

The Triple Bottom Line: How can we use in-store promotions to decrease WIC program costs, maximize store profitability and improve participant satisfaction?

Lucia A. Leone, PhD¹, Lindsey Haynes-Maslow, PhD, MHA², Margaret Lapp, MPH, MLA¹, Leonard Epstein, PhD^{1,3}

¹ Community Health and Health Behavior, School of Public Health and Health Professions, University at Buffalo

² Food and Environment Program, Union of Concerned Scientists, Washington DC

³ Division of Behavioral Medicine, Department of Pediatrics, University at Buffalo

Overview

Food prices are the largest factor affecting cost containment in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Variation in food prices exist between states, regions, and different size retailers. Limiting WIC-approved vendors to those that offer the lowest priced foods is one solution, but it could have the unintended effect of reducing access to participants who live far from such stores (such as in so-called food deserts). While smaller stores tend to have higher food prices, their impact on the WIC program is limited by their low WIC recipient numbers. Some states put price ceilings on WIC items or exclude higher-end products, which can result in program savings if a large proportion of recipients would otherwise use their Food Instruments (FIs) to purchase food items priced above the upper limit. However, we argue that universally limiting food prices is not the solution, but rather encouraging retail vendors to use smarter marketing practices and promotion strategies to entice WIC recipients to use their FIs and vouchers to purchase lower-cost, higher-margin items.

Behavioral economics indicates that people often prefer “default options.” We recommend strategies that can be used by stores to make the default option the one that is lower in price and offers higher profit margins for vendors. Vendors can nudge customers towards a particular product using product placement, signage and other cues. The goal of this paper is to identify and determine the potential success of marketing and promotional strategies that achieve a triple bottom line; we propose using principles of behavioral economics to entice vendors to make promotional changes which will make lower cost, higher margin food packages the easy choice for consumers.

One possible promotional strategy that has the potential to meet a triple bottom line is the concept of WIC bundles similar to “meal deals” offered by large grocery chains such as Harris Teeter. These rotating bundles could include multiple WIC-eligible products for one set price. This strategy could address the triple bottom line by reducing participant burden to identify WIC-eligible foods and increase participant satisfaction by not universally limiting choice. Bundling could decrease WIC program costs by including mostly lower-price products. Stores could also increase profitability by highlighting higher-

margin WIC-eligible items (such as generic brands) which might otherwise be less popular and/or increase sales by cross-merchandizing with healthy non-WIC products.

In order to evaluate the potential effectiveness of bundling or alternative strategies at reaching a triple bottom line, first we review the literature on healthy food promotion and in-store marketing to understand what strategies might be most acceptable and appealing to stores. Then we describe qualitative research conducted by our team with WIC key-informants, participants and vendors. Lastly, we compare these strategies based on findings from the literature and our own research and make recommendations for potential vendor-level strategies designed to control costs in the WIC program.

Background

Several studies have examined the potential cost-savings of different WIC regulations enacted in various states. Most of these regulations involve reducing or limiting the type/variety of WIC-eligible items or restricting reimbursement to vendors. For example, an analysis in California looked at the potential savings of lowering reimbursement rates for smaller stores who tend to have the highest prices for WIC-eligible food items [1]. They found that smaller stores make up such a small percentage of WIC purchases that overall cost-savings would be minimal (6.3%) and could have the unintended effect of limiting access to WIC for participants in rural areas or food deserts where there are not larger grocery stores available. Other research has examined the role of vendor management cost containment strategies [2]. By requiring vendors to use scanning equipment, provide receipts, and require other types of documentation, WIC could limit mistakes or fraud which can lead to excess costs. However, more extensive regulations and fines could discourage vendor participation; again smaller stores would be disproportionately affected.

In addition to limiting vendors, states have the ability to control approved brands, package sizes, forms or prices of products that participants can purchase with their FIs. One report found that these changes did not have negative outcomes for WIC participants nor did they place undue administrative burden on the WIC program [3]. The report examined food packages across six states and found that the average WIC food package ranged from \$24.26 to \$35.72. While some of these differences reflect variations in food prices between states, they estimated that cost containment practices used by states saved them as much as \$7.33 per participant. Despite conclusions that participant satisfaction and access were not significantly limited by these restrictions, there were satisfaction ratings as low as 50% for some products.

We argue that removing restrictions and instead using behavioral economic principles such as providing default options or “nudges” to encourage purchasing of lower-cost items could improve participant and vendor satisfaction while keeping costs and administrative burden low for WIC. Nudging generally involves manipulating the presentation of different options or the context of the choice to make it more likely that people will choose a given option [4, 5]. This paper explores strategies that vendors can use to nudge WIC participants towards choosing products which are lower-cost and higher margin without wholly limiting their options. In order to identify nudging strategies which would be acceptable in a

food retail setting, we performed a brief review of the literature on marketing of healthy food in stores and general promotional strategies.

Promotion of Healthy Foods in Grocery Stores

To better understand why vendors would participate in WIC or any program designed to improve the WIC program, we reviewed the literature on participation of stores in healthy food promotion programs. Vendors are driven by a desire to meet customers' needs and provide an important service for the community [6]. Perceived benefits of participation in healthy food promotion programs include increased number of customers, increased profits and sales, and improved store atmosphere [6]. When WIC added fruits and vegetables to the program, store owners reported that increased availability of fresh produce made their customers happy and that non-WIC customers also buy the produce [6].

Store-based interventions that promote healthful food selections generally use four key strategies that constitute this type of intervention include: (1) point-of-purchase (POP) information, (2) reduced pricing, (3) increased availability of healthful foods, and (4) promotion and advertising [7]. POP examples include use of food demonstrations, taste testing, signs, labels, and other printed materials with an overarching goal of influencing purchasing decisions toward more healthful foods. Coupons to promote purchase of healthful food options are the most common pricing strategies. Promotion and advertising strategies include newspaper inserts, multimedia advertising, and supermarket tours [7]. The strategies most frequently used by stores, when given the option, include point-of-purchase information and promotion and advertising interventions [7]. However, in the Baltimore Healthy Stores feasibility trial weekly sales of promoted foods increased in intervention stores only when stocking improved [7]. Small store owners had difficulty finding a reliable supply source or perishable food and selling it before it went bad. Despite challenges, a review of grocery store and supermarket-based Interventions indicated that these programs were more successful in small food stores, as compared to larger supermarkets; 9 out of 10 studies showed an increase in the number of purchases of targeted healthy foods among smaller food stores [7].

Profitable Promotional Strategies

In addition to looking at vendor motivations for participating in healthy food promotion programs and their potential effectiveness, we looked at more general strategies for promotion and marketing to help determine which types of programs vendors might be most likely to participate in.

Product placement

Some studies suggest that only 30% of store purchases are planned when a consumer enters a store [8]. To capitalize on "unplanned" purchases, product placement is an important promotional tool in the retail food industry in which stores strategically place items at "eye-level" near the front door, or in the check-out line to prompt uncalculated purchases by customers [9, 10]. Data from the Coco-Cola Retailing Research Council shows that putting fresh produce front and center in convenient, clear packaging incentivizes purchasing. Qualitative research has also shown that customers paid attention to product placement, especially items that were stocked in shelves at the store entrance [11] and were less likely to purchase fruits and vegetables from stores that did not display their produce in an appealing manner [12].

Price Promotion Strategies

Research has shown that low-income customers are savvy shoppers – and tend to seek out food deals and promotions by their local food stores [13-15]. It is suggested that since low-income customers are price sensitive, they are more likely to take advantage of promotions than higher-income customers [14, 15]. There are several pricing promotion strategies that have been used in the retail industry, including trade promotions[16]. Trade promotions include discounts, rebates and coupons that are offered to retailers by food manufacturers for certain products with the expectations that these deals get passed onto customers [17]. These promotions can be used to increase sales and stocking of certain foods during specific periods of time [18]. While it is believed that trade promotion are profitable practice, the evidence has been mixed. Ailawadi (2006) in a review of all trade promotions used by CVS Pharmacy in 2003 found that on average, the net profit impact of promotions was negative. Additionally, the promotion profit margin was often substantially less than the regular profit margin [9]. Popkin (2005) estimated that major retail promotion had the potential to increase sales by 75% [19]. However, it can be difficult to methodologically tease out the proportion of sales increase resulting from price reductions, versus the additional marketing tactics that accompany it, such as online advertisements, mailings, signage, and/or radio ads [20].

Cross-merchandizing and Bundling

Customers that are attracted to a specific food deals or promotions may also be inclined to purchase other products placed nearby that complement the featured or primary produce. The idea of “cross-merchandizing” related or complimentary products has the potential to increase stores’ profits [18]. Examples of cross-merchandized products include spices/seasonings for produce and complementary produce products such as aluminum for potatoes or skewers for grilling [21]. Additionally, stores have used cross-merchandizing to give customers ideas on how to use products together. This can be seen as evidence by meal ideas – placing fresh fruit, yogurt, and granola near each other.

One step further in placing related or complimentary products nearby is the concept of “bundling.” Retailers often bundle food items and sell together as one package. When bundling products, consumers may purchase items that they would not ordinarily purchase if the items were sold separately [22]. Additionally, many bundles are sold at a discount, relative to the individual prices of the items included in the bundle. This may lead consumers to view bundles as price promotions [23]. One example of bundling is a “meal deal” similar to that offered by large grocery chains such as Harris Teeter.¹ These rotating “meal deals” include several items which can be purchased together for one discounted price and used to make an entire meal.

Research has shown that consumers are motivated to purchase bundles when they perceive it reduces the total cost of goods and/or reduces the amount of time it would have taken to find each item individually (i.e., search cost) [22, 24]. Therefore, placing bundles near the store entrance increases the likelihood of a consumer purchase. In terms of the products being included in the bundle, research

¹ http://www.harristeeter.com/meal_planning/meal_deal.aspx

shows that there are trade-offs between quality, variety, and price. In terms of product quality (i.e., consumer perceptions about a certain brand), consumers are more price sensitive to lower quality food products. More specifically, the less confident a consumer is about the quality of food products being bundled, the more likely it is that a discounted price will affect his or her willingness to purchase the bundle [25]. Additionally, consumers that perceive the bundle to be of higher quality might be willing to trade-off variety of items in the bundle for quality [26].

Summary and Recommendations

In order to be appealing to customers and vendors, any nudging strategy would need to have benefits for both the customer and the vendor. Based on our review of the literature, an ideal strategy would include enhanced product placement and reduced search cost for customers in order to create a default option. Adding a cross-merchandizing component could further increase potential benefit to stores and customers. We believe bundling WIC items for joint sale could provide a default option for participants, thus nudging them to choose a product that is good for vendors and for WIC. These bundles could also take advantage of promotion strategies such as product placement, incentives. This strategy has the potential to reach a triple bottom line. It's good for customers because it reduces the search cost if identifying WIC-eligible foods and increases overall participant satisfaction by not universally limiting choice. It would decrease WIC program costs as bundles would include mostly lower-price products. It would increase vendor profits by highlighting higher-margin WIC-eligible items (such as generic brands) which might otherwise be less popular and/or increase sales by cross-merchandizing with healthy non-WIC products. Bundles could also benefit smaller stores because they could prioritize stocking of items in the bundles and reduce shrinkage (i.e., waste) of perishable items. We used qualitative research methods with WIC participants and vendors to further explore the potential effectiveness and acceptability of bundling and possible alternatives.

Qualitative Research

We conducted key-informant interviews, focus groups and vendor interviews to better understand what cost-savings measures would be acceptable to WIC participants and vendors while reducing administrative burden. We specifically explored the concept of bundling with participants, but also uncovered additional strategies which might prove effective at reaching a triple bottom line.

Study Setting

All of our focus groups and store manager interviews were conducted in the Western New York region. In order for readers to better understand our findings, we believe it is important to share some of the participant and vendor WIC regulations in this area. New York State (NYS) uses paper FIs (i.e., vouchers) and requires that participants purchase all items on a given voucher in order to check-out. The state recently moved from a system where vouchers had a "do not exceed" amount on them to the current system where there is no printed limit on the voucher. Participants receive vouchers for three months at a time. Food items listed together on a given voucher may vary from month-to-month. Lastly, NYS only imposes brand restrictions on bread, cereal and soy products. Organic and specialty (e.g., hormone-free, free range) fruits and vegetables, eggs and milk are not able to be purchased with WIC

vouchers. New York State does not allow WIC-only stores so in order to participate in WIC, vendors must have fewer than 50% of their profits come from WIC.

Key Informant Interviews

Key informants interviewed included a WIC Vendor Management Program Coordinator, the Director of Evaluation, Research and Surveillance for the Division of Nutrition in the NYS Department of Health, a regional WIC Director, 2 WIC coordinators and other experts in the field. Key informant interviews were used to provide context for statements made by WIC participants in the focus groups and vendor interviews. From our conversations with a vendor management representative, we learned that NYS had removed written price ceilings from the FIs because they didn't want customers to feel limited; they also believed that some vendors were "price gauging" and submitting for the full value when the actual price was lower. They indicated that the vendor and participant are now blind to the price limit of the voucher and that vendors can learn their reimbursement rate through their bank statement.

Focus Groups with WIC Participants

We conducted 9 focus groups across two counties in Western New York (Erie and Niagara) between June and July 2015. Each focus group consisted of 5-10 WIC participants (mothers) who were recruited with the help of coordinators at local WIC offices. Focus groups were held at 6 different WIC offices and one Baby Café location; all locations were urban or suburban. Focus groups were led by a trained moderator and lasted 60 to 90 minutes. Prior to starting the focus group, participants were asked to complete a short demographic survey. At the end of the focus group, each woman received a \$25 grocery store gift card. Focus group procedures were approved by the Institutional Review Board at the University at Buffalo.

Focus groups included discussion of the stores that participants generally shopped at and their experiences using WIC at those stores. We asked women why they preferred certain stores and what stores could do to make it easier for them to use their WIC benefits. We also discussed how women decided what products to purchase using WIC vouchers and how WIC guidelines and store availability affect their household purchasing. Specifically we asked women their opinions about the bundling concept and solicited their ideas for helping the WIC program save money and/or improving their WIC experience.

Demographics

Demographic characteristics of the 63 women who completed the focus groups are listed in Table 1. Average age of participants was 29.8. Most participants (36.5%) reporting being African American, having an annual household income less than \$10,000 (41.3%) and having a high school education or less (36.5%). The majority of women reported being the primary food shopper for the household (88.9%), never being married (51%) and receiving SNAP benefits in addition to WIC (73.0%).

Table 1. Demographic Characteristics of WIC Focus Group Participants (N=63)

Demographics Characteristics	
Age, mean	29.8
Household Size, mean	3.7
Education, %	
Some high school	9.5
High School or GED	27.0
Trade or beauty school	6.3
Some college	22.2
College graduate	25.4
More than college	9.5
Marital Status, %	
Never been married	50.8
Married/Living with partner	41.3
Divorced /Separated	7.9
Household Income, %	
< \$10,000	41.3
\$10,000-\$19,999	19.0
\$20,000-\$29,999	20.6
\$30,000-\$49,999	14.3
> \$50,000	4.8
Race/Ethnicity, %	
Black or African American	39.7
White/European American (not Hispanic or Latino)	38.1
Hispanic/Latino	7.9
Native American	3.2
Asian/Pacific Islander	3.2
Multi-racial	3.2
Other	1.5
Did not answer	3.2
Primary Food Shopper for Household, %	88.9
Receive SNAP¹ Benefits, %	73.0

¹SNAP is the Supplemental Nutrition Assistance Program, also known as Food Stamps

Results

Shopping Behavior

Most women reported doing the majority of their shopping at large supermarkets or supercenters. Generally they found that convenience stores and small corner stores were too expensive and that corner stores were not appealing (dirty, poor food selection). While many women reported shopping at bargain stores for their general grocery shopping, they reported that many of the bargain stores in the

area did not accept WIC. For this reason and in order to facilitate easier check-out, they often shopped for their WIC items at different times and/or locations than they purchased other groceries.

“I won’t even go with my regular shopping. I do WIC a whole different trip because otherwise I’m pulling out my hair. I mean it’s a great help but at the same time... it’s so frustrating. I wish they would find an easier way of putting things on there—like okay don’t change it 24/7.”

In general, women felt that WIC did not cause huge changes in the types of food that they bought; however there were two notable exceptions: many women switched to whole wheat bread and started eating more fruits and vegetables when the cash value vouchers (CVV) for fruits and vegetables were introduced. Almost every woman reported that they could not use all of their WIC products and many said that they gave things away to friends and family. Milk was the WIC package item which women most often reported having in excess. Women also had difficulty using all of the peanut butter and dried beans and welcomed recipes to help them better use these products.

Note: CVVs give WIC participants a certain monetary value to spend on produce (e.g., \$10 per month). They are allowed to purchase more than the designated value and pay the difference with their own money.

WIC Product Identification

Participants reported significant frustrations identifying which items were WIC approved within the stores they shopped. There was frequent discussion of WIC sections and shelf-talkers (i.e., signage indicating that an item is WIC approved). Women found both of these strategies extremely helpful for streamlining their shopping experience. It was reported by several women that one popular local supermarket used to have a section in the front of the store where they kept all of the WIC-approved items; however most women seemed to think that these sections and the shelf-talkers no longer existed. One woman reported that she had spoken with the store and asked why they had removed the shelf-talkers. She said the store told her it was *“because when the investigator’s coming and it’s wrong, they’re going to get fined \$10,000. Like they...say you have a WIC on a box of Trix, you get fined. So they stopped labeling. Because it was easy for someone to take a label off.”*

“Right, like the stickers are helpful, and if they have their own little section for everything that is WIC-approved, that would be making it so much easier because I mean, I have one child who wants to run through the store and another child who is bad and he wants to eat and I’m not – it’s hard to like hold him and breastfeed while I’m trying to grab things off the shelves and push a cart by myself. So.”

Note: Our key-informant interviews indicated that in NYS, vendors need to receive special approval to use “shelf-talkers”. There are very specific rules concerning the use of these identifiers and responsibility falls on the store owner to ensure that shelf talkers are properly aligned with the WIC-approved foods. Some store owners may be hesitant to use shelf talkers in their store as they may be penalized for improper usage.

WIC Customer Service

In addition to difficulty locating WIC-approved items, women frequently mentioned concerns about store personnel not being properly trained on WIC or having a negative attitude toward WIC customers. One regional grocery store used a “WIC ambassador” program which meant that only managers who were trained on accepting WIC could oversee the check-out process. While most women liked this since the managers were well-trained and they encountered fewer problems, at least one person reported that they did not like the attention she attracted when the cashier had to turn on a light and call the manager. Overall women agreed that one national supercenter chain had the best check-out experience when using WIC because all of their cashiers were well-trained. One participant believed that cashiers at other stores don’t like WIC customers because the stores push cashiers to reach a high “item-per-minute” rate and that WIC transaction slow down the process and lower their numbers.

Note: An interview with the manager at national supercenter chain where women reported good experiences with cashiers indicated that they emphasize training of cashiers on accepting WIC and promote an attitude of “let me help you” in relationship to WIC customers; she tells cashiers not to judge customers because they don’t know what their situation is. She also noted later in the interview that her store had a large percentage of WIC shoppers and that it must be profitable for the supercenter since they invest a lot of time and effort in the program.

Saving Money While Using WIC

Most women reported that they did not think about the food price when using WIC vouchers. As the WIC selection is limited at many stores, they focused on finding approved items. Most women did not use coupons when shopping with their WIC vouchers; there were several women who didn’t know that they could use coupons or that they were eligible to take advantage of grocery store loyalty card offers when shopping with WIC. In some cases, the cashiers had misinformed them and said that they could not use coupons or loyalty cards with WIC. Women who had used coupons said that they only used coupons that gave them a buy-one get-one free option. Most of the women reported that when shopping *without* WIC they buy what is on sale or the best deal, but that they don’t see a point in doing that with WIC. Often they find that when a WIC category food is on sale, it’s not a WIC-approved brand or the sale is for a different size than is indicated on their voucher. The one exception was that women frequently took advantage of coupons and promotions when redeeming their CVV for fruits and vegetables. Almost none of the women were aware that their purchases affected the number of women that the WIC program could serve.

Note: Key-informant interviews indicated that while some WIC coordinators encourage women to use coupons or loyalty cards, there is little consistency in the messages that WIC staff give concerning cost-savings. In NYS, the WIC program has not had to refuse participation to eligible women due to funding restrictions in decades so there may be less emphasis on cost savings.

Proposed Improvements to the WIC program

Focus group participants were eager to volunteer suggestions for changes that could be made to the WIC program. Some didn’t think WIC offered the most nutritious foods. For example, women felt that juice had too much sugar or that there were healthier products that were not allowed, particularly

different cereals that they viewed as more healthful. Several women said that they would prefer organic produce and/or organic/hormone-free milk. Others had concerns with food allergies such as dairy or soy or just preferred to limit these foods in their children's diets. A few participants said that the milk type offered by WIC was not in line with their doctor's recommendations for their children. Several women indicated that they would be willing to pay more if they could get the specific products that they wanted (i.e., organic, hormone-free). Others suggested a CVV-type system for all WIC products or preferred a system, similar to SNAP, in which they could choose the mix of products within general WIC guidelines. If given the option, most women thought they would spend all/most of their allowance on fruits and vegetables. On the other extreme, one woman suggested just giving them a package of food at the office (in lieu of vouchers) since they had little choice at stores. She felt this would eliminate the struggle of trying to find WIC eligible items.

"For something like the milk, though, they recently changed it to—it has to be the cheapest brand of milk and I always got Meadowbrook or Byrne Dairy, because they're hormone free but, you can't anymore because it has to be the cheapest form of milk. So I would actually pay extra if I could still get Byrne Dairy or Meadowbrook."

Note: Key-informant interviews with WIC coordinators indicated that women had the flexibility to change or remove products that they did not want or that their family was allergic to, but women usually only see a WIC nutritionist every three months so there is limited opportunity to make these changes.

Bundling

We proposed the idea of bundling several WIC-approved items into a package for convenient purchase at stores. The majority of women said they would be interested in a bundle because it was convenient and would reduce the burden of searching for WIC approved items. Participants indicated that the package would need to mostly have products that they would normally buy, but that they would like it to include some new WIC items so they could learn about other WIC-eligible products. Brand was generally not a concern, but they did not want to see canned fruits or vegetables in the bundle. Women felt that it was important that the bundle include a fresh fruit or vegetable item as either part of the bundle or a free bonus for purchasing the bundle. We suggested the possibility of recipes and women responded positively to including recipes that would tie together items in the bundle. The biggest concern that women had about bundling was that the items in the bundle might not match up with their FIs; all bundled products would need to be on the same FI. They also felt that it was paramount that all the items be clearly labeled and positioned together within the store.

"If they could make it a little easier instead of like searching, depending on like which brand or however they decided to put together, I think that would make it less of a hassle because sometimes, I'm not going to lie, if I'm just like low on stuff, I really don't like going just to get WIC stuff, because you have to search and it's just annoying. Then people be getting aggravated because you're holding up the line".

Note: The implementation concern regarding grouping of all bundle items on one FI would not be a concern in states that use electronic benefit transfer (EBT) currently and would be eliminated when all states transition paper vouchers to EBT by 2020.

Vendor Interviews

We completed four vendor interviews with a national supercenter chain store, a large regional supermarket chain store, a franchise convenience store, and a local grocery store. All interviews were completed with a store manager.

Promotions

We asked the managers about the types of promotions that the stores generally ran. The regional supermarket plans its merchandising around menus found in their store magazine. Both the national supercenter and regional supermarket said that they frequently promote seasonal items, such as local produce. This national supercenter looks to see what's transpiring in the community and looks at other stores' ads to determine promotions. Promotions offered by the local grocery store and convenience store chain include "5 for \$5" or "2 for \$1." The local chain also offers themed promotions; for example during their 92nd anniversary, anything ended in .92 was on sale. Only the convenience store reporting participating in bundling; for example selling a coffee and Danish together. None of the stores reported doing anything special to attract WIC customers other than post a sign that they accept WIC.

WIC Concerns

The national supercenter store recognizes that many WIC shoppers have trouble understanding the WIC vouchers therefore they have department managers who assist first-time WIC shoppers. While other retailers allow cashiers to process WIC checks, the regional supermarket requires that WIC ambassadors (WIC-trained coordinators) show new WIC customers around their store and complete the check-out process with them. They have experienced procedural problems with WIC in the past which is why they created this system but with the shift to the "no limit" requirement, their concerns have subsided substantially. The biggest problem with WIC encountered by the local independent grocery store was following WIC product guidelines as both approved items and minimum stock requirements change frequently. The convenience store manager was hesitant to renew their WIC vendor license due to the many fines that their store has received. Given the high turnover rate of employees it was difficult for them to maintain consistent procedures and limit mistakes.

Note: It was very challenging to receive approval from stores to interview store managers and even when approval was obtained, scheduling proved extremely difficult. Based on our experiences with these interviews and our literature review, we would recommend that any vendor-level participation in WIC cost reduction strategies include clear incentives for vendors, especially those participating in any initial pilot testing. While smaller stores may be motivated by the possibility of increasing their clientele and meeting the needs of current customers, profitability may be a stronger driver to larger supermarkets.

Key Findings

Potential Products to Promote

Based on our focus groups, interviews and review of the literature, we believe that promoting generic products (i.e., private label or store brands) to WIC participants has the greatest potential for maximizing vendor profit and reducing WIC program costs without other changes to the WIC program. Generic brands are not only lower price, but it is estimated that food retailers make a 35% gross margin on generic products compared to a 25% margin on brand label sales [27]. Based on focus groups, most WIC participants do not have strong brand preferences and are accustomed to choosing the least expensive brand in their non-WIC shopping. A concern in NYS which undoubtedly extends to other regions is that not all generic brands are approved by WIC; if promotion of generic brands proved effective, it would benefit WIC to actively solicit their inclusion on their approved food lists.

Possible Promotional Strategies

While we recommend promoting generic brands as a profit maximization/cost-saving strategy, this strategy alone will not necessarily have an effect on participant satisfaction. Furthermore, it may not be applicable for smaller stores or those that do not carry generic brands. Our initial idea, which we explored in our research, was to bundle lower-cost higher margin WIC items for sale to participants. Based on our research, we identified two alternative strategies, which have potential for improving participant satisfaction, increasing profits for vendors and reducing WIC program costs. These strategies include: 1) Offering WIC-only sections in stores; and 2) Reducing product limitations while enforcing price limits. Our research also indicated that proper training of store staff on dealing with WIC was important to WIC participants and that stores with the best trained staff may be more likely to attract more WIC customers as well as reduce errors and program administrative costs. However, we do not explore improved training as an alternative because after accounting for the cost of offering increased training to stores, we don't think it would result in a net reduction of WIC program costs.

Bundling of WIC Products

Bundling would allow stores to choose a mix of WIC-eligible products and promote them as a deal or package. While the combined price of all the items may not be lower as with conventional bundle deals, focus groups and previous research indicate that the reduced burden of having to find the individual items would be enough to encourage WIC participants to select this bundle [28]. There are several benefits for stores in terms of profit maximization. Smaller stores can add products to their bundles that they have excess of and are trying to sell, particularly perishable items; larger stores can choose generic brands which have a higher cost margin. WIC participants may be more likely to choose stores which offer bundles which could be a benefit for stores who depend on or are looking to increase their WIC customer base. In order to make the bundles appealing to WIC participants, they would need to have all of the items located in one convenient place. Selecting a bundle would allow for a speedier shopping trip and a smoother check-out as there would be no concerns as to whether all of the items were approved or not. In addition, it would give women an easy way to discover WIC-approved items, even if they do not choose to purchase the bundle every time.

The main challenges to this strategy reflect current issues faced by WIC vendors and WIC vendor management. While offering mostly lower-cost generic items in the bundles would save money for the WIC program as well as benefit stores, there is the concern that stores would inflate the costs of bundles to receive a greater reimbursement. Conversely, limited transparency with respect to reimbursement may make it harder for vendors to choose profitable items to include in the bundles. Furthermore there would be a burden on stores to create bundles, update scanning processes and create promotions around the bundles; evidence of increased profits would be needed to convince stores to offer these bundles. The additional promotional/shelf-space needed to accommodate bundles could also be a challenge in smaller stores. The burden would also be on the store to periodically change bundles and ensure that they stay current with WIC product guidelines.

Other questions remain as to how to match bundles with WIC packages. We would recommend that bundles include food items which are present in all WIC food packages: cereal, juice, eggs, fruits or vegetables (preferably fresh based on participant preference), and beans or peanut butter. Juice and cereal (along with milk and cheese) are the largest cost contributors to WIC food packages [3]. Even including common packaged items would still present challenges if all of these items were not on one FI. Policy changes would be needed to allow for bundle groupings, though this will be less of a challenge as all states move to an EBT system by 2020. Guidelines would be needed to determine what types of promotions should/could accompany these bundles. Suggestions discussed in the focus groups included offering recipes that could tie together all items in the bundle and/or offering some sort of non-WIC item incentive to women who purchase a bundle; fresh produce was a popular suggestion. Another possibility would be to add a non-WIC item to the bundle or include recipes that entice participants to buy additional non-WIC items to complete the recipe (i.e., cross-merchandizing). This could encourage more stores to participate especially given the knowledge that many participants do their WIC shopping in different locations than the rest of their shopping. It is possible that the local WIC office would need to be involved in assisting stores with bundle selection or recipe development.

WIC Only Sections

An alternative to bundling which has similar benefits is the creation of a WIC-only section in stores. As was noted in our focus groups and store interviews, several stores had previously offered sections in their stores which included only WIC items. These sections were located near the front of the store, making it convenient for customers to quickly find items and/or switch out items which were incorrectly selected at check-out for items that they know are WIC-approved. These WIC-only sections could include generic brand items and have many of the same benefits as described above: lower search costs for participants, higher profit for stores, lower cost for WIC but without the challenge of creating or regulating bundles. They could also offer more variety to participants. It is unclear however, whether WIC-only sections would be as attractive to customers as bundles which would be promoted and could possibly include other incentives and strategies which have potential to increase store profits. Other considerations include the greater amount of self-space in stores that would be needed to create a WIC-only section; especially if it included refrigerated items. WIC authorized vendors who had previously offered these sections had to stop doing so for fear of facing fines if non-WIC items were inadvertently placed in these sections or if signage was not updated to reflect frequent changes in WIC-authorized

brands and products. Furthermore, there was concern of stigma of offering such a section that it would both single out WIC customers and potentially keep non-WIC customers from purchasing items which were labeled as WIC items. While this would also be a concern with bundling, it is possible that bundles could be advertised in such a way that they were acceptable to all customers even if they included WIC-approved items, such as the weekly “meal deal” offered by Harris Teeter stores. One possible benefit of offering bundles to all customers is that vendors would be more likely to keep bundle prices low (below summed cost of all products) to appeal to more price-sensitive customers thus lowering WIC costs at the same time.

Removal of Product Limitations

A final alternative to bundling would be reducing limitations on the products that participants could buy while maintaining cost limits. The logic behind this alternative is that WIC-customers are savvy shoppers and that if given the opportunity to maximize their dollars, they could get more value for the same (or lower price) of current WIC-approved items. Current restrictions often do not allow women to take advantage of store promotions or encourage use of coupons. For example, if a woman is only allowed to get the 24 oz. juice, but the 18 oz. juice is on sale for buy-one get-one free, she is getting less value with her WIC benefits than she could if she had purchased the same product with cash. Women reported frequent usage of sales and promotions when using the cash value voucher (CVV) system for fruits and vegetables, but didn’t think they could and/or didn’t understand why they would use coupons or other promotions when buying products with their traditional WIC vouchers.

While we would not propose a complete removal of restriction on types of products, we could envision a CVV system that was limited to WIC-approved product categories (milk, bread, cereal, etc.) but that did not dictate specific sizes or brands that could be purchased. These would allow women to use their vouchers for the products that are most suitable for their family while still maintaining a nutritional mix of products that closely mirrors evidence-based WIC packages. For example, many women expressed that they wanted to give their children organic produce or milk, but were not allowed to purchase these items with the WIC vouchers. Women who expressed these desires all said that they would be willing to pay additional money of their own to get more preferred products. Allowing women to purchase these products would not only increase participant satisfaction, but could potentially increase revenues for stores if women are purchasing these potentially higher margin items.

We recognize that this option would require many upfront changes to the WIC program to change accepted products and limits, but could ultimately reduce the burden on WIC vendor management to regulate stores; there could be much less confusion or training needed on the part of stores and customers if WIC items were only specific to food categories and not brands or sizes. This would lead to fewer redemption mistakes, more satisfaction by vendors and less work for vendor management. In relation to cost reduction, there would need to be greater research on the price limits which would be most appropriate within a state or region. Price limits would need to be high enough to allow for purchasing an appropriate quantity of lower cost brands, but low enough that they represent a cost-savings for the WIC program. One would assume that there would be greater redemption with a CVV system which could raise costs for WIC. Whether this could be offset by limits and reduced vendor management costs is unclear. States which have increased their restrictions on brands have not shown

significant increases in the costs related to ensuring those restrictions are met [3]so it is possible that these changes would not have a significant impact on vendor management costs.

Comparison of Strategies

Based on the discussion above, we ranked each of the three strategies on the impact we felt that they would have on WIC participants, stores and administration. A ranking of 1 was the best in relation to the factor being considered and a ranking of 3 was the worst. Rankings were made based upon the information available to us in the literature, focus groups and interviews. In some cases where it was not clear that one alternative was superior, we gave the same ranking to two alternatives. In cases where clear evidence was not available, we used research team consensus on what we expected the effect would be, based on our research.

Table 2. Comparison of Bundling Alternatives

Comparison Factors	Bundling	WIC-Only Section	Remove Product Limitations
Impact on Participants			
Freedom of Food Choice ¹	2	2	1
Potential to Reduce Food Waste	3	2	1
Ability to use cost-savings measures	3	2	1
Search cost of finding WIC Foods	1	2	3
Likelihood of Full Redemption	2	3	1
Ensures specific nutritional package	1	1	2
Purchasing Incentives ²	1	2	2
Impact on Vendors			
Stigma around products	2	3	1
Burden on Stores	3	2	1
Potential to drive more WIC traffic to store	1	2	3
Potential Cross-Merchandizing Options	1	2	3
Product Placement Opportunity	1	2	3
Extra Space Needed in Stores	2	3	1
Impact on WIC			
Burden on Local WIC office	3	2	1
Vendor Management Cost-Savings Potential	3	2	1
Cost-Savings Potential on Products	1	2	3
Administrative Changes	2	1	3
TOTAL	32	34	31

Note: Sections highlighted in yellow indicate the alternative that had the highest score for that section.

¹Equal choice assumes that approved WIC items (brand, size, etc.) would remain constant in the WIC-only section and bundle scenario and that participants would be free NOT to choose the bundle and to

shop outside the WIC-only section; ²Purchasing incentives includes recipes or other free items that may accompany bundles.

Based on our team's ranking, we found that removing product limitations could have the largest potential positive impact on participants and that bundling could potentially work best for vendors. On the other hand, WIC-only sections could create the greatest potential cost-savings for WIC while limiting administrative changes. Overall, removing product restrictions received the lowest (best) score, but differences between the options were minimal.

Cost Savings Potential

As the cost-savings potential of switching to a CVV system for all products would depend upon voucher limits set by states, it is difficult to predict what cost savings would be realized, if any. In order to estimate the potential cost savings of bundling or WIC-only sections, we examined states that require participants to purchase generic brand items. For example, in Oklahoma and Texas, WIC was able to save \$6.43 and \$7.33 per package, respectively, by limiting juice and cereal to generic brand or store brands and requiring the purchase of 46-ounce cans. As we noted above, we would recommend that bundled packages include both generic brand juice and cereal. It is important to note that WIC participants had fairly low satisfaction with cereal and juice options in both our research and others [3]. Thus we recommend that bundling and/or WIC-only sections be used in conjunction with lowered restrictions on these products. Kirlin and colleagues found that satisfaction rates with WIC product offerings was approximately 50% for cereal, 68% for peanut butter and 80% for juice. Based on these findings, we estimate that 50% of participants would NOT use WIC-only sections or bundles due to dissatisfaction with the generic products. Even so, we could still expect a cost-savings in the \$3-\$4 range compared with no brand restrictions. Further exploration of the relative profitability of generic brands for specific food products such as cereal and juice would help us to better understand vendor's likelihood of including them in WIC bundles or WIC-only sections and thus improve our ability to estimate cost-savings potential.

Final Recommendations

Despite our higher ratings for removing product limitations, we do not recommend this strategy at this time. This represents a large departure from current WIC standards and would require significant changes to the WIC program. While participant and vendor benefits in terms of value and ease of program usage would undoubtedly be increased, the effects on the proven nutritional value of the package would need to be examined before this strategy could be considered. Furthermore, this strategy departs from our initial intention of behavioral economic principles to encourage cost-savings. The other two proposed strategies, bundling and WIC-only sections both provide strategies for highlighting default options for WIC participants therefore influencing their purchasing behavior without universally limiting choice. These strategies both reduce participant search burden thus potentially improving program satisfaction without compromising the integrity of a nutritionally balanced package. These strategies also are in line with current marketing practices offered by stores and have a potential financial benefit for the stores which would make them more likely to comply. Administratively, there may be a slight advantage for WIC-only sections because they would not require any administrative changes in most states. However, the difference in WIC administrative burden of these two strategies

will become nearly identical when all states move to EBT by 2020. Thus we recommend pilot testing of both of these strategies to better understand the likelihood of vendor uptake and their effects on store profits, participant satisfaction and WIC cost-containment.

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