published elsewhere.¹⁰ The three-step Click & Collect process and considerations for researchers and retailers interested in implementing Click & Collect in their community are presented below.

Figure 2.
The Click & Collect model three-step process.



Step 1, Online Order:

From September through December 2019, WIC participants placed an online order using a laptop computer provided by the research team at the University of Tennessee. Participants chose the option to “pay at pickup” and selected a time. Since the store’s website did not have a specific section for WIC items, WIC participants indicated their order was a WIC order in the shopping notes. WIC vendor staff (i.e., grocery store staff) were trained to look for these notes and to identify WIC items in the store. During the shopping process, WIC vendor staff communicated with WIC participants according to the store’s usual protocols, which involved direct communication (often text messaging) between the WIC vendor staff member filling the order and the participant. This was used to address substitutions if the ordered item was not available and to provide final instructions related to pick-up.

Step 2, In-Store Payment:

WIC participants paid for their order using their eWIC card at a register inside the store used for online orders, where the WIC vendor staff had already totaled and saved the order. The total included a \$4.99 (pre-tax) online ordering convenience fee, which many participants paid for with the gift card they received for participating in the study. In-store rather than curbside payment occurred because a mobile card reader compatible with eWIC was not available at the time of study.

Step 3, Curbside Pickup:

The WIC vendor staff delivered the groceries to the participant’s car, which was parked in a designated curbside pick-up spot.

Issues and Recommendations to Consider

WIC participants and WIC vendor staff shared their perspectives on the Click & Collect Pilot Study in qualitative interviews. The six considerations reported below are grounded in their feedback and the pilot learnings and can inform efforts by WIC vendors, WIC state agencies, and others interested in bringing Click & Collect WIC online ordering to their community.

1. Payment. Mobile eWIC card readers and split-tender transactions improve checkout for both WIC participants and vendor staff. Participants in the pilot study utilized split-tender transactions in their online orders and recommended use of a mobile eWIC card reader in the future to allow for curbside payment. Split-tender transactions allow WIC participants to purchase both WIC and non-WIC items in one order, making their shopping easier and faster. Curbside payment was perceived to be less burdensome and faster by both WIC participants and vendor staff, especially when there were children with the participant at the time of order pick-up.

“If this continues to go in the direction it’s going and we can stay in the car the whole time, I will do it all the time.”

– WIC Participant

2. Fees. Reducing or eliminating online ordering fees can enhance equity and increase participation. Some retailers add a fee to online grocery orders. WIC participants in the pilot study suggested the fee not exceed \$2 to \$5 and were more willing to pay a fee for home delivery than curbside pickup. Participants also suggested alternatives, such as a sliding scale for fees based upon order size or not requiring fees for online orders, both of which are currently being implemented by other major retailers.

“Around that \$4 or \$5 mark I think is really reasonable for most people to pay, especially to not have to go in the store and be able to process everything and have them load it into your car is great.”

– WIC Participant

3. Substitutions. Substitutions should be handled through a clear, consistent process with input from WIC participants when possible. With online orders, it is common for a substitute item to be selected if the ordered item is not in stock, and some retailers allow for “automatic substitutions,” meaning without consulting the customer. Automatic substitutions introduce issues for WIC online orders because WIC benefits can only be redeemed for items in specific brands and sizes. WIC vendors interested in offering WIC online services should avoid automatically substituting items in the order and encourage communication between the WIC participant and WIC vendor staff. In this study, the WIC vendor staff shopping for the WIC order

communicated directly with the participant (often via text message) to determine an appropriate substitution.

“I had gotten texts about how the cheese cubes were not approved at [the participating store] for their WIC... It made it easier for me to see what brands they pick up for you if your brand doesn't work and they have to use an alternative.”

– WIC Participant

- 4. Communication. Personalized communication can enhance WIC customer loyalty.** WIC participants in this pilot study had clear ways to indicate that their order was a WIC order and for communicating with the WIC vendor staff member shopping for their order. The WIC vendor staff member communicated with the WIC participant early and often via direct text messaging. Through these communications, they got to know the customer and could provide enhanced customer service. The WIC vendor saw this personalized communication as way to build customer loyalty and create a competitive advantage over other retailers.

“We converse back and forth with the customer. A lot of the other [online grocery ordering services] do not do that. We're more personable...What we're going to try to do is help the customers.”

– WIC Vendor, Store Employee

- 5. WIC Labels. Identifying WIC-approved items online can help WIC participants shop faster and more accurately.** Some states require that WIC vendors label WIC products in their stores using shelf tags. To facilitate ordering WIC groceries online, the WIC vendor's website should be modified to clearly label WIC-approved items. Participants in this pilot made several suggestions, including having a small WIC logo on the stock image that is consistent with the shelf tags in-store, an option to filter search engine results by WIC-approved items, and having a WIC tab for browsing.

“If it was a WIC approved item, if they had it [the WIC logo] on there in a corner...That would be nice too. Just a little stamp on there or something that said 'WIC approved.' That way I know I'm clicking the right thing.”

– WIC Participant

- 6. Produce. Selling produce by price or pound, not piece, can help maximize WIC cash value benefit redemption.** WIC benefits for produce are administered as a cash value benefit, which represents a specific dollar amount that participants are allotted for the purchase of fruits and vegetables. Although canned and frozen produce are often sold in individual packages with predetermined prices, fresh produce is typically sold by weight, so the cost is not uniform. WIC participants often weigh their produce when shopping in-store to determine how much they can purchase with their cash value benefit. To better accommodate WIC online orders, WIC vendors should create opportunities for purchasing produce by the pound or by price, in addition to selecting produce by the number of pieces.

“...It's price per pound. That's important to me with WIC because with the cash value voucher, I try to really maximize what I can get with it...And you know, use up every single penny that I can of that voucher.”

– WIC Participant

Despite identifying areas for improvement, the WIC vendor staff felt the pilot was successful and continued online ordering operations beyond the conclusion of the research study.

“I've let a couple of other stores do it since then. They have had customers who have asked about doing WIC online and I've told my [staff members] who have asked about it...yeah, sure...As long as that customer tells you that it's a WIC transaction and you tell them they're going to have to come inside and pay for it, absolutely. Go ahead and do it...It can be possible anywhere.”

– WIC Vendor, Regional Manager

Future Research Directions

The Click & Collect Pilot Study was an important initial step to explore feasibility and acceptability of online ordering in the WIC program. Additional research can enhance the process, as the WIC program explores opportunities to move to online transactions in the future. As WIC online ordering options grow in some regions, tracking the frequency of WIC participant use of a Click & Collect option and other online WIC retail innovations can assess equitable access to these new services. Additionally, studies on WIC food benefit redemption patterns and the diet quality of food purchases for in-store shopping versus online shopping can provide insight into how changes to the virtual food environment may impact health outcomes in this population of nutritionally vulnerable women, infants, and children.

Long-term projects should focus on expanding beyond online ordering models, toward fully online eWIC transactions that could permit both online order and online payment. Additionally, technological enhancements, such as integrating WIC benefit balances with the WIC vendor's website, a process called intelligent ordering,¹¹ can allow real-time benefit information to be displayed to WIC participants when they are shopping online. Future research should assess if this technology enhances ease of benefit use and increases benefit redemption. Engaging WIC participants, WIC vendors, EBT processors, and others in this research is essential to ensure the evolution of e-commerce in WIC has buy-in from multiple parties and is sustainable beyond the context of research studies.

Conclusion

Online ordering with WIC is a low-cost solution that is feasible and acceptable to WIC participants and retailers and is compliant with federal requirements for WIC transactions. Beyond the COVID-19 pandemic, WIC online ordering has the potential to address challenges to in-store WIC food shopping (e.g., stigma, difficulty locating WIC items). WIC online ordering also addresses equity concerns: allowing the general public and SNAP participants to pay for groceries online, while still requiring WIC participants to pay in the presence of a cashier, raises ethical concerns related to food access. As the USDA and researchers continue to explore WIC food retail innovations including fully online transactions, WIC vendors can be at the forefront of the e-commerce evolution by making Click & Collect services available to their WIC customers. As WIC vendors implement online WIC services, they should build on the learnings from this pilot, including the considerations for payment, fees, substitutions, communication, WIC labels, and produce.

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Links to Resources

- Infographic on WIC Online Grocery Ordering: A Click & Collect Model: [English](#), [Spanish](#)
- WIC Pickup and Delivery Requirements, [October 2020](#)
- National WIC Association's [COVID-19 Resources](#)
- USDA.gov, [WIC Waivers by State](#)

References

1. Chauvenet C, De Marco M, Barnes C, Ammerman AS. WIC Recipients in the Retail Environment: A Qualitative Study Assessing Customer Experience and Satisfaction. *J Acad Nutr Diet*. 2019;119(3):416-424.e2. doi:[10.1016/j.jand.2018.09.003](https://doi.org/10.1016/j.jand.2018.09.003).
2. Payne CR, Niculescu M, Guthrie JF, Mancino L. Can a Better Understanding of WIC Customer Experiences Increase Benefit Redemption and Help Control Program Food Costs? *J Hunger Environ Nutr*. 2018;13(2):143-153. doi:[10.1080/19320248.2017.1364191](https://doi.org/10.1080/19320248.2017.1364191).
3. Zimmer MC, Beard J, Steeves EA. WIC Participants' Perspectives of Facilitators and Barriers to Shopping With eWIC Compared With Paper Vouchers. *J Nutr Educ Behav*. 2020;53(3):195-203. doi:[10.1016/j.jneb.2020.09.007](https://doi.org/10.1016/j.jneb.2020.09.007).
4. McElrone M, Zimmer MC, Anderson Steeves ET. A Qualitative Exploration of Predominantly White Non-Hispanic Tennessee WIC Participants' Food Retail and WIC Clinic Experiences During COVID-19. *J Acad Nutr Diet*. Published online February 3, 2021. doi:[10.1016/j.jand.2020.12.011](https://doi.org/10.1016/j.jand.2020.12.011).
5. USDA-FNS. "WIC- Transaction Without Presence of Cashier." Accessed December 2, 2020. <https://www.fns.usda.gov/wic/transaction-without-presence-cashier>
6. CDC. "Data on COVID-19 During Pregnancy: Severity of Maternal Illness." Accessed December 2, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/special-populations/pregnancy-data-on-covid-19.html>
7. National WIC Association. "Blog Post: WIC Shopping in the COVID-19 Emergency." Accessed August 12, 2020. <https://www.nwica.org/blog/blog-post-wic-shopping-in-the-covid-19-emergency>
8. GovInfo. "7 CFR 246.12 - Food delivery systems. - Content Details - CFR-2006-title7-vol4-sec246-12." Accessed March 12, 2021. <https://www.govinfo.gov/app/details/CFR-2006-title7-vol4/CFR-2006-title7-vol4-sec246-12>
9. TN Department of Health. "For Vendors." Accessed December 2, 2020. <https://www.tn.gov/health/health-program-areas/fhw/wic/redirect-wic-for-vendors.html>
10. Zimmer M, McElrone M, Anderson Steeves E. Feasibility and Acceptability of a 'Click & Collect' WIC Online Ordering Pilot. *J Acad Nutr Diet*. In press.
11. Gustafson D, Miller J, Gutknecht K, Phelps B, Seitel T, Ewing T, Chilcoat J, Duncan A, Gilland J, Rogness M, et al. *WIC / EWIC PICKUP AND DELIVERY REQUIREMENTS*. https://s3.amazonaws.com/aws.upl/nwica.org/fy20_nwa_factsheet_pickup-and-delivery-requirements.pdf

About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition related health disparities. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at [@HERResearch](https://twitter.com/HERResearch).

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