

# Manager Perspectives on Implementation of a Farmers' Market Incentive Program in Maryland

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## ABSTRACT

**Objective:** A growing number of farmers' markets offer incentive programs to increase access to fresh produce in low-income communities and support local farmers, yet program implementation has not been widely studied. This qualitative study explored market manager perspectives on implementing a Maryland statewide farmers' market incentive program.

**Design:** Semistructured interviews with market managers.

**Setting:** Participating farmers' markets across Maryland.

**Participants:** Managers of participating farmers' markets (n = 19).

**Phenomenon of Interest:** Barriers and facilitators to program implementation and recommendations for improvement.

**Analysis:** Interviews were analyzed using a phonetic iterative approach and themes were organized using an adapted version of a multilevel implementation framework.

**Results:** Managers reported overall favorable attitudes toward the incentive program. They identified barriers to implementation such as vendor buy-in and funding uncertainties, facilitators such as private fundraising and local champions, and opportunities for improvement such as strengthening promotion and increasing the use of technology to reduce the data collection burden.

**Conclusions and Implications:** Managers identified implementation barriers (eg, customer confusion) and facilitators (eg, ease of staff training) that may be shared by other incentive programs. Based on these findings, barriers and recommendations may be addressed through collaborative problem-solving with managers, vendors, and customers, and facilitators can be amplified broadly. Future research is warranted to explore incentive program implementation in other settings.

**Key Words:** farmers' market, food access, implementation, incentive program, match program (*J Nutr Educ Behav.* 2019; 51:926–935.)

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## INTRODUCTION

In the US, nearly two thirds of adults and one third of children are overweight or obese, increasing their risk of diabetes, hypertension, and coronary heart disease.<sup>1–3</sup> Eating fruits and vegetables as part of a healthy diet may have a role in weight maintenance or

loss,<sup>4–6</sup> yet only 12% and 9% of American adults consume the daily recommended number of servings of fresh fruits and vegetables, respectively.<sup>7</sup>

Low-income Americans and participants in federal nutrition assistance programs including the *Supplemental Nutrition Assistance Program* (SNAP) are less likely to meet national fruit

and vegetable recommendations.<sup>7–10</sup> This may be attributable, in part, to the limited availability of affordable produce in low-income neighborhoods.<sup>11,12</sup> There have been calls for increased access to fruits and vegetables in low-income areas to address obesity and other chronic diseases, and to expand farmers' markets (FMs) as a targeted strategy to achieve this goal.<sup>13–15</sup> Farmer's markets located in underserved areas can increase the availability of fresh and affordable foods,<sup>16</sup> and access to FMs is associated with increased fruit and vegetable consumption.<sup>17–21</sup>

The number of FMs in the US expanded exponentially in recent years, growing from fewer than 2,000 in 1994 to greater than 8,700 in 2018.<sup>22</sup> Many FMs allow use of federal nutrition benefits including SNAP, the *Special Supplemental Nutrition Program*

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for Women, Infants, and Children (WIC), and the WIC and Senior Farmers' Market Nutrition Programs (FMNP). Yet, low-income customers face a number of barriers to shopping at FMs, including the perceptions that FM prices are too high and that nutrition assistance benefits are not accepted.<sup>23</sup> To address cost barriers for low-income shoppers, a rising number of markets provide matching dollar incentives for nutrition assistance beneficiaries, which were shown to increase vendor sales and self-reported consumption of fruits and vegetables among low-income populations.<sup>24–27</sup>

In 2013, the Maryland Farmers Market Association (MDFMA) developed *Maryland Market Money* (MMM),<sup>28</sup> the state's first unified incentive initiative. The program offers FMs funding to provide a match of up to \$5/d for customers using nutrition assistance benefits. In 2018, MMM was offered at 21 FMs across the state, serving 13,173 participants who redeemed \$125,267 in funds. Market managers are responsible for daily FM operations as well as administration and oversight of MMM and serve a critical role in program implementation.

Much of the research evaluating incentive programs has focused on the impact on consumer purchasing and consumption habits and a few studies<sup>29,30</sup> have also explored the impact on farmer–vendor sales. To the authors' knowledge, only 1 study<sup>31</sup> in the peer-reviewed literature to date has focused on the implementation of a market incentive program. The current study sought to fill this gap in the literature, drawing on insights from market managers to assess program implementation and guide strategies to improve implementation of FM incentive programs in Maryland and other jurisdictions. Specifically, this study sought to understand FM managers' perceptions of barriers and facilitators to implementing the MMM program, and their recommendations to strengthen the program.

## METHODS

### Study Setting

*Maryland Market Money* is a primarily grant-funded initiative that receives

financial support from private foundations, donors, and local and county governments. The MDFMA also raises funds for the program through annual events and donor campaigns. Five markets conduct private fund-raising to supplement MMM funds, providing an additional match for their market customers.

*Maryland Market Money* benefits, issued as metal tokens in \$1 denomination, can be spent on any SNAP-eligible foods. *Maryland Market Money* tokens are disbursed differently depending on which nutrition assistance benefit(s) the customer receives. Participants of SNAP receive metal MMM tokens as a match from the market manager when they swipe their electronic benefit transfer (EBT) card to receive wooden SNAP tokens. Participants in WIC and FMNP spend their WIC or FMNP vouchers directly with authorized farmer-vendors who provide them with an MMM receipt for the purchase. The customer can then return to the market manager and exchange this receipt for metal MMM tokens. The metal MMM tokens are universal across markets; customers can receive tokens at 1 market and spend them at another. Wooden SNAP tokens are specific to each market, because each market is a separate authorized retailer with the US Department of Agriculture (USDA) Food and Nutrition Service. At 1 participating market, SNAP participants could also register for a pilot loyalty program (since discontinued), through which their matching MMM dollars were automatically added to the SNAP/EBT card to be spent with participating farmers only at that market. (personal communication, Shelley Brosius, MDFMA MMM program coordinator, November 30, 2018).

In 2017, 5 markets participating in MMM contracted with MDFMA to provide an "EBT market coordinator" (here called a contractor) to work on-site in partnership with the market manager to manage MMM operations. Contractors were responsible for data collection, token distribution, and the processing of vendor reimbursement. Although each market was responsible for covering funding for its respective contractor, contractors reported to and were paid through MDFMA. At

the remaining markets, the market manager and his or her support network were responsible for overseeing the MMM program, including token distribution and vendor reimbursement, with indirect support from MDFMA. The decision regarding whether to hire an MDFMA contractor to oversee MMM program operations was made by each individual market based on institutional capacity, funding availability, and internal hiring protocols. (personal communication, Shelley Brosius, MDFMA MMM program coordinator, November 30, 2018).

### Data Collection

The researchers conducted semistructured in-depth interviews with managers representing all 19 markets that participated in MMM in both 2016 and 2017, as well as 1 market that launched MMM operations in 2017. All participants were aged  $\geq 18$  years and spoke English.

Interviews were conducted in person (n=14) or by phone (n=5) between February, 2017 and February, 2018. Interviews lasted approximately 30–55 minutes and participants received \$20 gift cards for participation. Recordings were transcribed by a third party and personally identifying information was redacted. All participants provided verbal informed consent. The Johns Hopkins Bloomberg School of Public Health Institutional Review Board approved this study protocol with exempt status.

Interviews were conducted one-on-one by researchers trained in qualitative research and interviewing techniques. Researchers practiced with 1 of the lead investigators (A.A.H., P.J.S., or C.M.) before conducting interviews to ensure consistency of administration. A.A.H. reviewed all interview transcripts and provided feedback to researchers during data collection to improve consistency further.

The research team developed a semistructured interview guide with feedback from MDFMA staff. After initial interviews, the interview guide was adapted to clarify complex questions and probe more deeply into barriers and facilitators mentioned in early interviews. Managers were asked

background questions about the market, the community in which it was located, and their daily responsibilities as managers. Managers were also asked about when and why the market decided to participate in MMM, the manager's role in administering MMM, ways in which MMM affected market operations, and barriers and facilitators to program implementation. Finally, managers were asked to provide recommendations to improve MMM.

## Data Analysis

Transcripts were analyzed in ATLAS.ti (version 8.1, ATLAS.ti GmbH, Berlin, Germany; 2018) using a phronetic iterative approach.<sup>32</sup> Two researchers trained in qualitative methods coded transcripts individually and met to discuss findings and reconcile differences. A final codebook composed of 105 codes was developed. Codes were grouped according to emergent themes, which were mapped onto an adapted version of a multilevel framework developed by Grol and Wensing.<sup>33</sup> The framework outlines 6 levels of factors that enable and impede implementation: the innovation itself (MMM), the professionals delivering the innovation (managers), the participants (customers), the social context (vendors and the broader FM community), the context of the organization, and the economic and political environment. This framework was selected because of its focus on using identified barriers and facilitators to create tailored, successful intervention strategies. For the current study, the organizational and economic and political contexts were condensed into 1 level representing the external context. Quotations presented subsequently were selected to illustrate findings.

## RESULTS

### Participant Characteristics

Participants included 19 managers representing 20 MMM participating markets in Maryland (1 market had 2 managers and another manager oversaw 3 markets). Managers represented markets that had participated in MMM

for an average of 3.5 years (range, 1–4 years). Thirteen markets were located in urban settings, 6 in suburban settings and 1 in a rural setting. Fourteen markets had paid managers, many of whom were employed by the organization that managed or hosted the market, and 6 had volunteer managers, all of whom were also farmer-vendors at the market.

### Barriers and Facilitators to Implementation

Managers discussed a variety of factors that might affect MMM program implementation (Table 1). Many of these factors had a role at several levels of the Grol and Wensing<sup>33</sup> framework. These are presented subsequently according to the level at which their role was most significant. Managers also provided recommendations to address key barriers (Table 2).

*Innovation: MMM program.* Overall, managers expressed high satisfaction with the program. All managers indicated that it was an easy decision to participate in MMM given the close alignment between the program and their market's mission. One manager explained how MMM supported the market's goal of providing high-quality food for the community:

*I see it as an extension of what we're already doing, meaning that we want to offer universal access to the great food that we offer at the market for sale, and this is the easiest way for us to extend the great food that we sell to the most number of people.—Manager 15*

Most managers described the MMM program as providing benefits both for vendors through increased sales, and for community members through increased access to healthy foods. One manager explained that the MMM program had attracted new customers to the market:

*I think it brings in a lot more money for [the vendors]. . . I also think without the matching dollars, a lot of those people would not be coming to the market at all. . . . I think they come because they get that benefit and so it's sort of incentive, and I told them, 'This is*

*an incentive for you to come to market instead of going to the grocery store. We want you to get these fresh foods; it helps the farmers out, and then you get bonus dollars, basically.' I think all around, it's sort of like a win-win-win situation for everybody.*  
—Manager 13

Nearly all managers reported that the process of starting to offer MMM at their market was straightforward and the ongoing work required to oversee the program was minimal. Managers who ran markets that did not have an MDMFA contractor on-site to administer MMM reported spending more time on average overseeing the program daily, but all indicated that the burden remained low. Managers of FMs without an MDMFA contractor explained that much of their time running the program was spent distributing MMM tokens and processing vendor reimbursement; most managers described both tasks as easy.

*Professionals delivering innovation: Market managers.* Most managers expressed a clear understanding of how the MMM program operated and the sources of funding through which MMM was supported. However, a few indicated that informal training provided to managers by MDMFA at the launch of the program was insufficient and left them with lingering questions. One manager expressed confusion regarding why some processes were put in place, and called for more training moving forward:

*I think for a really long time I didn't really know why I was doing what I was doing. It was just like, okay, you just have to do this because of data collection. And so, it would've been nice and for [an MDMFA employee] to sit down and be, like, 'Here is what we're doing, here's why. This is the purpose of this.' . . . For future people starting off as a market manager, I think that would help.*  
—Manager 13

To manage the additional work associated with MMM, many managers of markets that did not have an MDMFA contractor on-site reported

**Table 1.** Perceived Facilitators and Barriers to Implementing *Maryland Market Money (MMM)* Farmers' Market Incentive Program Among Market Managers (n = 19)

Level	Themes	Facilitators/Barriers
Innovation	Market mission	+ <i>MMM</i> aligns closely with market mission to serve community
	Benefits to stakeholders	+ Attracts new customers to market + Increases access to healthy food for low-income community + Increases sales for vendors
	Time requirement	+ Minimal work to oversee for managers with MDFMA contractors – More work to oversee for managers without MDFMA contractors
Professionals delivering innovation: managers	Manager education	+ Clear understanding of how <i>MMM</i> operates – Training of new managers at launch seemed inadequate – Lack of understanding regarding why some processes were in place
	Staffing needs	+ New staff training minimal, easy + Creative strategies to train new staff including role-play, cheat-sheets
Participants: customers	Customer feedback	– Waiting in line to receive incentive – Incentive amount too low – Having to return to manager's booth after using <i>Special Supplemental Nutrition Program for Women, Infants, and Children</i> or <i>Farmers' Market Nutrition Programs</i> vouchers to receive incentive – Funds run out before end of season + Gratitude for incentives
	Customer confusion	– Confusion regarding match amount, eligible purchases, sources of program funding – Language barriers
Social context: vendors and farmers' market community	Champions	+ Local champions start and maintain program
	Vendor feedback	– Increased demand on time not worthwhile – Lack of support for <i>MMM</i> mission
	Vendor training	+ Vendor training appears easy and to require little ongoing support – Vendors accept incorrect tokens (intentionally and unintentionally)
Organizational and economic context	Support from MDFMA	+ Strong support and communication with MDFMA + MDFMA contractor reduces time commitment
	Data collection	– Unnecessarily burdensome + Data collection becomes more routine and manageable over time – Unclear why some data are collected
	Funding	– Funding uncertainty year to year + Private fund-raising from local sources (eg, neighborhood associations)
	Promotion	+ and – Minimal promotion of program (negative to those who want to attract more customers, positive to others given unable to meet added demand)
	Customer education	– Minimal current efforts to educate customers on program operations – Customer misunderstandings may stem from incorrect information provided at benefit distribution sites

+ indicates a facilitator; –, a barrier; MDFMA, Maryland Farmers Market Association.

**Table 2.** Recommendations to Improve Implementation of *Maryland Market Money (MMM)* Farmers' Market Incentive Program From Participating Market Managers (n = 19)

Barrier	Recommendation
Budget	Increase match amount for customers Improve funding certainty from year to year
Education	Increase training for new managers on data collection and other program logistics Improve training for returning and new vendors focused on acceptable purchases Generate additional vendor buy-in through education about importance of <i>MMM</i> program Provide targeted customer education regarding acceptable purchases, match amount, and grant funding source Correct misinformation provided to customers at distribution sites including nutrition assistance benefit offices and senior centers
Data collection	Reduce data collection requirements Streamline data collection using by providing managers with iPads or other touch screen computers to collect data Digitize entire <i>MMM</i> system, allowing for loading of <i>MMM</i> credit onto digital loyalty cards rather than requiring market staff to dispense tokens
Promotion	Increase signage promoting <i>MMM</i> across the market Improve outreach at nutrition assistance benefit distribution sites Promote <i>MMM</i> through diverse print and digital channels (eg, community newsletter, listserv, flyers, postcards, magnets, banners and yard signs, automated phone calls)

hiring additional staff, including paid employees, interns, and volunteers, depending on their market structure and funding. Most managers described the responsibility of training new and returning market staff as straightforward and minimally burdensome. A few used techniques such as role-play and cheat-sheets for staff that explained how to handle each benefit type. One manager described how the market approached added staffing needs:

*When we did the first year, then we had an additional staff person. And then, as the program [has] grown, and with the senior farmers' market coupons and the WIC, we've had to have 2: one to help manage the line and kind of deal with collections and stuff... so, we've added 2 people throughout the past couple years. [I] feel like we're at a comfortable number with that now.—Manager 12*

*Participants: FM customers.* A few managers reported receiving complaints from customers about various components of the program, including waiting in long lines to receive the incentive, the incentive amount being too low, and having to return to the manager's booth

with a receipt after spending the WIC or FMNP voucher with vendors to receive their *MMM* tokens. One manager described sympathizing with a customer who felt the match amount was inadequate:

*We did have feedback from 1 customer who was a first-time customer this year, who, for a little context, is a Syrian refugee along with several other families. And I think he was the only one who had a lot of English and was trying to shop on behalf of several other families using their [benefits]. And it was frustrating to him that we couldn't match more. And I totally agree with him. He was using quite a lot of benefits. He spent \$50 in benefits and it was a shame to only be able to give him \$5 in [MMM] and \$5 in the [supplemental market incentive] money.—Manager 17*

During the market season before this study, MDMFA ran out of funds for *MMM* a few months before the end of the season. Some markets were able to continue offering incentives using funds raised through their own private channels. Several managers described receiving angry complaints from customers who did not understand why the incentive was terminated, or why

only a few markets in the area were able to continue providing incentives. One manager explained the confusion at the market:

*I think that at the back end, when we're running out of money, it gets frustrating for the customers then, because they don't understand the process. So, like, last year, we had a bunch of challenges with that. Like, [another nearby market] was out of their Market Money. They ran out. They had spent all theirs. We were supplementing ours ... We ran out of [MMM] grant money. We always keep our program going until the end of the year. We just make up the difference. So, they don't understand how one can end and one can ... continue.—Manager 3*

Despite having received occasional complaints from customers, on balance, all managers reported receiving more positive feedback and expressions of gratitude for the program. According to 1 manager:

*Generally, when people first find out about it, their reaction is 'What, really?' They're, like, really surprised that I am telling them about this and it's really positive. We've had people say, 'Thank*

*you.' People are just really grateful for it, overall.—Manager 13*

Nearly all managers reported that some of their customers did not understand how the MMM program operated. In particular, managers described customer confusion regarding the total match amount, the different types of tokens distributed for each benefit program, and the different rules governing how each type of token could be spent. Furthermore, nearly all managers reported that customers were unaware that funding for the MMM program was primarily from grants; some customers assumed that funds were provided through a federal or state entitlement program. According to 1 manager:

*There is definitely confusion, but it's just a matter of explaining and helping people understand the different coin systems. Because there's SNAP, and then there's the WIC vouchers, and it's all very complicated stuff, even for us on the back end, dealing with this all the time. So, just explaining it to people ... understanding it can be a challenge.—Manager 1*

Managers at markets that served large non-native English-speaking populations especially noted difficulties in explaining the program to their customers. A few of these managers described strategies they pursued to address language barriers, such as hiring staff that spoke other languages and pulling in vendors or family members of customers to translate.

*Social context: Vendors and broader FM community.* When asked to describe factors that made it possible to begin offering the MMM program at their market, a few managers described the importance of champions, or people within their community who pushed the idea forward. One explained that at her market, although the manager was critical about getting the market started, customers had since had an important role in advocating for ongoing support of the program. When asked about lessons learned through the process of launching MMM, the manager said:

*[It is clear] that a market will need someone who appreciates the value of the program to handle the process. Other markets will definitely need a champion ... the recipients are [champions], and that is 1 thing that keeps it going. The people who do take advantage of the program are very appreciative ... of the work and the value of what we're giving them. But as far as finding champions, you would need to hire someone. Farmers usually are not; they have enough of their own [work] to do.—Manager 11*

Managers described mixed feedback from vendors regarding the MMM program. Several explained that vendors complained about additional demands on their time imposed by MMM but recognized the positive impact it had on their sales. According to 1 manager:

*Some complain because it's just another complexity that they have to deal with. Like, on market day, which is their most hubbub day. And others are just totally for it; it just brings in more business. And I feel like the ones that complain, it brings them more business, too, but they just like to complain.—Manager 10*

A few managers cited resistance among a small number of vendors who did not support the mission of the incentive program and felt their participation was not financially worthwhile. One manager explained the difficulty of securing vendor buy-in:

*We've had a couple issues. Some of them look at it as it's time-consuming, it's burdensome to hand out the receipts. I mean, some see the real benefit in it. Some are really behind the program and kind of what it stands for. It hasn't been easy for us, either, to explain that to them and kind of keep things in check. I think 1 of the obstacles we're facing is because our market is so diverse with the customer base that our vendors don't always know the best way to handle it. And so, trying to work with them and coach them on that and explain to them*

*that our tolerance for things is, you know, just working with them on it, that's been a challenge.—Manager 12*

Managers reported using diverse strategies to train vendors on MMM operations. Many used the annual vendor market meeting at the start of the new season to remind returning vendors about MMM and explain the program to new vendors. Others described meeting one-on-one with new vendors or dropping by their stalls at the beginning of the season. A few managers provided cheat-sheet materials to vendors, similar to those they used to train market staff, which explained how to process each type of benefit and the types of items eligible for purchase with tokens. Most managers reported that training vendors on how MMM operated was easy, and that once vendors were trained, little ongoing support was needed. Despite perceptions shared by most managers that vendor training was straightforward, a few indicated that they continued to experience problems with vendors accepting tokens for ineligible products (eg, hot prepared foods). One manager explained that this practice often decreased as the season went on and vendors received feedback from managers:

*It's usually, like, the first 2 weeks of the farmers' market where you're, like, 'Okay, you accepted this this week, and I'm gonna let you slide this week, but if you do it next week, I can't pay you.'... Because as soon as I say, 'I can't pay you,' they're like, 'Oh, okay, I'll make sure to never do that again ...'—Manager 5*

A small number of managers speculated that some vendors intentionally bent the rules to accept ineligible purchases even though they had been fully trained. According to 1 manager:

*It's an ongoing communication and reminding the vendors sometimes. I don't know if they honestly have at different points forgotten how the programs work or they choose to forget because they want something to benefit the customer. We do have a lot of*

*customers that come without a lot of money and with greater needs, and it's hard to not—for some of our vendors at times—to not step outside of the rules of the program and maybe give an extra WIC receipt to help boost what the customer might do, and that was a problem this past season.—Manager 7*

*Organizational, political, and economic context.* When asked about their relation with the MDFMA, all managers reported feeling satisfied with the level of support and communication, and many said they were grateful for the help the MDFMA provided with tasks including streamlining data collection processes, improving accounting techniques, and daily problem-solving. Several markets with an MDFMA contractor on-site indicated that they would have been unable to operate the MMM program without the staffing support. One manager explained the important role MDFMA had in facilitating program management:

*I'm excited that they offered that administrative opportunity [to have an MDFMA contractor on-site] because that was 1 of the arguments against the program from some of the board members, was: 'We don't have the capacity to send out checks and do all that administrative work,' and I professionally couldn't take that extra amount of time from my job. . . . So, being able to have that available was the major game changer for us in getting the program here, so it's been fantastic.—Manager 16*

A handful of managers without an MDFMA contractor on-site explained that creating the infrastructure for data collection and reporting was challenging at the outset but data management had since become routine. A small number of managers also expressed ongoing frustration regarding data collection, explaining that it was unnecessarily burdensome and that they did not understand whether data they collected were going to be used meaningfully. Several managers recommended strategies to reduce the

burden of data collection, including lessening data collection requirements and streamlining the process with technology. One manager explained the need for better communication from MDFMA regarding the value of data collection:

*I guess some of the things in the data collection don't seem as applicable to our use as we thought they would be . . . like asking the customer if it was their first time at the market. That hasn't been helpful for us, but if it helps somebody else and we can see the results of that, then maybe it would be more applicable. . . . If it was something that would help, great, but I'm not sure that that data is helpful for anybody. Is it? I don't know.—Manager 16*

Several managers reported that uncertainty regarding the level of funding they would receive from MDFMA for the program from year to year made it difficult to plan and budget. Several managers referenced the year prior when MMM funds ran out before the end of the market season and called for better communication from MDFMA regarding funding limits earlier in the market season. When asked to describe the greatest challenge maintaining the MMM program, 1 manager said:

*I think it is our unknown—it's fund-raising. . . . And we're very fortunate that we get some community partners that contribute and then [MMM]. But it's always that unknown. It's like, what is the dollar amount going to be for this year? We don't find out what money we're going to have until later in the season or close. We really, that stuff we need to be putting, planning February, March, beginning of April.—Manager 12*

The managers of markets that conducted private fund-raising through their boards or neighborhood associations to supplement MMM funds explained that the additional dollars went a long way toward supporting their ongoing operations and maintaining financial stability.

Managers expressed diverging opinions regarding the need for additional promotion at their markets to

attract new customers. Several managers reported that current promotion of the MMM program was insufficient and should be expanded, whereas a minority said that they already lacked funds to meet current customer demand and thus promotion should be limited until additional funding for MMM benefits could be identified. Although managers described using a variety of strategies to promote the market overall, including writing announcements in the community newsletter, listserv, and social media page; distributing flyers, postcards, magnets, and business cards; posting banners and yard signs; and making automated phone calls, few had advertised the MMM program specifically. Nearly all managers described raising awareness at the launch of the MMM program as a challenge. One explained:

*Our biggest challenge in the early years was, we had the double dollars available but we couldn't have the customers . . . so the initial challenge was getting people to take advantage of the program that was in place, and then, once we did that successfully, the problem or the challenges became more to keep up with the demand and keep up with the fund-raising for the double dollars and then to find a way to cap it at some point and set limits.—Manager 11*

Despite concerns from managers regarding customer understanding of how the program operated and sources of MMM grant funding, only a handful reported making a concerted effort to educate customers about these topics. The manager of 1 of the markets that had made the greatest effort to educate customers still described the overall approach as informal:

*We're just constantly talking about ways to navigate the system and how to use the benefits and we're engaging with customers in a really friendly way and we are going about it in a way that people don't feel like it's taboo to be using federal nutrition benefits at the farmers' market. . . . We have a reputation, for being very welcoming and friendly at the market and*

*we ask that our volunteers and staff do the same.*—Manager 11

A few managers attributed customer misunderstandings related to the total match amount to external organizations unaffiliated with MDFMA that distributed WIC, SNAP, and FMNP benefits. One manager recommended that MDMFA take steps to work with these independent benefit distribution sites to correct the misinformation they provided FM customers:

*The most confusing part, I feel, in the whole thing is at the very beginning, when they get their benefits at the office. They need the correct wording. They should just say, 'When you take these you will get incentives. You will get something, some extra money.' They don't need to say how much.*  
—Manager 4

## DISCUSSION

Market managers reported overall favorable attitudes toward the *MMM* program. At every level of the Grol and Wensing<sup>33</sup> framework, managers identified key facilitators to implementation, such as private fund-raising, local champions, and strong support from the overseeing body, as well as barriers such as vendor buy-in, confusion among customers and vendors, and funding uncertainties. Although managers reported receiving some negative feedback from customers and vendors, on balance, managers believed that the positive impact of the program on both groups outweighed the logistical challenges.

To the authors' knowledge, only 1 other study<sup>31</sup> in the peer-reviewed literature has focused on implementation of an FM incentive program. The evaluation of the New York City *Health Bucks Program* by Payne et al<sup>31</sup> incorporated the perspectives of market managers, customers, and vendors using surveys and interviews. In their study, managers reported favorable attitudes toward the program, and nearly all indicated that the program brought more new and returning customers to the market. In the current study, most managers also

reported observing increased sales for vendors as a result of the *MMM* program; this is consistent with quantitative impact studies that found that FM incentive programs grow sales.<sup>24,25,34,35</sup> Similar to the current findings, Payne et al also identified a desire among participants to transition toward a more digitized system.

Aside from the peer-reviewed literature, some organizations that administered FM incentives also conducted evaluations<sup>21,36,37</sup> of their programs, soliciting feedback from customers, vendors, and managers. Consistent with the current findings, those evaluations reported positive manager perceptions of incentive programs and their impact on sales and drawing returning customers. In addition, a USDA report that included interviews with representatives of 103 organizations that fund, administer, and implement FM incentive programs similarly identified funding, staffing, and financial accounting challenges as key barriers to program implementation.<sup>38</sup>

This study sheds light on opportunities to improve implementation of the *MMM* program moving forward. Managers enumerated several recommendations, including increasing funding security, improving promotion and education, and reducing the data collection burden through program digitalization. Several of these recommendations highlight differences in perception and challenges in communication between managers and the MDMFA. At new manager training sessions and the biannual market manager meetings, MDFMA staff discussed budget constraints and explained the importance of data collection for grant applications, both topics on which managers reported receiving insufficient information. When grant funding was running low in the year before the study, MDMFA called a meeting of managers to brainstorm solutions, but several managers did not attend (personal communication, Shelley Brosius, MDFMA *MMM* program coordinator, November 30, 2018). According to MDMFA staff, some managers also did not take advantage of training and other support offered to them; for example, when MDFMA offered managers grant funding to

purchase laptops and other technology, few applied. Understanding why managers do not perceive the support offered by MDFMA as adequate or take advantage of is an important next area for investigation.

This study highlighted the wealth of accumulated knowledge among the managers. To address some identified barriers, MDFMA could create more opportunities to share information among managers, allowing more experienced managers to communicate lessons learned to those new to *MMM*. Experienced managers could share strategies they developed related to increasing vendor buy-in, better promoting the incentive within the market, and explaining the program to customers. Improving manager training is particularly important given the critical role that managers have in interfacing with customers and vendors. The MDFMA might continue to consider creative and low-cost technological solutions to reduce the data collection burden and accommodate the diverse needs of the market managers. The MDFMA could also build on facilitators identified in this study: for example, providing technical support to markets seeking to conduct private fund-raising and encouraging them to identify and amplify local champions of the *MMM* program.

This study had some limitations. First, it focused on implementing an FM incentive program in Maryland. Although this program is similar in major ways to other incentive programs used in markets across the country, results may not be generalizable. For instance, the *MMM* program is unusual in that the match can be used to purchase all SNAP-eligible foods, which include dairy, eggs, and meat, unlike many other such programs that provide a match to purchase only additional fruits and vegetables. In addition, the *MMM* program was offered in primarily urban and suburban settings; only 1 participating market was located in a rural area. However, the study was strengthened by including perspectives from managers from all markets that participated in *MMM* in both 2016 and 2017; they represented markets of different sizes and host organizations (eg, universities,

neighborhood associations), those with and without MDFMA contractors on-site, and those that had participated in *MMM* over a range of years. Next, some of the managers interviewed assumed their management role after implementation of *MMM* and thus were unable to comment on challenges or changes required during the early stages of implementation. This study also included only managers at markets that opted to participate in *MMM*; thus, the researchers missed the perspective of markets that were unable or unwilling to participate. Finally, this study was conducted before Maryland's switch to eWIC, an electronic benefits issuance system for WIC benefits, which may have affected how WIC beneficiaries received *MMM* tokens.

## IMPLICATIONS FOR RESEARCH AND PRACTICE

In this study, the authors identified barriers and facilitators to implementation that may be shared by other FM incentive programs. Barriers could be resolved through collaborative problem-solving, taking into consideration the unique perspectives of market managers, vendors, and customers. Existing incentive programs might consider systematically soliciting feedback from managers, vendors, and customers to identify targeted strategies to strengthen their programs. Facilitators might be amplified broadly. Markets introducing incentive programs could take special care to identify local champions and diverse funding sources, streamline processes through technology, and engage in far-reaching promotion and education of all key stakeholders from the outset.

Further research is needed to evaluate market incentive programs in other contexts, including research focused on rural settings, where customers and vendors may have access to fewer retail venues. The current study focused on a statewide incentive program that was < 4 years old; future research might explore strategies that markets use to sustain and grow their incentive programs in the long term. Finally, the authors

focused on markets that had decided to opt into the *MMM* program; additional studies might consider the perspectives of managers of markets that opt not to participate in incentive programs to better understand barriers to adoption.

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