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**Implementation Evaluation:
Grady's Fruit and Vegetable Prescription Program**

By

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Introduction

Publications explaining the success or failure of an intervention within a community, in the field of health research, are abundant. Less common are publications outlining the implementation process of those interventions. Many institutions, including the United States' National Institutes of Health, have identified implementation and operational research as an area deserving of funding.¹ This information contributes not only an explanation of the *what* but also the *how* that is needed to positively impact the health of a community. Wholesome Wave Georgia (WWG), a nonprofit organization operating in forty-six different locations in the state of Georgia, seeks to positively impact health by emphasizing food as medicine.² One of WWG's main programs, Fruit and Vegetable Prescription Program (FVRx), works through partnerships with healthcare providers and farming cooperatives to provide fresh produce to patients by way of written prescriptions. While WWG provides the funding, network, and blueprint for the program, it is the responsibility of the healthcare team to develop a program plan that will best suit their population. The purpose of this project is to evaluate the fidelity of the initial implementation phase of WWG's FVRx with a new program plan at Grady Health System (Grady) and to review the existing literature regarding best markers for program sustainability (see Appendix A for program plan).

Fruit and Vegetable Prescription Programs

Food insecurity, the lack of or inconsistent access to a sufficient quantity of affordable, nutritious food is estimated to affect more than 14% of US households.^{3,4} The association between chronic disease prevalence and food insecurity has been well

established.⁴ Grady, one of Georgia's largest hospitals, serves many low-income patients who experienced food insecurity and are diagnosed with nutrition-related chronic diseases. WWG has partnered with Grady to bring the FVRx program to eligible patients who use Grady clinics for out-patient care. FVRx is a multistep program that empowers healthcare providers to write produce prescriptions for their patients with chronic diseases, such as diabetes, hypertension or cardiovascular disease, that can be managed or mitigated by diet.² In addition to provision of fresh fruits and vegetables, two educational components are integral to the program: nutrition education taught by Registered Dietitian Nutritionists (RDN) and cooking education following the Cooking Matters curriculum also taught by a RDN. Patients attend monthly nutrition classes for six months and weekly Cooking Matters classes for the first two months. Success of the program year is measured by assessment data such as weight, blood pressure, and waist circumference as well as survey data that assesses knowledge and behavioral changes. The 2018 FVRx Program at Grady will consist of five cohorts: the Primary Care Center, two at the Diabetes Center, the Asa Yancey Health Clinic and the Infectious Disease Program. These initial cohorts will pave the way for new cohorts to be added in subsequent years.

Fidelity

Program longevity, a key component to significant impact in a community, can be predicted in part by fidelity, the consistent and true-to-original-intention execution, of the program.⁵ High fidelity strengthens the chances of successful intervention replication, and therefore endurance, in new settings.⁵ Program plan documents are often created to

ensure high fidelity and serve as systematic guides to be followed by providers both familiar with and new to the intervention. Those executing the program must both follow the program plan document *and* appropriately understand the significance of maintaining fidelity past the initial phases.⁵ Fidelity is positively correlated with consistent outcomes program wide.⁵ Hanafin and O'Reilly identify three pillars to fidelity in a team-based approach: personnel, active management, and guidelines and documentation.⁶ Personnel includes clear organizational flow, including leaders and support staff, their roles and responsibilities, as well as ensuring the proper ratio of program personnel to program participants. Active management pertains to both handling of data and a structured plan for communication amongst all program leaders. Lastly, guidelines and documentation include participant-specific information and prioritization of records.⁶ Hanafin and O'Reilly argue that adherence to these pillars are integral to wide-scale program implementation.⁶ Furthermore, measurement of implementation fidelity is required to assess its effect on program outcomes.⁷ Without this measurement, it is unclear whether a program failed to achieve its goals due to flaws in the design or flaws in the implementation.⁷ Furthermore, in the case of a successful program, it would be difficult to gauge if those successes were maximal without understanding of the degree of implementation.⁷ Carroll et al argue that a plan/tool for this measurement is essential for intervention replication as evidenced-based practice is founded on the assumption that an intervention is implemented as described in the published details.⁷ In addition to program replication, this measurement tool is needed for secondary research to accurately gauge heterogeneity between interventions.⁷

Further emphasizing the importance of implementation measurement for fidelity, several authors have identified five essential elements of program implementation that should be evaluated: adherence to an intervention, exposure or dose, quality of delivery, participant responsiveness, and program differentiation.^{7,8} Early observation and timely identification of issues within program application is imperative for best outcomes.⁸ Of these elements, quality of delivery may be the most difficult to measure. A program plan document should outline the policies and procedures, against which adherence to the intervention could be evaluated.¹ This document should also describe exposure, the frequency and duration of an intervention received by participants, and include mechanisms for assessing participant responsiveness.⁷ Program differentiation relates to the identification of unique features that elicit the program's intended effects.⁷ While not directly a measurement of fidelity, this element is noteworthy as it highlights the aspects that make a profound difference to end results.⁷ Identification of these unique features would relate back to fidelity if these "essential components [were] the most difficult to implement."⁷ Carroll et al acknowledge that there are two different schools of thought regarding how to use these five elements of program implementation. One method would be to use one or some of these elements; the other method is to use all five together.⁷ Carroll et al supports the method of evaluating all five and goes on to describe a conceptual framework for fidelity measurement in great detail.

In addition to their discussion of the five elements for measurement, Carroll et al introduces two new elements: intervention complexity and facilitation strategies.⁷ These two components potentially become barriers to program success and therefore should be evaluated in relation to implementation. Complexity, as the name suggests, points to the

degree of detail and specificity used to guide the intervention. Higher fidelity is associated with interventions that are designed and executed with greater level of detail.⁷ However, it has been noted that in the case of complex interventions, the success of the program is highly dependent on the context.¹ Facilitation strategies “include the provision of manuals, guidelines, training, and monitoring and feedback for those delivering the intervention.”⁷ Adequately providing support to all levels of program staff with these facilitation strategies ensures an equal understanding of the (ideally) detailed intervention plan.

Closely following the implementation design is not only a strong marker for success of the program but also a strong indicator for replicability of the intervention. Wholesome Wave, the parent organization of WWG, has successfully enacted the FVRx in numerous states across the US and in other cities in Georgia. These successes are in part due to the core structure of the program but can also be attributed to the ability of individual sites to create a program plan that best suits their needs and their patient populations. As a result, FVRx operates differently across different healthcare systems. At Grady, the FVRx has the capability to affect countless patients in the metro-Atlanta area as the program adds more cohorts. As with any intervention, the degree of fidelity with the first few cohorts is crucial for expansion.

Key Components of Implementation Research

Implementation research ultimately aims to promote an intervention's wide-ranging replication and sustainability and can take a qualitative, quantitative, or mixed methods approach to meet this goal.⁹ Considering the multifaceted nature of

implementation research, mixed method designs often are most fitting.⁹ Utilizing both qualitative and quantitative data allows for a comprehensive view of both the context and details of an intervention. Implementation *must* be evaluated in reference to the intervention's context.¹⁰ Therefore, a unique feature of this type of research is that it must adapt to real world conditions, as opposed to controlling for these variables.⁹ Evaluation of a program's implementation can examine both fidelity and multiple outcome measures to determine success or failure.

While implementation research has been present in the literature for a few decades, a common theme persists: a lack of consensus in terms and scope. In 2009, Damschroder et al established the Consolidated Framework for Implementation Research (CFIR) to clarify differing terminologies, definitions and overlap that had previously created considerable challenges with using implementation theories to promote effective implementation.¹⁰ While not directly a component of the intervention plan, researchers and intervention leaders can use this framework as a tool for assessing, evaluating, and explaining the context for and process of implementation with a standardized language.¹⁰ Monitoring implementation, or the assessment of quantitative data, has been associated with greater results, shown by larger effect sizes as represented by statistically significant changes.⁸

Because implementation analysis must take into account the setting of the intervention, numerous factors can influence the level achieved such as community level factors, provider characteristics, characteristics of the intervention, factors relevant to the delivery system and factors relevant to the support system.⁸ Also included in these components is the degree of shared decision-making among partners in the intervention

as well as among individuals responsible for the day-to-day activities.⁸ Including information regarding these factors in documentation not only increases the ability of other parties to replicate the intervention but also allows secondary researchers to better understand the outcomes. Overall evaluation of the FVRx at Grady will follow a mixed method approach, looking at qualitative data reported by the dietitians leading the program as well as quantitative, assessment data collected from the patients. However, the scope of this project is to evaluate qualitative data about program implementation.

Key Components of Program Sustainability

Both proper delivery and perpetuation of an intervention are important in creating significant, long-term change within a community. It has been shown that after the initial implementation phases and pushes for high fidelity, falling back into old routine is common.¹¹ Reverting to status quo diminishes the ability of the intervention to continue to create change. Ament et al define the existence of a sustainable intervention as one that “continues to deliver the achieved benefits over a longer period of time, [that] does not return to the usual processes...even after the implementation project is no longer actively carried out.”¹² Therefore, sustainability becomes a strong focus in the post implementation phase. Factors related to program longevity include, but are not limited to: adaptability, costs and communication, and structural characteristics.¹²

Adaptability

Adaptability, the ease of a program to change in response to changing needs, or to evolve to meet new standards, is often an indicator for survival.¹² While this flexibility is

desirable for a durable intervention, it conflicts with the ongoing need for fidelity. The ability of providers to simultaneously *replicate* parts of programs and *adapt* others with appropriate discernment can be a useful tool in maintaining an intervention. Some authors have noted that many providers see adaptation as synonymous with implementation failure and therefore do not attempt change when change is warranted.⁸ Yet studies point to the benefits of combined adaptability and shared decision-making on improved implementation outcomes.⁸ Durlack and DuPre argue that the framing of the adaptation/fidelity debate in black and white terms is a disservice to implementation research.⁸ Instead, a clear explanation of the program components that can or do change and the components that should not be changed increases chance for sustainability and adds to the literature. Stated differently, the *documentation* of the adaptation is most significant. The viewpoint that change is necessary for longevity is a tenet of the Dynamic Sustainability Framework.¹³ This framework portrays the ability of programs to grow and change in complex clinical and community settings to ensure ongoing presence in these environments.¹³ One method of managing this adaptation/fidelity dichotomy could be to readily adapt nonessential, peripheral components while maintaining core elements.¹⁰ In the case of Grady's FVRx, some peripheral components could include responsibilities of the support personnel, specific times when reminder phone calls are made to patients, the recruitment process, or other aspects that are not fundamental to the program goals. Another method views the adaptation period as one existing between the initial implementation phase and the sustainability phase, rather than as a part of both.¹³ Program designers and implementers must decide how to approach the balance of fidelity and adaptability.

Costs and Communication

Financial demands and sufficiency of funding play a significant role in the duration of an intervention. A program that hopes to positively impact the health of a community must have appropriate financial ability to sustain the project as long as positive results are occurring. Likewise, the role of communication is integral to program sustainability. Communication with all levels of program leaders is key to addressing issues and concerns in a timely manner and facilitates shared decision-making. Some system theories argue that the relationships made between program leaders often have more of an impact on the intervention than the personal attributes of the individuals.¹⁴ Therefore, by building strong, effective relationships the program is positively impacted. These strong relationships facilitate a teamwork approach that has been shown to increase effective implementation and contribute to program sustainability, especially when combined with low personnel turnover.¹⁴

Structural Characteristics

Structural characteristics can be defined as the social architecture, age, maturity, and size of an organization.¹⁴ Structural characteristics could also point to the intensity of internal support for program personnel. The division of roles and responsibilities, the diversity of knowledge in an organization, and team stability (turnover) all contribute to the lifespan of an intervention.¹⁴ The CFIR argues that “size and age of an organization are both negatively associated with implementation when bureaucratic structure is

increased as a result;” which could then diminish sustainability of the original program goals, policies, and procedures.¹⁴

Success versus Sustainability

Success or failure of an intervention is an imprecise description, as it does not point to a time frame. An important role of implementation research is to distinguish “between *achieving* improvements in outcomes and *sustaining* them.”¹⁵ A sustainable program aims for integration into the larger organization in which it was started. When a program is expected to grow to additional areas of an organization, such as with the FVRx program at Grady, replication with high fidelity is vital.¹⁵ For this reason, it is important for researchers to measure the initial implementation process *and* the process when the program has reached a sustainable status. Additionally, implementation researchers should understand that a program is rarely perfect at first, and therefore some adjustments can and should be made when needs are identified, indicating that programs are not static after implementation, but need constant evaluation to ensure sustainability.¹⁵

Sustainable, Evidenced-Based Components of the FVRx Program

As previously mentioned, the FVRx program provides fresh produce to patients in combination with education on why that produce is important for health and how to prepare the food at home. One contributing factor to the initial success and sustainability of this program model is the utilization of RDNs to teach the educational component. RDNs are specifically trained to follow and interpret the most current health-related

research and to educate the public accordingly, keeping in mind practicality and accessibility.¹⁶ Nutrition education provided by an RDN is tailored to encourage recipients to make realistic behavioral changes and, as a result, has a greater impact on blood pressure trends than usual care, a statically significant impact on lowering hemoglobin A1c in patients with diabetes and slowing time to dialysis for patients with chronic kidney disease stages 3 and 4 when compared to nutrition education provided by other types of health care providers.^{16,17,18,19} RDNs leading these programs are not only well-versed in the physiologic repercussions of having or lacking a nutritious diet, but also are trained to approach lifestyle changes in a manner that is simple, measurable, attainable, realistic and fits in an appropriate time frame for their audience. One of the primary aims of the FVRx program is to provide fresh produce to food insecure populations. Food insecurity refers to the inability or inconsistent ability to obtain nutritious, safe food sufficient to feed the household.²⁰ The Academy of Nutrition and Dietetics (Academy) acknowledges access to healthy food as a human right and argues that food insecurity has tangible negative effects on health outcomes across the lifespan.²⁰ The Academy asserts that RDNs play an important role in combating food insecurity as they are uniquely positioned to speak to the physiologic and social implications.²⁰ In addition to the value that their expertise brings to the educational component of programs aimed at improving health parameters, RDNs provide culturally sensitive, financially appropriate guidance that empowers those that are struggling with food insecurity.²⁰

Operating under the knowledge that “factors such as low education attainment, low income and high socioeconomic deprivation tend to increase the likelihood of inadequate food access, low food and nutrition literacy and lack of practical cooking

skills,” Cooking Matters uses an evidenced-based approach to teach children and adults how to cook, grocery shop, and ultimately make healthier choices.^{21, 22} Cooking Matters, a part of the No Kid Hungry campaign, has been successfully replicated and implemented all across the United States since its creation in 1993.²¹ In adults such as Grady's FVRx population, Cooking Matters has been shown to promote lasting behavior change through building basic culinary skill sets, increasing participant confidence and fostering food resource management skills.²³ In keeping with FVRx program goals, Cooking Matters taught by RDNs inspires patients to make healthful choices while staying within a realistic budget. By combining nutrition education led by outpatient RDNs with nutrition-based cooking education following the Cooking Matters curriculum, the FVRx program delivers a robust view of food as medicine to a population with significant need.

FVRx Implementation Evaluation

Evaluation of the 2018 FVRx program at Grady utilized two components: developing a program plan document and qualitative data collection via focus group. A program plan document was created to ensure fidelity across cohorts. This tool can be used to measure the three pillars of fidelity – personnel, active management, guidelines and documentation – as well as the five essential elements for the measurement of implementation – adherence to an intervention, exposure or dose, quality of delivery, participant responsiveness, and program differentiation.^{6,7,8} This evaluation will discuss the three pillars of fidelity; however, will not touch on the five elements for measurement due to time constraints as these elements would be better measured once all cohorts complete the program in the Fall of 2019. The focus group, consisting of two Grady

RDNs, was conducted to assess adherence to as well as the strengths and weaknesses of the program plan. This subjective data can be used to modify of some peripheral, and therefore adaptable, aspects of the program.

Program Plan

A program plan document was created to describe the design for the Primary Care Center, Diabetes Center, and Asa Yancey Health Center cohorts (IDP was not a part to this document due to implementation and recruitment differences that were predetermined by management). Creation of the program plan document began with meeting Grady and WWG staff members that were either overseeing or directly involved in executing the program. As WWG has FVRx programs in other healthcare settings in Georgia, a Tool Kit had previously been created for new and potential partners. This Tool Kit includes a step-by-step guide for new sites to follow when initiating their own program as well as an explanation of WWG's criteria for enrollment and expectations of data tracking. In preparation to implement the Grady FVRx program, the Nutrition Team drafted documents that outlined the program's goals and general flow. This program plan document combined the format of the WWG Tool Kit with Grady-specific policy and procedural guidelines. Multiple meetings with the Director of Medical Nutrition Therapy at Grady, Grady RDNs and the Director of Programs at WWG took place to ensure that the program plan document described the Grady FVRx program in a comprehensive and robust manner. The intent of the document is to use it as an instructional tool for current and future program leaders as well as a measuring stick for fidelity. The document starts by explaining the motivation for the intervention, general FVRx goals and Grady-specific

goals, all partners involved in the program, and the target audience. Next, the details of the program are outlined, which includes the duration of time for the cohorts, eligibility criteria for patients, the recruitment and enrollment process, and program flow. The produce prescriptions are explained, followed by 2018 program year specific information (this portion of the document should be updated annually). The document then provides a detailed explanation of how data will be collected and evaluated as well as roles and responsibilities of each program position. Program positions include: lead RDN, Grady RDNs, support staff such as interns and diet technicians, Open Hand staff, Common Market staff, and WWG staff. This program plan document is intended to require minimal changes going forward, with the exception of year-specific information and adaptation of peripheral components such as how patients are recruited or responsibilities of support staff. As discussed in implementation literature, as an intervention grows some aspects will likely require adjustment. Core elements that should not be modified include the motivation of the intervention, goals, target audience, specific assessment data, prescriptions for produce – the characteristics that distinguish FVRx from other health-related interventions. In addition to serving as a blue print for future cohorts, this document can also be used to correct deviations from the intended format and to maintain high fidelity past the initial implementation phase.

Because the 2018 Grady FVRx team was instrumental in creating the document, the group did not use it as an instructional tool. The document was discussed in a meeting with the 2018 team and leaders from Grady and WWG were given opportunities to make comments and suggest edits. Going forward into new program years, returning program leaders will use the document to review policies and procedures. New program leaders

will use the document as a way to understand the intervention, both intention and implementation. Both new and returning program leaders will use the document to ensure that they execute the program with high fidelity. The program plan document will be distributed to all active FVRx members during the first meeting of new program years and will function as a training tool. Additionally, the document can and should continue to lead discussion in subsequent meetings. It is recommended that the responsibility of editing the plan be delegated to one individual person, for example, the lead RDN.

Evaluation of the Three Pillars of Fidelity

Personnel

The program plan document describes a structure with solid organizational flow. There is a clear chain of command and distinction between leaders and ancillary staff. However, the responsibilities of each position could be further specified, specifically the role of the dietetic interns and the Lead RDN. More comprehensive expectations of dietetic interns should be added to the document and explained to potential candidates prior to committing to the position. The Lead RDN should be given a specific allotment of time dedicated to management of FVRx (aside from her regular duties as an outpatient RDN). The need for minor adjustments to the descriptions of roles and responsibilities is not surprising during the initial implementation phases. These modifications should, however, be discussed intentionally and be written into the program plan document to provide clearer understanding for future program years. With regard to the ratio of program personnel to program patients, it appears that the current staffing is sufficient for 2018 enrollment numbers. Currently, the average enrollment number for the Primary

Care Center, Diabetes Center, and Asa Yancey Health Clinic cohorts is twenty patients. WWG criteria require that healthcare sites aim for a minimum of thirty patients per cohort. As the Grady FVRx program increases patient enrollment to meet WWG criteria, more staff may be necessary to assist with assessment, data collection, produce distribution, or other in-class needs.

Active Management

Considering both the management of data and the management of personnel, the 2018 program structure could be described as having highly active management. The collection and handling of patient data as well as data entry is directed by WWG. Data collection and entry is carried out in the same manner across all cohorts with high fidelity. Additionally, WWG schedules bi-monthly meetings in which all program partners are welcome and encouraged to attend. WWG sets the agenda for these meetings and attempts to gather feedback regarding all aspects of the program. These meetings provide an opportunity for communication across all program partners. However, one result of such a robust inclusion at these meetings is decrease in the time available to discuss any one matter in great detail. In the initial phases of implementation, the program could benefit from the addition of a separate meeting with Grady and Open Hand RDNs. These meetings could allow more open and detailed discussion of the educational component of the program carried out by these two partners. Furthermore, it is recommended that these meetings between Grady and Open Hand begin prior to the start of each cohort so that distribution of logistical responsibilities can be ironed out.

Guidelines and Documentation

As discussed with active management, the handling of patient-specific documentation is carried out with high fidelity across cohorts and with high fidelity in regard to the procedure outlined in the program plan document. Regarding prioritization of guidelines and FVRx administrative records, it is recommended that program leaders adopt the practice of tracking successes and/or issues that arise related to the implementation. These written accounts should be discussed as a team at designated meetings, as opposed to informally. Intentionally discussing these successes or issues ensures that appropriate decisions can be made for future cohorts and the program plan document can be amended as needed during this initial implementation phase. Addressing these topics early on in the life of the program can promote sustainability once the program has transitioned past implementation and can encourage higher fidelity during expansion/replication.

Focus Group

A focus group was conducted to gather feedback regarding the successes and challenges of implementing FVRx with high fidelity to the intended program plan. Two Grady RDNs were selected to participate in the focus group based on the criteria that their cohorts were the first to start the 2018 educational program as well as the Cooking Matters sessions. These criteria ensured that the focus group discussion could touch on all aspects of the FVRx intervention. The Georgia State University Institutional Review Board granted approval for the focus group and informed consent was obtained from both participants (see Appendix B for consent form). The discussions were prompted by six

open-ended questions (see Appendix C for focus group questions). While multiple strengths and weaknesses of the program were explored, the following themes were most prevalent:

- The importance of shared decision-making and a need for increased communication across all active parties
- Equal collaboration
- Logistical difficulty as a main area of concern for expansion to new cohorts
- The need for a clearer understanding of roles and responsibilities across personnel
- The desire to place more emphasis on the “food as medicine” foundation/ intent behind the program
- The possibility of a future position for a FVRx RDN

Shared Decision Making and Equal Collaboration

As previously mentioned, the level of shared decision-making is an important aspect to consider when evaluating implementation.⁸ Shared decision-making is a core building block for value-based care – the viewpoint that care should be aimed at increasing health, increasing standards of care, and decreasing costs rather than aimed at increasing volume.²⁴ Conversely, the motivation for increasing volume, is a result of a fee-for-service system.²⁴ The FVRx program compliments value-based care as it endeavors to decrease the volume of overall healthcare services that individual patients need by improving health through access to fresh produce and nutrition-related knowledge. Grady's FVRx depends on five community organizations: Grady, WWG, Open Hand Atlanta (leader of the Cooking Matters courses), Common Market Produce

(an organization that brings produce to the patients during the first half of the program), and Fresh MARTA Markets (a pop-up subset of Atlanta's Community Farmers Markets where patients fill their prescriptions for fresh food). While allowing each partner to have an appropriately proportionate role in decision-making creates its own challenges, it benefits the intervention by increasing collaboration and the desire to "stick to the plan" or to implement the program with high fidelity as each party has substantial contribution.⁸ Additionally, creating numerous opportunities for shared decision-making facilitates frequent communication across involved organizations which in turn enables transparency. In an ideal intervention structure, shared decision-making also means "shared responsibility in completing important tasks" so that one organization does not feel strain to a significantly larger degree than the others.⁸ Disproportionate strain could weaken the desire of some active program partners to sustain the intervention long term, weakening the ability of the intervention to have a significant impact on the target community.⁸ Furthermore, communication and collaboration are quickly identified as important factors by the individuals carrying out the day-to-day aspects of the program, such as the RDNs that participated in the focus group. Areas where communication could be improved include sharing education lesson plans between Grady RDNs and Cooking Matters RDNs, more emphasis on food access and food choices as a necessary aspect of disease management across all healthcare providers at Grady (regardless of their direct involvement in FVRx), and expectations of each organization. The distinction of each organization's role would address concerns about equal partnerships versus support roles. Specifically, clarifying the degree of responsibility that the Cooking Matters dietitian and Open Hand have in the design and logistics could diffuse strain felt by Grady RDNs.

Logistical Coordination

Coordination of logistical elements surfaced as a prominent issue to the fidelity and replication of the FVRx in future Grady cohorts. Concerns such as day and time of nutrition education and cooking classes, produce delivery schedule and market seasons, and securing adequate and appropriate classroom space, pose challenges to expansion of the program, especially if these tasks are not equally distributed among involved organizations and the strain of coordinating these items is felt by one group more than others. Additionally, these logistical factors heavily influence potential patients' decision to participate in the program as the commitment can be difficult to make when the classes are during the workweek, on different days, or at different locations. Different recruitment processes could also pose a challenge to fidelity across cohorts, as is the case with the Infectious Disease Program cohort, which has an entirely different process for recruitment, enrollment and lesson plans and is independent from the other Grady RDNs. In these cases, the recommendation would be the creation of separate program plan documents to outline the program organization and flow for those cohorts that do not follow the same procedure as the Primary Care Center, Diabetes Center and Asa Yancey Health Center's cohorts. Fortunately, the differences with the IDP cohort such as recruitment procedures and lesson plans, are 'peripheral' or non-core/non-essential aspects of the program and therefore could be adapted to best encourage program sustainability if necessary.

Roles and Responsibilities

A clear understanding of personnel organization and responsibilities as well as adequate support for all levels of staff is needed for an intervention to be carried out to its intended degree. The launch of the first two 2018 cohorts revealed the need for better distinction of roles among FVRx staff as well as a more equal distribution of responsibility and accountability, specifically among ancillary staff. These clarifications should be written into the program plan document to ensure that all members of the project understand their duties. Further defining the roles of program staff members is especially important to fidelity as the program expands to new areas/clinics. Additionally, holding members accountable to their individual duties is vital to maintaining the core aims of the intervention.

“Food as Medicine”

The focus group revealed opportunity for more intentional emphasis of the produce prescriptions as another “medication” prescription and that the redemption of these prescriptions for produce is just as important to manage patients’ diagnosis as their pharmaceutical medications. Without the continued and passionate emphasis of this core program value, it is more likely that fidelity will decrease over time. Intimate understanding of the intervention’s goals and objectives, as well as emphatic support among all organization members is essential to the programs’ ability to continue to yield greater results each year. Repeatedly acknowledging the ability of fresh produce to improve nutrition-related health conditions such as diabetes, obesity, or hypertension as the reason that the produce is made available – first being brought directly to the patients in the classes then “purchasable” at MARTA Markets – solidifies conceptualization of

food as medicine. It is important for this conversation to be a part of each FVRx class, but also to be a part of each patient interaction throughout Grady Health System. It is recommended that a staff memo be sent out to all out-patient physicians and that incoming out-patient residents be educated about the FVRx program and instructed on how to discuss the program/the importance of food choices as it relates to disease management with their patients.

Dedicated FVRx Dietitian

The themes revealed by the focus group exhibited considerable overlap – need for collaboration, communication, division of responsibilities – and led to a suggestion of a future position for a dedicated FVRx Registered Dietitian. This dietitian would be hired specifically to coordinate FVRx programming. He/she could work out logistical details, develop the education lesson plans, create folders and take-home items for the patients and could attend each class for all cohorts to set individual goals with participants. The creation of this position would lead to higher fidelity as one person would be responsible for shaping the flow and details of all cohorts, as opposed to multiple outpatient RDNs who are primarily responsible for patient care. Additionally, this staff member could further improve outcomes through individual goal-setting with patients. While goal-setting is an existing component of the 2018 FVRx, these goals are generalized and set as a group. With health-related endeavors such as weight loss, individual goal setting increases investment in the patients' own action plan which increases the likelihood that they will achieve their desired results.²⁵ A FVRx dietitian could oversee the spread of the program to new areas of Grady, ensure that each new cohort followed the program plan as closely

as possible, approve adaptations to peripheral components and be responsible for updating the program plan document when necessary.

Conclusion

Implementation research is gaining recognition as an important tool for program replication and evaluation. These publications not only allow for better understanding of the context in which an intervention was carried out, but also help guide the implementation of future programs. Furthermore, clear outline of program plans and evaluation of the fidelity to said plans help program leaders identify sources of success or failures. Multiple approaches can lead to worthwhile findings: qualitative, quantitative, or mixed methods. As a foundation for evidence-based practice, implementation evaluation should occur with each program initiation as well as each occurrence of expansion. Likely, a program plan document will guide the policy and procedures of the intervention and will be a valuable instrument for the implementation assessment. The program plan document should be as specific as possible and should distinguish the core values of the program from the peripheral or changeable aspects.

Following the viewpoint that some degree of adaptation during the initial implementation phases is inevitable and beneficial for subsequent fidelity, this evaluation finds that the 2018 FVRx program at Grady has a solid foundation but room for improvement with regard to design of personnel, active management, and guidelines and documentation. These three pillars can be used to guide modifications to the existing plan that will ensure higher fidelity in future program years. Current personnel organization is well-structured but needs further clarification regarding some roles and their

responsibilities. Active management is in place but is primarily being led by WWG. It is recommended that in addition to WWG-led meetings, that the Grady team should hold separate meetings with Open Hand. Increasing the intentional meetings and discussions of program implementation among Grady leaders and Open Hand leaders could facilitate more timely solutions to issues that arise as well as lead to a better understanding of the division of responsibilities between these two partners. Guidelines and documentation of patient-specific information is handled with high fidelity across cohorts. Record keeping for implementation purposes could be increased; these records could lead to more efficient discussion and decision-making among program leaders. It is recommended that a Grady FVRx team member be responsible for editing the program plan document as adaptations to the plan are made.

Recommendations for future program years at Grady based on discussions from the focus group include: increasing communication among Grady RDNs and Open Hand RDNs regarding lesson plans and logistical responsibilities, emphasizing the importance of equal collaboration, ironing out logistical concerns with as much similarity across cohorts as possible, more clearly defining roles and responsibilities before cohorts commence, increasing the discussion of food as medicine and possibly creating a new position for a FVRx RDN that could manage the Grady FVRx program and help with individual goal setting. Maintenance of support and investment in the program is necessary for sustainability and therefore significant impact. Allowing active partners ability to collaborate, communicate, and share responsibility facilitates better personnel involvement and adherence to program plans. A teamwork approach greatly contributes to the lifespan of an intervention.

Some limitations of this project include: lack of evaluation of the five essential elements of implementation measurement, lack of discussion of intervention complexity and facilitation strategies, and inability to evaluate quantitative data. Additionally, evaluating the long-term financial sustainability was outside the scope of this project. Due to time constraints, this evaluation covered the initiation of the first two cohorts only (Primary Care Center and Diabetes Center Cohort 1). As a result, topics such as adherence to the intervention or participant responsiveness could not be adequately addressed. Time constraints also prohibited the use of quantitative data. Additionally, focus group questions were written before extensive review of the literature; therefore, intervention complexity and facilitation strategies were not incorporated into the scope of this analysis.

Lastly, it is a limitation that the Open Hand dietitian was not included in the focus group as this inclusion could have facilitated a more robust discussion of FVRx implementation and a better understanding of responsibilities between Grady and Open Hand personnel.

Possible areas where this research could be expanded include: evaluating the fidelity of all five 2018 cohorts at the end of this program year, examining the financial stability of the program, and assessing the degree of adaptability that is required of the program plan going forward and the degree to which record keeping is prioritized during those adaptations.

Combining nutrition education led by Registered Dietitians with aid for/access to fresh produce, the Fruit and Vegetable Prescription Program at Grady has the potential to positively influence health in Atlanta's high-need populations. Program expansion (or spread) and sustainability are directly related to degree of impact in the community. In

order to maximize impact, high fidelity must be prioritized by existing and new program staff.

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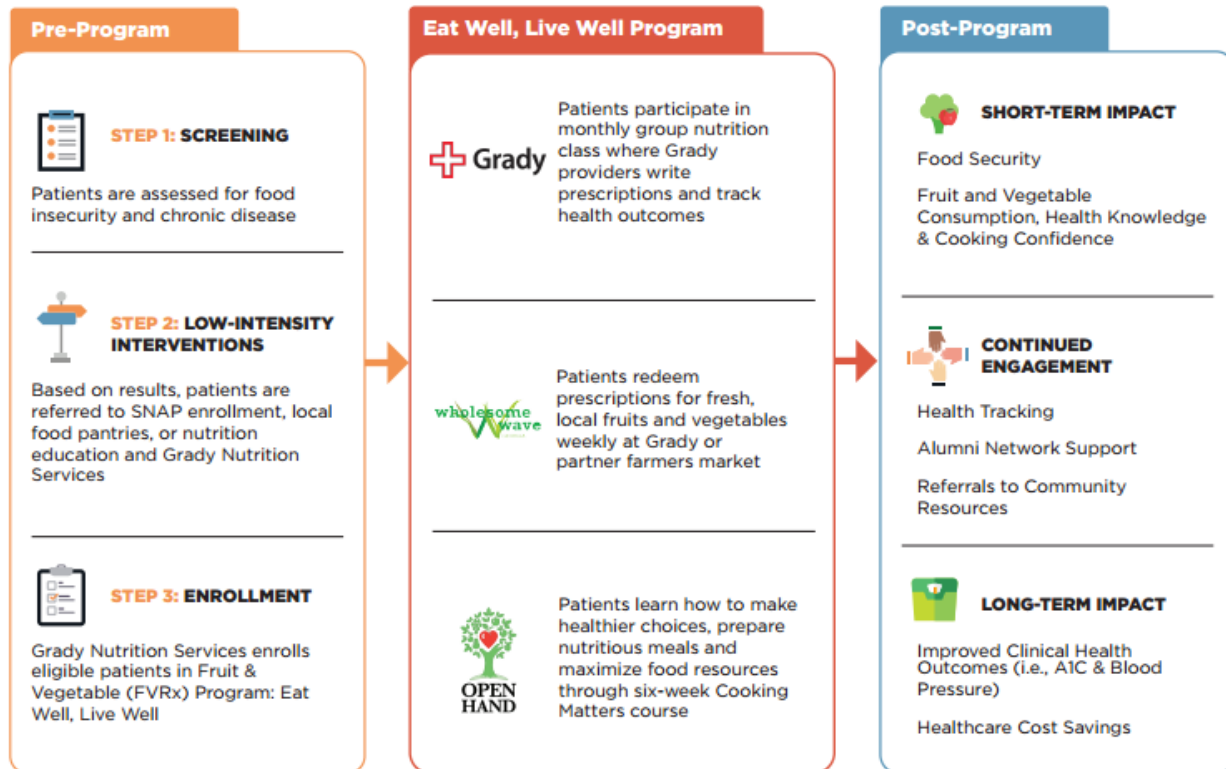
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Appendix A
Program Plan Document



2018 Grady FVRx Program Plan



*Depending on the recruitment process for the cohort, patients may be required to attend and graduate from four core nutrition classes taught by the Grady dietitian responsible for that area (Ex: Primary Care Center, Diabetes Center). Please see Recruitment below.

Introduction

The Fruit and Vegetable Prescription Program (FVRx) is a Wholesome Wave Georgia initiative that seeks to reduce food insecurity and reinforce the association of food as medicine through partnerships with community health care institutes and fresh produce providers. Grady Health Systems has partnered with Wholesome Wave Georgia (WWG) to bring this program to some of Georgia's most underserved patient populations. As of 2017, greater than 50% of Grady's primary care patients were known to be food insecure. A large portion of patients have diagnoses of chronic diseases that are known to benefit from nutritional treatment such as diabetes, obesity, and hypertension. The FVRx program at Grady Health System brings together Medical Nutrition Therapy (MNT) for chronic diseases, hands on cooking classes that follow the evidence-based Cooking Matters model, and access to fresh produce.

Overarching Program Goals

1. Connect food insecure patients to affordable fruits and vegetables
2. Teach patients with chronic diseases to prepare healthy foods
3. Enhance relationships with other community organizations that promote healthy eating such as local farms and/or markets in underserved communities

Grady-Specific FVRx Goals

1. Improve glycemic control in patients with diabetes by 1 % as measured by HbA1c by the end of participation in the FVRx program
2. Decrease average blood pressure by 1 % (systolic) and 9 % (diastolic) over the course of the program
3. Use behavioral and clinical outcomes data from current cohorts to make the case that this program should be expanded to other areas of Grady Health System

After participation in the program, patients will have a clear understanding of how nutrition impacts their disease state, a familiarity with cooking techniques, and the ability to navigate local produce markets.

Partners

Grady Health System – enroll patient participants and deliver MNT through a series of group education classes

Wholesome Wave Georgia – support coordination of all partners and provide funding for fresh produce

Open Hand Atlanta – teach weekly Cooking Matters classes during the first two months of each cohort

The Common Market – deliver fresh produce during the first two months of each cohort

Fresh Marta Market – access point for patients to redeem FVRx after first two months of program

Target Population

The target population for this program are Grady patients who have experienced food insecurity and have a disease diagnosis that can be wholly or partially managed by diet. In addition, the patients ideally show a motivation to improving their health, as well as reliability and a commitment to the program.

Outline

The following steps outline the Grady-specific procedures of the FVRx and should be used to guide the development of the FVRx program in future cohorts.

1: Attend Wholesome Wave Georgia's Annual FVRx Training

Program partners are required to attend an annual training meeting hosted by WWG. At this meeting, partners learn the planning process and guidelines for the FVRx program. Additionally, this meeting facilitates an opportunity to meet face-to-face with other members of the FVRx network. The meeting will typically be held around January, though the date may fluctuate as needed.

2: Policies

In order to meet the partnership requirements established by WWG, each FVRx program must:

1. Be six months long
2. Enroll participants that are food insecure and have a diet-related illness
3. Aim for a minimum of 30 participants in each cohort
4. Have monthly classes throughout program
5. Have a method for fruit and vegetable prescription redemption
6. Have a method for clinical data collection throughout program

3: Program Procedures

Duration

The program length for each cohort is six months of participant involvement. In addition to this time of participant involvement, there will be an approximately 3-month enrollment period. The enrollment period begins three months before the start date for the particular cohort, and continues until a goal of 30 patients are enrolled or until the first class takes place.

Eligibility

Patients are eligible for participation in the FVRx if they are (1) food insecure and (2) have a diagnosis of a chronic, diet-related illness.

Recruitment

Selection of patients may differ across cohorts, depending on clinical site.

The following outlines two possible models:

(a) Nutrition Class Graduate Model

Patients are referred to the program from a pool of four core nutrition class graduates. These classes are separate from the FVRx program and focus on low sodium, low fat, portion sizes and meal planning. Priority is given to graduates who have been diagnosed with comorbidities and who exhibited an active interest and consistent attendance to the four core nutrition classes. Primary Care Center (PCC), Diabetes Center and Asa Yancey Health Center (Asa) utilize this method.

(b) Provider and Self-Referral Model

Patients are referred to the program from direct patient care staff or may also self-refer. Priority is given to patients with high-risk diagnoses such as HIV/AIDS,

diabetes, hypertension, mental health issues that increase the risk for food insecurity, and other comorbidities. The Infectious Disease Program (IDP) utilizes this method along with the use of promotional flyers throughout the facility.

Enrollment

Once patients have been selected through either method (a) or (b), they are screened to ensure that they meet eligibility requirements, that they have reliable transportation to the meetings, and that they have a serious interest in participating in the program. Wholesome Wave Georgia has created a screening tool for this process. The Grady team can choose to use this tool or adapt parts of it, whichever best serves their needs and is most appropriate for their patients. The screening must include the two food insecurity assessment questions exactly as they are worded on WWG's tool. Please see [Appendix 1](#) for this tool. Once enrolled, the patient should be added to the roster for their respective cohort.

Program Flow

Each cohort should consist of at least 30 participants. The 6-month program has two educational components: monthly Eat Well, Live Well (EWLW) classes taught by Grady dietitians throughout the entire program and weekly Cooking Matters (CM) classes taught by an Open Hand dietitian through the first two months of the program. The first two months of the program will have classes every week, for a total of eight classes. Following the first 8 weeks, classes will drop down to once a month.

Example:

| | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 |
|-------|---------|---------|---------|---------|---------|---------|
| Week: | | | | | | |
| 1. | EWLW | EWLW | EWLW | EWLW | EWLW | EWLW |
| 2. | CM | CM | | | | |
| 3. | CM | CM | | | | |
| 4. | CM | CM | | | | |

*Note: The classes do not necessarily begin the first week of each month. This example represents only the order of the classes.

WWG requires that participants attend at least 3 of the 6 monthly EWLW classes to be considered a graduate at the end of the program.

At EWLW visits, Grady dietitians lead 2-hour long group education classes that cover the following content:

- Caloric content of beverages
- The importance of breakfast
- Nutrient dense vs calorie dense foods
- Cooking for weight management
- Tips for dining out
- Smart Snacking

*IDP may follow a different format, with different curriculum.

At CM classes, the dietitian will lead 2-hour long hands-on nutrition-based cooking classes with a different meal each week.

Conducting the educational portion of the program in a group setting allows for longer sessions with patients. Nutritional topics are able to be covered in greater depth and interactive discussions facilitate peer learning and support. During these classes the Grady dietitian will guide group goal setting.

In addition to the two educational components, the FVRx program provides fresh produce to participants. Grady dietitians write and disperse prescriptions for participants at every EWLW class. The dollar amount is determined by WWG and is as follows:

\$1.00 per household member per days of the month

*Exception: Households of one receive \$2.00 per day

Example: a family of two would receive a prescription for \$14.00/week for each four weeks of the month.

Prescription pads as well as funding to support the prescriptions are provided by WWG. The format of the prescription will be amount by week. The prescription will be marked off when redeemed at market (both Common Market deliveries and Fresh MARTA Market shopping).

Participants will initially redeem the prescriptions *weekly* for the first two months of the program at weeks 2, 3, 4, 6, 7, and 8. In future program years, produce may be delivered to EWLW classes 1 and 2 (program weeks 1 and 5). However, due to schedule and location, produce will not be given to participants at these classes for the 2018 FVRx Program. To compensate for these two weeks without produce, additional produce will be distributed each week during the first two months. Produce will be provided by The Common Market, and participants will exchange their prescriptions for pre-ordered produce. The Common Market will deliver the produce to the location of the group classes weekly for the first two months of the program. During this portion of the program, the produce brought to the participants will mimic the recipe taught to them during the Cooking Matters class. Following the first two months, when Cooking Matters classes have ended, and participants are only attending monthly EWLW classes, prescriptions can be redeemed weekly at any one of four Fresh MARTA Markets. Participants have the choice of redeeming their prescriptions at West End, HE Holmes, College Park, or Five Points MARTA Markets. Participants may choose the market based on the day that the market is held, ease of access, etc. Participants are able to choose which produce they would like to purchase.

By following this structure (produce delivered for the first two months, then obtained at a Fresh MARTA Market independently), the FVRx program creates a foundational familiarity with produce before giving the patients the responsibility of procuring the fresh food on their own.

2018 Cohorts

The 2018 program year will have the following five cohorts:

- Primary Care Center – 1 cohort of approximately 30 participants
- Diabetes Center – 2 cohorts of approximately 30 participants each
- Asa Yancey Health Center – 1 cohort of approximately 30 participants
- Infectious Disease Program – 1 cohort of approximately 30 participants

Dates for each cohort can be seen in calendar form. Please see [Appendix 2](#) for this calendar.

Locations for classes:

PCC –

Eat Well, Live Well classes will take place at Emory Faculty Office Building on Wednesday mornings, 9:30-11:30. Cooking Matters classes will take place at Georgia State University's Urban Life Building, Room 325B on Wednesday mornings, 9:30-11:30.

DCC – Cohort 1

Eat Well, Live Well classes will take place at the Diabetes Center on Monday afternoons, 1:00-3:00.

Cooking Matters classes will take place at Big Bethel Church, 220 Auburn Ave on Thursday afternoons, 1:00-3:00.

DCC – Cohort 2

Eat Well, Live Well classes will take place at the Diabetes Center on Monday afternoons, 1:00-3:00.

Cooking Matters classes will take place at Big Bethel Church, 220 Auburn Ave on Thursday afternoons, 1:00-3:00.

Asa –

Eat Well, Live Well classes will take place at Asa Yancey Health Center on Thursday mornings, 9:00-11:00.

Cooking Matters classes will take place at Atlanta Community Food Bank, 732 Joseph E. Lowery Blvd., NW on Thursday mornings, 9:00-11:00.

IDP –

Eat Well, Live Well classes will take place at IDP (Ponce) Center on Wednesday mornings, 9:30-11:30.

Cooking Matters classes will take place at Action Ministries, 485 Ponce De Leon Ave on Wednesday mornings, 9:30-11:30.

The Grady internal team (RDs and DTs) will meet monthly following their regularly scheduled staff meetings. At this meeting, they will discuss any issues that have arisen and will prep for the WWG bimonthly meeting.

4: Evaluation – During Classes and Post-Program Completion

In order to track success of the program, objective and subjective data are collected from participants. Anthropometrics and blood pressure will be checked monthly, at the beginning of each Eat Well, Live Well class. Anthropometric measurements will include: height, weight, body mass index (BMI), blood pressure, and waist circumference and will be collected by GSU interns and Grady Diet Technicians. Additionally, the Diabetes Center will monitor participant A1c. This information will be used to track body composition and health improvement throughout the program. Participants will also complete surveys; data from these surveys will be used to discover program strengths, areas where program improvement is needed, and the degree of behavior change prompted by the nutritional education and cooking classes. These surveys will be conducted at the beginning of the program (pre-survey at EWLW class 1), at the end of the Cooking Matters series (“mid”-point survey at Cooking Matters class 6), at the end of the program (post-survey at EWLW class 6). Participants will be surveyed one final time at six

months post-program completion to gauge long-term behavior change as a result of the program. Please see [Appendix 3](#) for this survey.

Program interns will be responsible for submitting data to WWG. All data is due to WWG the first week after the end of the month in which the data were collected. Survey and anthropometric data will be entered via a link provided by WWG. All survey and anthropometric data will be entered twice to minimize entry error. Attendance, class roster, and prescription redemption data will be entered into Excel spreadsheets provided by WWG. The data entered via website link will be automatically available to WWG and the data entered into spreadsheets will be emailed to WWG.

5: Roles and Responsibilities

| Team Member | Name | Responsibilities |
|----------------------|--|---|
| Grady Leadership | Kathy Taylor | -Provide ongoing support and guidance to Team |
| Lead RD | Shanae White | -Manage recruitment and enrollment process -Attend all planning meetings -Coordinate data tracking and entry -Coordinate Grady RDs, GSU Interns, Peer Champions -Provide ongoing support and guidance to Team |
| Grady RDs | Shanae White – PCC Alisha Virani – Diabetes Center Ziaieh Jafari – Asa Ellen Stanback - IDP | -Lead monthly Eat Well, Live Well classes -Write Food Rx -Supervise GSU interns -Conduct reminder calls to cohort participants |
| Peer Champions | William “Bill” – Asa Miguel - IDP | -Offer peer support and encouragement throughout the program -Conduct reminder calls to cohort participants -Attend all program activities (EWLW and CM classes) -Help distribute food for 1 st eight weeks -Distribute MARTA passes each week |
| Grady IDP Leadership | Magdalene Yonker - MSW | -Manage recruitment and enrollment process -Data tracking and entry (including attendance) and submit to WWG monthly -Help distribute food Rx for 1st 8 weeks -Support IDP RD |

| | | |
|--|--|--|
| FVRx Support Team (including RDs, DT, and GSU interns) | Danielle Jackson, DT – all cohorts Sara Atcheson – PCC Stephanie Turner – Diabetes Center Kim Rodriguez – IDP and Asa | -Report to RD of respective cohort -Collect and record attendance and clinical indicators at EWLW classes -Help administer consumption surveys -Submit data to WWG -Help RD prepare for monthly classes -Order Common Market produce, MARTA cards, prescription pads and other supplies -Handle delivery and distribution of produce and supplies -Conduct reminder calls to cohort participants -Send produce invoices to WWG |
| Open Hand Atlanta | Kayla Anderson Shelby Utter | - Lead Cooking Matters Classes - Selects Common Market produce for first eight weeks of each FVRx cohort to align with recipes |
| Common Market | Lily Rolader | - Deliver produce to Cooking Matters classes at weeks 2, 3, 4, 6, 7, and 8 |
| Fresh MARTA Markets | J. Olu Baiyewu | - Facilitate prescription redemption - Track Rx redemption and submit to Program Coordinator and WWG monthly - Lead MARTA Market tours |
| Wholesome Wave Georgia | Rachael Kane WWG Intern | - Develops all program materials and shares with Leigh to disseminate to team - Coordinates and leads bi-monthly team meetings - Oversees data collection and evaluation - Handles payment for Common Market produce, MARTA cards and other supplies and coordinates distribution with GSU interns |

6: Ensuring Attendance

Grady RDs, peer champions, interns and dietetic technicians all help to ensure attendance by conducting reminder phone calls, text messages or emails (whichever is chosen as the primary method of contact for each cohort). The cohort participants are divided evenly among those that will be responsible for ensuring attendance. Assuming a cohort of 30, the RD, GSU intern and peer champion would each be responsible for reaching out to 10 patients. During the first two months, these reminders may occur a few days before the upcoming class. Once the classes drop to once a month, these reminders should occur approximately one week before the upcoming class.

7: Supplies

WWG provides reimbursement for FVRx related supplies.

Supplies needed for each EWLW class:

- Prescription pads
- Clinical data forms
- Surveys (class 1 and 6)
- Pencils
- Folders
- Nametags
- MARTA passes
- Snacks (class 1 and 6)
- Blood pressure reader
- Tape measures
- Clip boards
- Weekly educational handouts
- Free give-a-ways
 - Class 1 – cutting boards
 - Class 3 – wooden spoons
 - Class 6 – apple slicers

2018 Program Leadership and Contact Information

| Location: | Title/Role: | Name: | Email: | Phone: |
|-------------------------------|--------------------------------------|------------------|--|----------------------|
| Grady, Main | Director, Medical Nutrition Therapy | Kathy Taylor | ktaylor@gmh.edu | 404-616-3647 |
| | FVRx Coordinator/ Lead RD, PCC RD | Shanae White | sswhite@gmh.edu | 404-616-2241 |
| | Diabetes Center RD | Alisha Virani | avirani@gmh.edu | 404-616-6015 |
| | Asa RD | Ziaieh Jafari | zjafari@gmh.edu | 404-323-0731 |
| | Support for all cohorts | Danielle Jackson | dmjackson@gmh.edu | 470-585-6843 |
| Grady, IDP | Program Lead | Magdalene Yonker | myonker@emory.edu | 404-616-9793 |
| | Program Lead, IDP RD | Ellen Stanback | estanback@gmh.edu | 404-616-0455 |
| Open Hand | Director of Nutrition Services | Kayla Anderson | kanderson@openhandatlanta.org | 404-419-3331 |
| | Cooking Matters RD | Shelby Utter | sutter@openhandatlanta.org | 404-419-3330 |
| Wholesome Wave Georgia | Executive Director | Denise Blake | denise@wholesomewavegeorgia.org | 404-551-5996 |
| | Director of Programs | Alisha Thym | alisha@wholesomewavegeorgia.org | 404-551-5996 |
| | FVRx Intern | | fvrintern@wholesomewavegeorgia.org | |
| GSU Interns | PCC Intern | Sara Atcheson | satcheson1@student.gsu.edu | 404-862-2448 |
| | Diabetes Center Intern | Stephanie Turner | sturner67@student.gsu.edu | 912-663-4975 |
| | IDP and Asa Intern | Kim Rodriguez | krodriguez12@student.gsu.edu | 678-906-1140 |
| Peer Champions | PCC | | | |
| | Diabetes Center | | | |
| | Asa | William "Bill" | | 678-451-4958 |
| | IDP | Miguel | | 404-454-6473 |
| Common Market | Outreach Coordinator | Lily Rolader | lily@thecommonmarket.org | 678-343-9525 ext. 21 |
| Fresh MARTA Market | Food Redemption Coordinator | J. Olu Baiyewu | organixmatters2016@gmail.com | |

Appendix 1 Screening Tool

2018 Grady Fruit and Vegetable Prescription Program Questionnaire

EMR DATA

Name: _____

DOB: _____ MRN: _____

Phone number: _____

Email: _____

Medical qualifier:

- Obese (check chart) _____
- Diabetic (check A1C) _____
- Hypertensive (check #) _____
- Other: _____

Words in italics are instructions for the recruiter. **DO NOT read these words to participant.*

Introduction:

Hello, may I speak with _____?

Hello my name is _____ calling from _____. How are you today?

I am calling today to talk to you about a Fruit and Vegetable Prescription program that we are starting in _____. We would like to invite you to participate in this special program! Through this 6-month program we hope to provide you and your family with fresh fruits and vegetables every week; a fun, healthy, eating, and cooking class for 6 weeks, and really cool cooking utensils and gifts.

Your participation in the program would be completely free of charge to you. Do you mind if we talk for a few minutes to determine if the new Fruit and Vegetable Prescription program is something that you would benefit from? This should not take very long.

If participant agrees to talk, proceed to the questions below.

If participant disagrees to talk, say: Okay. Thank you for your time.

TRANSPORTATION

1. What are your main forms of transportation?

- A. Car/reliable vehicle
- B. MARTA/public transportation
- C. I don't have transportation
- D. Other: _____

If they answer "A" "B" or have reliable transportation, move to question 2

If they answer "C" to #1 or do not want to participate:

Unfortunately, reliable transportation is one of the requirements for this program. I am sorry you are not eligible for enrollment. Thank you for speaking with me today. If your situation changes,

please feel free to contact me. Hopefully you will be able to participate in the program in the future. Have a great day!

2. Are you able to get to one of these four MARTA stations to redeem your Rx weekly?
- A . West End – car accessible
 - B . Five Points
 - C . Hamilton E. Holmes –car accessible
 - D . College Park – car accessible
 - E . None

If they answer “E” or do not want to participate:

Unfortunately, having access to one of these MARTA stations is a requirement for the program. You are not eligible to participate. Thank you so much for speaking with me today. If your situation changes, please feel free to contact me. Hopefully you will be able to participate in the program in the future. Have a great day!

Program Schedule Assessment

1. Are you able to participate in a 6 month program? The program includes:
- A. Cooking class for 6 continuous weeks (1x a week)
 - B. Healthy Living Class 1x each month
 - C. Health screening and check in during the Healthy Living Class each month.
 - D. Weekly grocery pickup at a MARTA station Farmer’s Market (you will be given a voucher to shop).
 - YES
 - NO
 - MAYBE

If they answer “NO” to #2 or do not want to participate:

Unfortunately, attendance at each component mentioned prior is one of the requirements for this program. I am sorry you are not eligible for enrollment. Thank you for speaking with me today. If your situation changes, please feel free to contact me. Hopefully you will be able to participate in the program in the future. Have a great day!

2. Are you available during any of the following days or times below (Circle all that apply)
- Monday afternoon (1:00pm-3:00pm)
 - Wednesday morning (9:30am-11:30am)
 - Wednesday afternoon (4:00pm-5:00pm)
 - Thursday afternoon (6:00pm-8:00pm)
 - Not available

If they answer “Not available”:

Otherwise, move onto the next question

Unfortunately, availability at these times is one of the requirements for this program. I am sorry you are not eligible for enrollment. Thank you for speaking with me today. If your situation changes, please feel free to contact me. Hopefully you will be able to participate in the program in the future. Have a great day!

Pre-Existing Food Assistance

Hunger Vial Sign™ Two-Question Screening Tool for Food Insecurity

- 1 . Within the past past 12 months, we worried whether our food would run out before we got money to buy more. Was that often true, sometimes true, or never true for you and/or your household?

_____ often true _____ sometimes true _____ never true

- 2 . Within the past 12 months, the food we bought just didn't last, and we didn't have the money to get more. Was that often true, sometimes true, or never true for you and/or your household?

_____ often true _____ sometimes true _____ never true

*If they answer "often true" or "sometimes true" for either question, move onto the next question.
If they answer "never true" for both questions, move on to Family Size.*

SNAP Eligibility

1. Are you or anyone in your household enrolled in the Food Stamps Program?

_____ yes _____ no

If they answer "no", move onto question 2

2. Have you or anyone in your household been screened for Food Stamp eligibility in the past 6 months?

_____ yes _____ no

*If they answer "no", refer them to Grady Screeners from the Atlanta Community Food Bank:
Thank you for your responses, if you are interested in additional food assistance, the Atlanta Community Food Bank can assist.*

Family Size

Adults: _____

Children: _____ (under 18) **may be asked to provide proof*

Additional Questions

1. Why are you interested in this program?

-
3. We want you to be successful in completing and participating in the program. What concerns do you have about participating?

- Transportation
- Child care
- Time Commitment
- Schedule Conflict
- Other: _____

Closing

Thank you so much for answering those questions! I am pleased to inform you that are eligible to participate in the program! Our first orientation session will be

_____ and I hope to see you there. What is the best

number or email to contact you? _____

If you have any final questions, my phone number is XXX-XXX-XXXX. Feel free to call me if you have any questions!

Thanks again for speaking with me. Have a great day!

Voicemail Message Script

Hello my name is [your name] calling from [organization] for [patient's name].

I am calling about a Fruit and Vegetable Prescription program that we are starting in [start month]. Through this 6-month program we hope to provide you and your family with fresh fruits and vegetables every week, a fun, healthy, eating, and cooking class for 6 weeks, and really cool cooking utensils and gifts.

Your participation in the program would be completely free of charge to you. If you are interested in participating in this exciting program, please call me at [phone number] to determine if the Fruit and Vegetable Prescription Program is something that you would benefit from. Again, my number is [phone number]. I look forward to hearing from you!

March 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|------------------------|--------|---------|-------------------------|--|--------|----------|
| | | | 1 | 2 | 3 | |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 Daylight Savings | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 PCC – EWLW @ 9:30 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 PCC-CM @ 9:30 Produce @ class | 30 | 31 |
| | | | | | | |

April 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|------------------------------------|---------|-------------------------|---|--------|----------|
| 1 | 2 DC- Cohort 1 EWLW @ 1:00 | 3 | 4 | 5 PCC- CM @ 9:30 Produce @ class | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 PCC - CM @ 9:30 Produce @ class DC - Cohort 1 CM @ 1:00 Produce @ class | 13 | 14 |
| 15 | 16 | 17 | 18 PCC - EWLW @ 9:30 | 19 DC - Cohort 1 CM @ 1:00 Produce @ class | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 PCC - CM @ 9:30 Produce @ class DC - Cohort 1 CM @ 1:00 Produce @ class | 27 | 28 |
| 29 | 30 DC - Cohort 1 EWLW @ 1:00 | | | | | |

May 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------------------|---------|--|--|--------|----------|
| | | 1 | 2 | 3 Asa – EWLW @ 9:00 PCC – CM @ 9:30 Produce @ class | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 Asa – CM @ 9:00 Produce @ class PCC – CM @ 9:30 Produce @ class DC – Cohort 1 CM @ 1:00 Produce @ class | 11 | 12 |
| 13 | 14 | 15 | 16 PCC – EWLW @ 9:30 Produce from MARTA Market | 17 Asa – CM @ 9:00 Produce @ class DC – Cohort 1 CM @ 1:00 Produce @ class | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 Asa – CM @ 9:00 Produce @ class DC – Cohort 1 CM @ 1:00 Produce @ class | 25 | 26 |
| 27 | 28 MEMORIAL DAY | 29 | 30 IDP EWLW @ 9:00 | 31 Asa- EWLW @ 9:00 | | |

June 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|--|---|--------|----------|
| | | | | | 1 | 2 |
| 3 | 4 DC – Cohort 1 EWLW @ 1:00 Produce from MARTA Market | 5 | 6 IDP – CM @ 9:30 Produce @ class | 7 Asa – CM @ 9:00 Produce @ class | 8 | 9 |
| 10 | 11 DC – Cohort 2 EWLW @ 1:00 | 12 | 13 PCC – EWLW @ 9:30 Produce from MARTA Market IDP – CM @ 9:30 Produce @ class | 14 Asa – CM @ 9:00 Produce @ class | 15 | 16 |
| 17 | 18 | 19 | 20 IDP – CM @ 9:30 Produce @ class | 21 Asa – CM @ 9:00 Produce @ class DC – Cohort 2 CM @ 1:00 Produce @ class | 22 | 23 |
| 24 | 25 | 26 | 27 IDP – CM @ 9:30 Produce @ class | 28 Asa – EWLW @ 9:00 Produce @ MARTA Market DC – Cohort 2 CM @ 1:00 Produce @ class | 29 | 30 |
| | | | | | | |

July 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|---|---|--------|----------|
| 1 | 2 DC – Cohort 1 EWLW @ 1:00 | 3 | 4 HE Holmes MARTA Market CLOSED | 5 DC – Cohort 2 CM @ 1:00 Produce @ class | 6 | 7 |
| 8 | 9 DC – Cohort 2 EWLW @ 1:00 | 10 | 11 PCC – EWLW @ 9:30 Produce from MARTA Market IDP – EWLW @ 9:30 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 IDP – CM @ 9:30 Produce @ class | 19 DC – Cohort 2 CM @ 1:00 Produce @ class | 20 | 21 |
| 22 | 23 | 24 | 25 IDP – CM @ 9:30 Produce @ class | 26 Asa – EWLW @ 9:00 Produce @ MARTA Market DC – Cohort 2 CM @ 1:00 Produce @ class | 27 | 28 |
| 29 | 30 DC – Cohort 1 EWLW @ 1:00 Produce @ MARTA Market | 31 | | | | |

August 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|--|--|--------|----------|
| | | | 1 IDP – EWLW @ 9:30 Produce @ MARTA Market | 2 DC – Cohort 2 CM @ 1:00 Produce @ class | 3 | 4 |
| 5 | 6 DC- Cohort 2 EWLW @ 1:00 Produce @ MARTA Market | 7 | 8 PCC – Final Class & Graduation @ 9:30 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 Asa – EWLW @ 9:00 Produce @ MARTA Market | 23 | 24 | 25 |
| 26 | 27 DC – Cohort 1 Final Class & Graduation @ 1:00 | 28 | 29 | 30 | 31 | |
| | | | | | | |

September 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|---|--|--------|----------|
| | | | | | | 1 |
| 2 | 3 | 4 | 5 IDP – EWLW @ 9:30 Produce @ MARTA Market | 6 | 7 | 8 |
| 9 | 10 DC – Cohort 2 EWLW @ 1:00 Produce @ MARTA Market | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 Asa – Final Class & Graduation @ 9:00 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | | | | | | |

October 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---------|---|----------|--------|----------|
| | 1 | 2 | 3 IDP – EWLW @ 9:30 Produce @ MARTA Market | 4 | 5 | 6 |
| 7 | 8 DC – Cohort 2 EWLW @ 1:00 Produce @ MARTA Market | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |
| | | | | | | |

November 2018

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|---|---|--|----------|
| | | | | 1 | 2 | 3 |
| 4 | 5 DC – Cohort 2 Final Class & Graduation @ 1:00 | 6 | 7 IDP – Final Class & Graduation @ 9:30 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 HE Holmes MARTA Market CLOSED | 22 College Park MARTA Market CLOSED | 23 Five Points MARTA Market CLOSED | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | |
| | | | | | | |



FVRx 2018 Pre-Program Survey

GRADY SITES

This material was funded by USDA's Supplemental Nutrition Assistance Program — SNAP. This institution is an equal opportunity provider.



FOR FVRX® PROGRAM STAFF USE ONLY:

PARTICIPANT ID#: _____

FVRx® Site: _____ **DATE (MM/DD/YY):** _____

Was this survey administered by FVRx® staff or volunteer? Yes No

1. What is your date of birth? *Please write the month and year only.*

2. What is your sex? Male Female

3. Are you Hispanic or Latino? Yes No

4. What is your race?
(please check all that apply)

- Asian or Asian American
- American Indian/Alaskan Native
- Black/African American or Caribbean American
- Hawaiian/Pacific Islander
- White/Caucasian
- Other (*please specify* _____)

5. What is the highest grade or year of school you completed? *(pick one)*

- Less than a high school degree
- High school or GED certificate
- Two- Year College or technical school degree
- Four-year College or technical school degree
- Some college / technical school, but have not graduated
- More than four-year college degree

PART 1: YOUR BACKGROUND



6. What is your employment status? (*pick one*)

- Working full-time
- Working part-time
- Retired
- Student
- Not employed/Homemaker
- On disability
- Other (*please specify* _____)

7. What is your health insurance status?

- Uninsured
- Insured, Medicaid, Medicare or other public insurance
- Insured, through employer
- Insured, private insurance
- Other (*please specify* _____)

8. How many people live in your home, including yourself? (*This may include non-relatives who live with you*)

How many are children ages 0- 5 years? _____

How many are children 6-17 years? _____

How many are adults over age 65? _____

PART 1: YOUR BACKGROUND

9. Please select your monthly household or family income from all sources after taxes? *(pick one)*

- Less than \$1,001
- \$1,001-\$1,300
- \$1,301-\$1,700
- \$1,701- \$2,000
- \$2,001- \$2,400
- \$2,401- \$2,700
- \$2,701- \$3,000
- \$3,001- \$3,400
- More than \$3,401

10. In the past 6 months have you visited the ER?

- Yes No

If yes, how many times? _____

11. In the past 3 months, did you ever skip medications or take less than your doctor recommended?

- Yes No N/A

If yes, why? *(check all that apply)*

- I didn't like side effects
- I felt like I didn't need it anymore
- Could not pay for my prescription
- I forgot to fill or refill my prescription/forgot to take my dose
- Other (*please specify* _____)

12. In the past 3 months, has your doctor reduced the dose of medication you take?

- Yes No N/A

PART 1: YOUR BACKGROUND

13. Have you or anyone that lives with you participated in any of the following programs in the last year?
(check all that apply)

- WIC
- Food Stamps (SNAP)
- Free or reduced-price school meals
- Free summer meals
- TANF/cash assistance from the government
- Head Start
- Food Pantry
- Do not participate in any of these programs

14. What are the main forms of transportation you think you will use during this program?
(check all that apply)

- MARTA/public transportation
- Driving your own car
- Ride from someone else
- Walking
- Taxi/Uber
- Other (*please specify* _____)



PART 1: YOUR BACKGROUND

15. For the following questions, please check the box that best fits the way you feel about the food eaten in your household over the last 30 days.

- | | Often | Sometimes | Never |
|---|--------------------------|--------------------------|--------------------------|
| a. During the last 30 days, how often was this statement true: <i>The food that we bought just didn't last, and we didn't have money to get more.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. During the last 30 days, how often was this statement true: <i>We couldn't afford to eat balanced meals.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Yes | No | |
| c. In the past 30 days, did you or other adults in your household ever cut the size of your meals because there wasn't enough money for food? | <input type="checkbox"/> | <input type="checkbox"/> | |
| d. In the past 30 days, did you or other adults in your household ever skip meals because there wasn't enough money for food? | <input type="checkbox"/> | <input type="checkbox"/> | |
| e. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food? | <input type="checkbox"/> | <input type="checkbox"/> | |
| f. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food? | <input type="checkbox"/> | <input type="checkbox"/> | |

Please list all of the **FRUITS** you ate (including fruit juice) from the time you first woke up yesterday. This includes any canned, fresh fruit, frozen fruit, mixed fruit cocktail, or applesauce that you had with meals or snacks.

Please select the amount of each fruit that you ate

- | | | |
|----|--|---|
| 1. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 2. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 3. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 4. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 5. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 6. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |
| 7. | <input type="checkbox"/> Less than 1 cup | <input type="checkbox"/> Less than whole piece of fruit |
| | <input type="checkbox"/> 1 cup | <input type="checkbox"/> Whole piece of fruit |
| | <input type="checkbox"/> More than 1 cup | <input type="checkbox"/> More than whole piece of fruit |

Please list all the **VEGETABLES** you ate yesterday from the time you woke up to when you went to bed. This includes any canned, fresh or frozen vegetables you had with meals or snacks. For mixed dishes like stir-fry please tell us, as best you can, the vegetables in the dish.

Please select the amount of each fruit that you ate

1. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
2. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
3. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
4. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
5. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
6. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
7. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
8. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup
9. Less than 1/2 cup About 1 cup
 Between 1/2 cup and 1 cup More than 1 cup



| How often do you usually eat... | Not at all | Once a week or less | More than once a week | Once a day | More than once a day |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. fruit like apples, bananas, melons, or other fruit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. green salads? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. other dark greens like collards, kale, spinach, chard? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. other non-fried vegetables like carrots, greens, sweet potatoes, broccoli, green beans, or other vegetables? (not including white potatoes) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. French fries or other fried potatoes, like home fries, hash browns, or tater tots? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. any other kind of white potatoes that aren't fried? (NOT including sweet potatoes) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. refried beans, baked beans, pinto beans, black-eye peas, or other cooked beans? (Do not count green beans or string beans.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. How many times a week do you typically eat a meal from a fast-food or sit-down restaurant? Including eat-in, carry-out/drive-thru, and delivery? (Consider breakfast, lunch and dinner). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PART 3: EATING HABITS

| How often do you usually drink... | Not at all | Once a week or less | More than once a week | Once a day | More than once a day |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 9. 100% fruit juices like orange juice, apple juice or grape juice? (Do not count punch, TANG, Kool-Aid, sports drinks or other flavored drinks.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. a can, bottle, or glass of regular soda, sweet tea, flavored drinks like Kool-Aid, TANG, sports drink, or energy drink? (Do not count diet or zero calorie drinks.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. a bottle or glass of water? (Include tap water, bottle water and sparkling water.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

12. I typically eat meals...

| Alone | With my children | With my adult children | With my friend/ roommate | Spouse or Partner | With other adult family members |
|--------------------------|--------------------------|---------------------------|-----------------------------|--------------------------|------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

13. To what extent do you agree or disagree with the following statement...

The people I eat with enjoy it when I make healthy meals.

| Always | Never | Sometimes | Does not apply to me |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PART 3: EATING HABITS

| How often do you... | Never | Rarely | Sometimes | Often | Always | Does not apply |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 14. When you have milk, how often do you choose low-fat milk (skim or 1%)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. When you eat dairy products like yogurt, cottage cheese, sour cream, etc., how often do you choose lower fat options? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. When you eat grain products like bread, pasta, rice, etc., how often do you choose whole grain products? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. How often do you choose low-sodium options when you buy easy-to-prepare, packaged foods like canned soups or vegetables, pre-packaged rice, frozen meals, etc.? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. When you buy meat or protein foods, how often do you choose lean meat or low-fat protein like poultry or seafood (not fried), 90% or above lean ground beef, or beans? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. When you eat at fast food or sit-down restaurants, how often do you choose healthy foods? (Healthy foods include fruits, vegetables (other than white potatoes), whole grains, lean meats, low-fat, or fat-free dairy, and water) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |





PART 4: ATTITUDES AND BELIEFS

To what extent do you agree or disagree with each of the below statements?

| | Always | Never | Sometimes |
|---|--------------------------|--------------------------|--------------------------|
| 1. Fresh fruits and vegetables are easy to find in my neighborhood. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I can afford fresh fruits and vegetables. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I am willing to try new foods. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I like to eat vegetables. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I like to eat fruits. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. It takes too much time to cook. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I think cooking is fun. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Cooking is frustrating. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. It is too much work to cook. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PART 4: ATTITUDES AND BELIEFS

Please let us know how often you do the listed activity

| How often do you... | Never | Rarely | Sometimes | Often | Always | Does not apply | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 10. Compare prices before you buy food? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 11. Plan meals ahead of time? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 12. Use a grocery list when you go grocery shopping? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 13. Use the “nutrition facts” on food labels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 14. Eat breakfast within two hours of waking up? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 15. Eat food from each food group every day? (Food groups include: dairy, grains, fruits, vegetables, and protein.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 16. Make meals at home “from scratch” using mainly basic whole ingredients like vegetables, raw meats, rice, etc.? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 17. Adjust meals to include specific ingredients that are more “budget-friendly,” like on sale or in your refrigerator or pantry? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 18. Use healthy cooking practices? (for example: adding more vegetables to a recipe, reducing the amount of salt or using salt substitutes like herbs or lemon, reducing the amount of sugar, baking instead of frying, using whole grains) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 19. During the past 7 days, how many times did you cook dinner or supper at home from scratch? | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PART 4: ATTITUDES AND BELIEFS

Please let us know how confident you are in doing the listed activities.

| | Not at all confident | Not very confident | Neutral | Somewhat confident | Very confident | Does not apply |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 20. How confident are you that you can use the same healthy ingredient in different recipes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. How confident are you that you can choose the best-priced form of fruits and vegetables (fresh, frozen, or canned)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. How confident are you that you can use basic cooking skills, like cutting fruits and vegetables, measuring out ingredients, or following a recipe? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. How confident are you that you can buy healthy foods for your family on a budget | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. How confident are you that you can cook healthy foods for you family on a budget | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. How confident are you that you can help your family and/or friends eat healthier? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. How confident are you that you can explain to a friend the importance of fruits and vegetables in one's diet? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PART 5: PURCHASING BEHAVIORS

Please state whether you agree or disagree with the following statements.

| | Agree | Sometimes Agree | Disagree |
|--|--------------------------|--------------------------|--------------------------|
| 1. I know where to find locally grown fruits and vegetables. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I know which fruits and vegetables are grown during different times of the year. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. When selecting fresh or local produce to purchase, what is most important to you? Please rank your top 3 choices, most important being 1. | | | |
| _____ a. Where the produce came from | | | |
| _____ b. Whether it is seasonal | | | |
| _____ c. Price | | | |
| _____ d. How it is grown (organic, no chemicals, sustainable, etc.) | | | |
| _____ e. How healthy it is | | | |
| _____ f. How quick or easy it is to prepare | | | |
| _____ g. The quality or freshness | | | |
| _____ h. The way it is being sold (Pre-packaged, cut up, loose, etc.) | | | |
| _____ i. Other (please specify) _____ | | | |

PART 5: PURCHASING BEHAVIORS

4. How often do you buy food at these different types of stores? (check all that apply)

| | Never | A few times a year | Once a month | 2-3 times a month | Once a week | More than once a week |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Supermarket/Grocery Store (Walmart, Kroger, Ingles, Publix, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dollar Stores (Dollar General, Family Dollar, Dollar Tree, Fred's, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Local Farmers' Markets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Convenience Store/Gas Station | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Produce truck/produce stand | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (please specify) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. When you shop at these places, how often do you buy fresh fruits and vegetables from these stores?

| | Rarely / Never | Sometimes | Most of the time but not always | Always | N/A |
|--|--------------------------|--------------------------|---------------------------------|--------------------------|--------------------------|
| Supermarket/Grocery Store | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dollar Stores (Dollar General, Family Dollar, Dollar Tree, Fred's, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Farmers' Markets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Convenience Store/Gas Station | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Produce truck/produce stand | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (please specify) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

THANK YOU!

This material was funded by USDA's Supplemental Nutrition Assistance Program — SNAP. This institution is an equal opportunity provider.



Appendix B
Consent Forms

Georgia State University (GSU)
Division of Nutrition
Informed Consent

Title: Evaluating the Implementation Process of a Fruit and Vegetable Prescription Program

Principal Investigator: Jessica Todd
Co-Investigator: Kate Wiley
Student Principal Investigator: Sara Atcheson
Sponsor: Wholesome Wave Georgia

I. Purpose:

The purpose of this study is to evaluate the implementation of the beginning portion of Grady Health System's 2018 Fruit and Vegetable Prescription Program. You are invited to take part in this research study because you are one of the dietitians leading the first two cohorts to begin the program. A total of 2 people will be invited to take part in this study.

II. Procedures:

If you decide to take part, you will be asked to be a part of a two person focus group. The focus group will be guided by open-ended questions. I, Sara Atcheson the student investigator, will lead the discussion. You will be invited to ask any questions about the research that you may have. These questions will not ask anything regarding personal information of you or the patients in your cohort. The focus group will be conducted in a conference space at Grady Health System that is empty of other non-focus group peoples. The discussion will be audio recorded, so that I may play it back later to capture all of the details discussed, but you will not be identified by name on the recording. The recording will be destroyed upon the completion of the analysis of information collected from the focus group. This focus group will take one hour of your time.

- You will arrive at the meeting.
- You will be asked a series of six (6) questions.
- You will be able to ask for clarification at any time.
- You will be able to stop participating at any time.
- The focus group will occur once, and last for 1 hour.
- The conversation will be audio recorded.

III. Future Research

Researchers will not use or distribute your data for future research studies even if identifiers are removed.

IV. Risks:

In this study, you will not have any more risks than you would in a normal day of

life.

V. Benefits:

This study is not designed to benefit you personally. The researchers hope that the Grady Nutrition Department and Wholesome Wave Georgia will benefit from the information and will be able to positively influence future programs as a result of this study. Overall, we hope to gain information about the implementation process of the FVRx program and to make suggestions to improve implementation for the future.

VI. Alternatives

The alternative to taking part in this study is to not take part in the study.

VII. Voluntary Participation and Withdrawal:

You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. The choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may refuse to take part in the study or stop at any time, this will not cause you to lose any benefits to which you are otherwise entitled.

VIII. Confidentiality:

We will keep your records private to the extent allowed by law. The following people and entities will have access to the information you provide:

- Jessica Todd, PI
- Kate Wiley, Co-Pi
- Sara Atcheson, student PI
- GSU Institutional Review Board
- Office for Human Research Protection (OHRP)
- Wholesome Wave Georgia, funding source
- Grady Nutrition Department

We will use your initials rather than your name on study records. The information you provide will be stored on the student researcher's password protected personal computer. The audio recording will be saved under the nonsignificant identifier "1235" also on the student researcher's person password protected computer. When we present or publish the results of this study, we will not use your name or other information that may identify you. As this study will utilize a focus group, there are limits to confidentiality that can be ensured. We ask you not to reveal what was discussed in the group, but would like to warn that we do not have complete control of the confidentiality of the data.

VII. Contact Persons:

Contact Kate Wiley at (404) 413-1236 or kyeager1@gsu.edu or Sara Atcheson at (404) 862-2448 or satcheson1@student.gsu.edu if you have:

- Questions about this study or your part in it.
- Questions, concerns, or complaints about the study

Contact the GSU Office of Human Research Protections at 404-413-3500 or irb@gsu.edu if you have:

- Questions about your rights as a research participant
- Questions, concerns, or complains about the research

VIII. Copy of Consent Form to Subject:

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research, please sign below.

| | |
|-----------------------------|------|
| Printed Name of Participant | Date |
|-----------------------------|------|

| | |
|--------------------------|------|
| Signature of Participant | Date |
|--------------------------|------|

| | |
|--|------|
| Principle Investigator or Researcher Obtaining Consent | Date |
|--|------|

Appendix C
Focus Group Questions

FVRx Focus Group Questions

2/20/18

The following open-ended questions will be posed to the Grady dietitians:

1. How did you use this tool in the implementation of your classes?
2. What was the most difficult area of the program to execute? How could the program plan be expanded to make this easier?
3. Which component of this program do you feel has the greatest contribution to overall success?
4. What part of the program plan do you think will be the most difficult to implement in future cohorts/ other Grady clinics? What can we do to minimize some of those future difficulties?
5. What are some suggestions for improvement/ ways the document could be more beneficial for future cohorts?
6. Can you give some feedback as to how the integration of the Cooking Matters classes into this FVRx program is going so far?