

Nutrition Services WIC

10A NCAC 43D .0202, .0203, .0703,0707 and .0708

Agency: DHHS/ Division of Public Health

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Impact Summary: State government: Yes
Local government: Yes
Federal government: Possible
Substantial impact: Yes

Authority: G.S. 130A-361; 7 C.F.R. 246; 42 U.S.C. 1786;

Purpose of Rule Change

We are proposing to implement an electronic benefit transfer (EBT) system for the North Carolina WIC Program. Current WIC participants are issued paper food instruments and cash value vouchers that they can redeem at grocery stores for infant formula and medical nutritionals as well as nutritious foods, fruits and vegetables. Change in Federal WIC regulations regarding the mode of issuance and redemption of food benefits has necessitated a nationwide shift from a paper-based system to an electronic system. Per 7 CFR 246.12 (a): “*By October 1, 2020, each State agency shall implement EBT statewide.*” As a result of this requirement detailed in Federal WIC regulations, the North Carolina WIC Program must develop and implement an EBT system where WIC participants are issued benefits loaded onto a card which are subsequently redeemed at a retail grocery store or pharmacy. EBT will be implemented across the state, from October 2017 until May 2018, using a staged rollout methodology and the rules must be amended to accommodate changes in issuance and redemption of WIC benefits.

The funding level for the Women, Infants and Children (WIC) Program would not be changed as a result of adopting the proposed permanent rule amendments. The level of funding that comes from federal sources to the State would not be altered by these rules, although the level of unused funds the State returns to the federal government each year might decrease. The funds passed from the State to the local governments for administering the WIC Program would not change.

The Department anticipates that issuing food assistance benefits through an electronic system will make redeeming WIC benefits at the grocery store more flexible and convenient for WIC participants. Making the switch from paper vouchers to an EBT card that looks like a credit card may also reduce the external stigma associated with using food assistance. The electronic system will provide both participants and vendors with up-to-date information on approved foods, minimizing transaction problems in the checkout line.

Furthermore, the Division of Public Health (DPH) anticipates that data tracking will be easier with an electronic system, improving the efficiency of the program. The agency will be able to better control food costs and reduce fraud and abuse of program benefits.

As a result of the rule changes, the State would avoid penalizing actions that the federal government might take if the proposed rule changes are not adopted, including corrective action or loss of program funding.

Proposed Rule Changes and Their Impact

The proposed rule changes perform the following actions:

1. Add the following definitions to rule .0202:
 - a. Electronic Benefit Transfer Processor
 - b. Personal Identification number (PIN)
 - c. Point of Sale Terminal
 - d. Product Look Up Code (PLU)
 - e. Universal Product Code (UPC)

These definitions have been added due to the Federally required implementation of EBT for all state agencies.

2. Add the Physical Address of the Nutrition Services Branch to rule .0203

The address has been added to ensure that those interested know where program-related documents can be obtained.
3. Establish Policies and Procedures for WIC Program Management Under an EBT System.

WIC Participants

The proposed rule change regarding the implementation of EBT in North Carolina would have a positive impact on WIC Program participation by decreasing psychological costs to participants. Use of paper vouchers/coupons at grocery stores has long been a source of stigma for recipients of public assistance whether that may be the Supplemental Nutrition Assistance Program (SNAP formerly referred to as Food Stamps) or the WIC Program. The stigma was not only external, but internal. Some participants perceived that they were looked down upon by other shoppers for using their vouchers/coupons (external stigma) while others felt bad for using the assistance to meet basic needs (internal stigma) (Manchester and Mumford 2010). This and other factors has resulted in a decrease in WIC participation nationwide in recent years. North Carolina also experienced a steady decrease.

In an EBT system, public assistance benefits are loaded onto a card which is utilized at a store to obtain approved foods. Transaction of WIC benefits using an EBT card would allow participants to redeem their benefits without other shoppers knowing because the EBT card will look like any other credit/debit card. This is a positive programmatic change for participants because use of the card could drastically decrease the external stigma (psychological cost) associated with using their benefits

EBT implementation would also be beneficial to WIC participants in several other ways. First, they would have a choice regarding the quantity of foods they want to purchase at any given time. Currently, the participant must get everything listed on the food instrument at one time if they want to obtain all the food listed. For example, a participant is issued four food instruments which each contain 2 gallons of milk, 1 container of 64-ounce juice, 1 dozen eggs, 36 ounces of breakfast cereal and 16 ounces of whole wheat bread or whole grains. Though the food instruments can be redeemed at different times, all the food on each food instrument must be

purchased at the same time because once the food instrument is redeemed, the participant cannot get food they chose not to purchase on a later date. This can create a challenge with storage, expiration and consumption. This issue is greatly minimized with EBT. When an EBT system is used, the participant can get what they need (in an approved quantity) from their list of foods issued on any given date as long as the benefits are still valid. This means that if they were issued 2 gallons of milk for the month, they can redeem one gallon on one day and the other gallon on another day to allow for adequate storage and consumption of the foods obtained.

Another benefit to participants is the streamlined shopping experience. North Carolina will be using a mobile app for smart phones which will let the participants know what items are WIC-approved as well as their benefit balances. Should the participant not have a smart phone, they may also obtain their benefit balance by calling a toll-free phone number to access the interactive voice response (IVR) system. The approved food information obtained through the app will be the same information available to retailers. As a result, confusion regarding approved products will cease. Additionally, for the vendors with integrated cash register systems that accept credit, debit, SNAP and WIC, the participant will no longer need to separate WIC-approved foods from their other purchases. The system will select the WIC-approved items to deduct from the participant's benefit balance based on the UPC code of the food purchased. WIC EBT will eliminate many obstacles participants face during their shopping experience.

See the Uncertainties section for a discussion about how these improvements to the program could affect future enrollment or future food costs for current participants due to changes in food instrument use.

State Agency

Prior to implementation, retailers need to upgrade their current cash register systems to transact benefits for WIC participants using EBT cards. This may either necessitate upgrading the software of current multi-function equipment for retailers with integrated systems or obtaining single function equipment (stand-beside point of sale terminals) that will be solely used for WIC transactions. Per Federal regulations a state agency cannot impose the cost of EBT implementation on vendors. Implementation costs will be absorbed by the state agency for expenses related to implementation. The state agency will provide single function, stand-beside equipment to approximately 20% (400) of the WIC authorized retailers. These retailers are mostly smaller stores. It is likely that the state agency will provide them with one point of sale device per store. Each device costs \$484.50. Therefore, the cost of equipment provided to the smaller retailers would be approximately \$193,800 ($\484.50×400). The majority of the larger corporate chains, approximately 1200 stores (60%), already have the software built into their multi-function, cash register systems because of implementation of EBT in other states. Therefore, their software will not need to be updated, only deployed. As a result, the provision of equipment or software to a small number of vendors translates into an insignificant cost for the state agency.

In addition to the WIC Federal administrative grant, the State agency has received grant funding from the USDA to implement EBT that will be utilized to cover additional costs incurred by

vendors for software upgrades and/or equipment. The cost to the Federal government equates to the amount of the grant provided to the state to implement EBT and administrative funding for the fiscal years 2017-2019. Funding for implementation was provided to the state during State fiscal year 2016 and is available until State fiscal year 2019. The complete grant allocated for EBT is \$5,173,251 for the four-year period while the administrative funding allocated to pay for the remainder of the implementation is \$1,000,364, making the cost to implement the project \$6,173,615. Fifty six percent (\$3,437,610) of that cost is payment to the EBT contractor for coordinating statewide implementation of the new EBT system. The rest of the funding allocated will be used for administrative activities/costs necessary to support the project.

The administrative and food budgets will not change for local or state governments as the result of these rule revisions unless there is truly an increase in participation or benefits redemption. See the Uncertainties section regarding the effect of EBT implementation on WIC program participation. This food cost will be paid for by Federal grant dollars allocated to the state as a result of any future increase.

Time would be required to train staff regarding new screens designed within the MIS system to manage EBT and new equipment for card and benefit issuance e.g., printers for cards and devices used to load benefits onto cards. Training for staff will not require a significant amount of time. It will be approximately four hours per staff member and will not have a great impact on the clinic flow. There are approximately 950 staff to be trained which will result in a total of 3800 training hours for all staff across the state. The estimated average annual salary for local agency WIC staff is approximately \$40,000 annually (\$19.23 per hour). As a result, the estimated total cost for local staff training would be $19.23 \times 3800 = \$73,074$. The estimated average annual salary for a state employee that works for the North Carolina WIC Program is approximately \$58,000 (\$27.88 per hour). The number of State staff that will need to be trained is 30. The total cost for training state staff is estimated to be $27.88 \times 4 \times 30 = \$3,346.15$. Total training costs for the state and local staff is \$76,420.15 combined.

A major benefit of implementing the EBT rules is to avoid penalizing actions that the federal government might take if the proposed rules were not adopted. Penalizing actions include:

- a. If a State agency fails to comply with the federal regulation regarding EBT implementation, the U.S. Department of Agriculture could put the State on a corrective action plan. Should a corrective action plan be put in place, administrative time will be expended addressing the corrective action and ensuring NC is brought into compliance. The Department cannot estimate the exact savings from preventing a corrective action plan, but wants to preclude this outcome by implementing an EBT system well in advance of the federal deadline.
- b. The USDA may refuse to approve the NC WIC State Plan in future years until North Carolina fully complies with federal regulations. Refusal to approve the State Plan would be the most severe repercussion and last resort the USDA would employ to ensure that North Carolina adopts the required federal regulations.

WIC program costs total \$196,698,261. Although it is not possible to fully quantify the benefits that North Carolina residents (including participants and non-participants) receive from this program, studies have demonstrated that WIC improves the health of nutritionally at-risk women,

infants, and children, and reduces fetal death and infant mortality¹ as well as healthcare costs. Implementing EBT will allow the state to continue to operate the program at a high level of service.

EBT implementation can ensure the purchase of the appropriate WIC-approved items by WIC participants. In order for an EBT system to function properly for WIC, a list of authorized foods has to be uploaded into the cash register system utilized. This list of foods, identified by individual Universal Product Codes (UPCs), is called the authorized product list (APL). By using the APL, the retailer can determine what food is approved to be transacted by the WIC participant. This will prevent the purchase of non-approved foods or foods improperly substituted due to human error and decrease the opportunity for fraud and abuse of Program benefits. Though this is a benefit to the Program, it cannot be quantified.

EBT implementation will also provide the WIC Program with data useful to improve program management and integrity. The data provided includes, but is not limited to, the type, brand, cost, frequency and time of purchase for each food item. Proper analysis can result in improved cost containment and fraud detection measures that can aid in overall Program administration, including food package changes and improved rebate billing for infant formula. Though staff will likely analyze data differently which may result in changes to program policies/procedures, time savings cannot be determined.

Retailers

The only cost incurred by the retailer would be the time necessary to train their employees on how to use the EBT system appropriately on new or existing equipment in their store. Retailers with an integrated cash-register system will need to train their staff on the new procedures that they will be using for WIC. As they will already have a system in place for SNAP (food stamps) transactions, training for WIC will not be extensive. The training for vendors with stand-beside devices should also be very simple. The stand-beside device chosen is a “plug and play” device which is programmed specifically for the vendor by the EBT Contractor prior to shipment and is very easy to connect. Using the instructions provided with the equipment, a retailer will be able to set up the equipment and quickly train staff, prior to implementation.

Retailers will benefit from the implementation of WIC EBT as well. Not only will the time spent in the checkout lane be reduced, allowing for an efficient and accurate transaction, but they will always know what the authorized products are when they are transacted. As they will be required to download the authorized product list at least once every 24 hours, they will always have the most current list in their system, which will eliminate the purchase of incorrect items due to human error and decrease the incidence of fraud and abuse of Program benefits by vendors that try to substitute approved foods for foods that are not authorized for purchase.

Another benefit for retailers will be less time processing WIC benefits. There will no longer be a need to process food instruments and cash value vouchers manually e.g., reviewing them for

¹ Source: <https://www.fns.usda.gov/wic/about-wic-how-wic-helps>

accuracy, batching them for deposit, assessment of those rejected and returned, etc. This will decrease the cost and time for back office accounting. Transactions will be processed instantly which will facilitate quicker payment for WIC benefits redeemed by participants. Though we expect this positive impact, it cannot be quantified given the diversity in processes, procedures and Point of Sale systems employed by the different retailers statewide.

4. Modification of Minimum Inventory Requirements

The minimum inventory requirements were modified to:

- include new minimum stocking requirements for rice, bread, tortillas, tuna and infant fruits and vegetables,
- remove the requirement for concentrated formula,
- decrease the requirement for powdered formula and infant cereal, and
- increase the requirement for skim milk and canned fruits and vegetables

Changes to the food package and shopping patterns necessitated updating the minimum inventory requirements to make them more realistic for retailers and participants. For example, WIC Program data shows that the overwhelming majority of North Carolina WIC participants are issued infant formula in the powdered form, thus eliminating the need to have a minimum inventory requirement for concentrated infant formula.

Changes to minimum inventory requirements will not have an economic impact because retail grocery vendors already have the approved foods added on their shelves for purchase for non-WIC customers and to fully transact food instruments or cash-value vouchers for all WIC participant categories.

Uncertainties

Changes in WIC Participation or Food Cost due to EBT

An article entitled *Welfare Stigma Due to Public Disapproval*² details the findings of a study conducted that concluded that EBT implementation would eliminate the external psychological cost associated with benefit redemption at the grocery store and increase WIC participation rates by 23 percent (Manchester and Mumford 2010). This increase could translate into increased redemption of WIC benefits by current WIC participants in addition to increased enrollment of those eligible to receive WIC. Based on the conclusion of the study, the table below illustrates the potential increase in redemption and enrollment in North Carolina due to EBT implementation.

EBT may remove the external stigma associated with benefit redemption at the grocery store, reducing barriers to program participation. However, the research findings on the effect of EBT on enrollment in food benefits programs such as WIC and SNAP are mixed.

A recent study of WIC data from five states³ that implemented EBT found no evidence that EBT increases enrollment.⁴ DPH considers this to be the lower bounds of the possible enrollment change.

Between 1997 and 2004, EBT was implemented for SNAP (then called the Food Stamp Program or FSP) in most states, but EBT was not implemented for WIC. Researchers Manchester and Mumford examined SNAP participation pre- and post-EBT and estimated that EBT increased participation in SNAP by 30% due to reduced external stigma.⁵ Assuming that the WIC transition to EBT occurred at the same time and in a similar manner as the FSP transition to EBT, Manchester and Mumford estimate that implementing EBT for WIC would have increased participation by 23%.

DPH interprets these findings with caution due to a number of factors that could impact participation and considers 23% to be the upper bounds of the possible enrollment change. Reduced external stigma may have a different effect among the WIC population than the SNAP population because the eligibility requirements and restrictions on the type of food that may be purchased under SNAP and WIC are different. There may also be variation in results between states. Furthermore, there is not consensus on the effect of EBT on FNS take-up rates. Some studies find that EBT increased participation, while others find no statistically significant effect. Manchester and Mumford estimate a larger impact on FNS participation than other studies.

Based on the conclusion of the study, the tables below illustrates WIC total food costs in North Carolina, assuming a 0% increase and a 23% increase in program participation after EBT implementation.

Year	Total Participation	Total Food Costs	Average Annual Food Costs per Participant
Historical Data			
2012	269,335	\$145,882,649	\$542
2013	264,755	\$137,507,456	\$519
2014	255,672	\$143,064,930	\$560
2015	248,860	\$127,920,051	\$514
2016	241,286	\$122,959,051	\$510

³ Kentucky, Ohio, Massachusetts, Virginia, and Wisconsin.

⁴ Source: <https://www.aeaweb.org/conference/2017/preliminary/paper/QNbK7Ne>

⁵ Source: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.617.4266&rep=rep1&type=pdf>

Projections	2017	2018	2019	2020	2021
Baseline Projections- No Impact from EBT					
Total Participation	234,748	228,387	222,198	216,177	210,319
Avg Food Cost per Participant	\$529	\$529	\$529	\$529	\$529
Total Food Costs	\$124,144,162	\$120,780,155	\$117,507,305	\$114,323,141	\$111,225,261
23% Growth in Participation					
Total Participation	288,740	280,916	273,303	265,898	258,692
Avg Food Cost per Participant	\$529	\$529	\$529	\$529	\$529
Total Food Costs	\$152,697,319	\$148,559,591	\$144,533,985	\$140,617,464	\$136,807,070
\$206/person/yr Growth in Food Cost					
Total Participation	234,748	228,387	222,198	216,177	210,319
Avg Food Cost per Participant	\$735	\$735	\$735	\$735	\$735
Total Food Costs	\$172,427,076	\$167,754,719	\$163,208,971	\$158,786,403	\$154,483,675

Food Cost, Change from Baseline	2017	2018	2019	2020	2021
23% Growth in Participation	\$28,553,157	\$27,779,436	\$27,026,680	\$26,294,322	\$25,581,810
\$206/person/yr Growth in Food Cost	\$48,282,914	\$46,974,563	\$45,701,666	\$44,463,262	\$43,258,415

Since Manchester and Mumford's study, 21 states have fully implemented EBT. According to nationwide WIC Program data, all 21 states have still had a steady decrease in WIC Program participation rates. The decrease may be less in states that implemented EBT, but due to the many factors (programmatic, social and financial) which may contribute to the decrease in participation, the effect of EBT on program enrollment cannot be determined with certainty.

WIC Benefits Redemption

EBT implementation could also affect benefits redemption by current WIC participants by reducing the amount of time required for each transaction. A recent analysis of WIC data from five states that implemented EBT showed evidence that WIC participants redeem more benefits beginning 2-4 months after EBT transition, redeeming an additional \$17.14 per month by month five.

DPH also interprets these results with caution as effects may differ between states and between retailers. The table above shows WIC total food costs in North Carolina, assuming additional benefits redemption of \$206 (\$17.14*12 months) per enrollee per year after EBT implementation.

Alternatives

The two alternatives to implementing an EBT system now are:

- **Do Not Implement An EBT System At All:** The North Carolina WIC Program can choose not to implement an EBT system. As stated previously, the implementation of EBT for WIC Programs nationwide is a Federal mandate. Failure to implement EBT, will result in non-compliance with Federal WIC Program regulations and inevitably, total loss of Federal funding. As WIC is 100% Federally funded, the program would have to cease operations. This would have a detrimental impact on families in North Carolina that depend on the infant formula, supplemental foods and services the Program provides.
- **Implement EBT at a Later Date:** Another alternative is to implement EBT at a later date. While possible, this could result in an implementation schedule which still fails to meet the Federal deadline because the majority of states still need to develop and implement an EBT system simultaneously. As the number of EBT contractors nationwide is very limited, the resources for this tremendous national endeavor will be stretched thin the closer we get to the October 1, 2020 deadline. Failure to implement the EBT system now could result in fewer resources to create and implement a system which functions at an optimal level or missing the Federal deadline for implementation altogether. Both could result in punitive action from the USDA, which could include a corrective action plan or loss of Federal funding.

Summary

In summary, there are many benefits to using an EBT system for participants and retailers. The implementation of EBT may increase WIC Program enrollment and redemption due to the benefits of using an EBT card that were identified above; however, the effect of EBT on enrollment and redemption is uncertain. At most, changes to enrollment and benefits redemption could expand the program by over \$40 million per year. New or intensified use of the program is expected to result in better health outcomes for participants.

State and local governments will also benefit from the EBT system. More accurate and timely data from the electronic system is expected to reduce error, fraud, and abuse within the program. These benefits are unquantified. Furthermore, by complying with federal requirements, North Carolina will ensure continued program funding from federal sources.

The quantifiable costs are the costs incurred from training staff at the local and state level as well as those employed by retailers and costs incurred by the state government (via federal funds) for equipment, coordination, and administration of the project.

See the table on the following page for a summary of the estimated costs and benefits.

IMPACT ANALYSIS	FY2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
COSTS						
State Government*						
Additional Food Benefits Payments			\$0-\$46,974,563	\$0-\$45,701,666	\$0-\$44,463,262	\$0-\$43,258,415
EBT Technology to Vendors			193,000			
EBT Contractor		\$2,590,166	\$738,080	\$109,364		
EBT Implementation - Other	\$75,433	\$839,954	\$512,617	\$114,635		
Additional Staff and Training		\$256,229	\$649,884	\$21,177		
Local Government						
Staff training costs		\$6,692	\$66,382			
Retailers						
Staff training		Minimal	Minimal	Minimal	Minimal	Minimal
Total Costs	\$ 75,433	\$ 3,693,041	\$2,159,964 - \$49,134,527	\$245,177 - \$45,946,843	\$0- \$44,463,262	\$0 - \$43,258,415
BENEFITS						
State Government*						
Retain WIC Program and Admin Funding						\$ 149,217,082
Reduced Error, Fraud, and Abuse			Unquantified	Unquantified	Unquantified	Unquantified
Local Government						
Retain Administrative Funding						\$ 47,241,715
WIC-eligible Individuals						
Reduced Stigma and Increased Convenience /						
Additional Food Benefits Payments			\$0-\$46,974,563	\$0-\$45,701,666	\$0-\$44,463,262	\$0-\$43,258,415
Improved health outcomes			Unquantified	Unquantified	Unquantified	Unquantified
Retailers						
EBT Technology to Vendors			\$193,000			
Staff Time Savings			Unquantified	Unquantified	Unquantified	Unquantified
Reduced Error, Fraud, and Abuse			Unquantified	Unquantified	Unquantified	Unquantified
Total Benefits	\$ -	\$ -	\$193,000 - \$47,167,563	\$0 - \$45,701,666	\$0 - \$44,463,262	\$196,458,797 - \$239,717,212
NET IMPACT	\$ (75,433)	\$ (3,693,041)	\$ (1,966,964)	\$ (245,177)	\$ -	\$ 96,458,797
NET PRESENT VALUE (FY 2017 dollars)		\$ 44,051,291				

*The Federal Government provides 100% funding for the WIC program to individual states, who then implement the program. WIC funds are considered "state funds" according to the State Budget Act.

References

Hanks, Andrew *et al.* (2017). “ From Paper to Plastic: Understanding the Impact of EBT on WIC Recipient Behavior.” Accessed at

<https://www.aeaweb.org/conference/2017/preliminary/paper/QNbKE7Ne>

Manchester, C.F. and Mumford, K. J. (2010): “Welfare Stigma due to Public Disapproval”

Accessed at

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.617.4266&rep=rep1&type=pdf>

USDA, Food and Nutrition Service (November 2013). *About WIC – How WIC Helps*. Access at

<https://www.fns.usda.gov/wic/about-wic-how-wic-helps>