Challenge

WIC supplemental foods are provided to meet the special nutritional needs of participants who are at nutritional risk. Eligible participants are provided a set of “vouchers” each month to be utilized at WIC authorized vendors to buy the designated foods, including: infant formula and baby food, milk, eggs, cheese, fortified breakfast cereals, whole wheat products, legumes, peanut butter, juice, canned fish (exclusively breastfeeding women only), and fresh, frozen and canned fruits and vegetables. As reported in Altarum Institute’s Final Report *The Effects of Changes in WIC Food Packages on Redemptions* (2011), the redemption rate of “traditional” WIC food vouchers (milk, cheese, eggs, peanut butter, beans, fish, whole grains, cereal, infant fruits and vegetables, infant meats, juice, eggs) is high (90% nationally). However, the redemption rate of “Cash Value Vouchers” (CVV) for fruits and vegetables is much lower (77% nationally). Additionally, only 67.4% of participants who utilized the CVV’s redeemed them for the full amount. Hispanic participants were more likely (almost 66%) to use the full amount of the CVV, compared to 40% of non-Hispanic White, and fewer than 40% of non-Hispanic Black, non-Hispanic American Indian/Alaskan Native, and non-Hispanic participants of multiple races.

The report states that, nationally, approximately 63% of WIC participants who used their CVVs purchased more fruits and vegetables than the maximum value of the CVV. In the context of focus groups, WIC participants reported that at some stores, the cashier did not allow them to exceed the value of the CVV, despite this being allowed in the WIC Program. Many WIC participants stated that they did not feel confident that they understood what could be purchased with CVV’s.

Relatively low CVV redemption has also been reported for Baltimore City WIC recipients, as they redeem about 76% of their voucher with vendors and 0.7% with farmers. Almost 23% go unredeemed. The CVV redemption rate in Maryland is a little higher; 80.5% with vendors and 0.6% with farmers.

This phenomena is not surprising given that, in Baltimore City, 1 in 4 residents lives in “food deserts”. A food desert, as defined by the USDA, is an area with very limited access to fresh fruits, vegetables, and other healthy foods. Limited access is a function of long distances to food retailers, widespread lack of available vehicles, and limited community resources (e.g. household income at or below 185% of the Federal Poverty Level). Certain subpopulations have disproportionately low access to healthy foods, as African Americans are the most likely race to live in food deserts in Baltimore City and thirty percent of residents who live in food deserts are children (Mapping Baltimore City’s Food Environment: 2015 Executive Summary).
Solution

In order to improve the redemption rate for WIC Fruit and Vegetable Vouchers, we must first understand the barriers to non-use and under-use. In August and September of 2015, Johns Hopkins WIC Program staff conducted 21 in-person interviews with WIC participants at 3 geographically and participant diverse Johns Hopkins WIC sites in order to uncover the barriers to purchasing fruits and vegetables with WIC CVV’s. The interviewer first asked the participant if she used the CVV and if not, why. If the participant did regularly use the vouchers, she was asked to “walk through” a typical shopping trip when she planned on using the vouchers. As with all qualitative interviews, it was participant-driven. However, the interviewer also probed to gather particularly important information such as: types of stores used (traditional grocers, corner stores); number of vouchers used at one time (for a family with more than one voucher available); and types of fruit and vegetables products bought (fresh, frozen or canned). If they bought fresh produce, they were asked: if they used the scales (why or why not); if they bought pre-packaged products (why or why not); which produce that they typically buy; how they choose the produce; and what they think of the selection. They were also asked about the check out process: does the cashier know how to use the voucher; is the price what they expected; and do they use the whole voucher amount (why or why not). Finally, they were asked what they liked about the fruit and vegetable vouchers; what they didn’t like; and what would make it easier to use them.

Results:

Preliminary analysis found that participants purchase more fresh produce than canned or frozen products. Bananas, apples, and grapes were three of preferred fruits. Greens, carrots, and tomatoes were mentioned as vegetables they often bought. Barriers to any use and/or full use included: a) cashiers not being knowledgeable about the WIC Program, and eligible fruit and vegetables and the correct way to utilize the CVV’s, - *The Check looks overwhelming. You have to explain how it works. It’s very intimidating looking*”; b) produce area and check out belt scales not being calibrated - “*Their scale was off and we put the cherries back. It should have been $2.00 but rang up as $10.00*”; and 3) participant confusion about how to weigh produce in the produce area so that the amount would comply with the voucher amount – “*The prices of fruits and vegetables fluctuate. I have to adjust how much I add to the check based on that.*” While the interviews were conducted in three different WIC sites located in different geographic areas in the City, with different sub-population composition, the barriers uncovered were similar.

Summary

The provision of WIC CVVs to participants is primarily based on the Institute of Medicine (IOM) of the National Academies recommendations in order to provide participants with a means to increase their consumption of fresh fruit and vegetables and increase their knowledge of how to purchase, store and prepare fresh fruit and vegetables. Along with the other foods provided by WIC, fruits and vegetables are sources of key
nutrients such as Vitamins A, B, C, D and E, iron, zinc, calcium and fiber. WIC participant use of the CVV’s also provides economic benefits to the community. Unfortunately, as noted above, for a variety of reasons, many WIC participants may not consume the optimum amount of nutrients contained in fruits and vegetables. By carrying out these interviews we collected information critical to developing strategies to improve the use of CVV’s by WIC participants.

**Get involved**

Preliminary data analysis indicates that in order to improve rates of WIC participants’ full redemption of CVVs, a comprehensive approach needs to be implemented. This approach should include: 1) expanded and on-going retail staff education, 2) equipment quality control; 3) improved store signage, directions and other material customer support; and 4) participant education.

1) For logistical and scheduling reasons, retail cashiers and management may receive insufficient and abbreviated WIC training. Additionally, training is often provided in a lecture format. It is anticipated that with expanded and “on the floor” training, store staff will be familiar with WIC voucher transactions and better equipped to correctly use them. Ongoing follow-up training must also be carried out to ensure continued appropriate WIC voucher processing.

2) The accuracy of produce area and check-out lane scales is monitored; however, this process may be as infrequent as two times per year. We recommend that the number of monitoring assessments be increased to ensure quality control and comparability.

3) There have been materials developed, primarily by State agencies and educational institutions, that are designed to assist customers to understand the produce measurement process and consequently promote scale use. However, the availability of these materials in retail stores is limited at best. It is anticipated that increased availability of these materials in stores would reduce a major barrier to CVV use, thereby increasing their full redemption. Additionally, instructional signage in the produce area should be made available to all appropriate retail outlets.

4) Participant nutrition education is critical and integral to WIC services. More and more, WIC nutrition education has been supplemented to include in-clinic “lessons” on shopping on a budget, understanding the differences and advantages of purchasing different forms of fruits and vegetables (fresh, frozen, canned) and understanding unit prices. Instruction on these topics has been shown to be effective at increasing participant’s knowledge and confidence in shopping healthy. Consequently, this education component should be considered for inclusion in all WIC nutrition education plans.

**Sustaining Success**

The Johns Hopkins WIC Program serves approximately 10,300 low income women and children in Baltimore City. Johns Hopkins WIC provides services in 17 permanent and outreach clinics and has a long...
standing presence in Baltimore’s communities by partnering and coordinating with community organizations, agencies and groups, and working directly with residents. Since its inception, working and coordinating with retail vendors has also been critical to providing the best services possible for our clients. Over the past several years, our collaboration with retailers has been expanded to include the provision of in-store customer education; supplemental store staff education, and in store materials and signage, as well and promoting friendly and mutually beneficial community/store relationships. These activities have been well received and successful and we anticipate that by continuing and expanding them, we will continue to provide the best services possible for our clients.