

# YEAR 1 EVALUATION REPORT

# Norton Healthcare Centers for Prevention and Wellness

August 2013



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# Get Healthy Access Program

# Year 1 Evaluation Report

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### **Executive Summary**

The Get Healthy Access Program (GHAP), administered by the Norton Healthcare Centers for Prevention and Wellness, received funding from the Kentucky Healthy Futures Initiative in 2011. The program offers cardiovascular screenings and education and navigation for at-risk individuals needing follow-up care, with the long-term goal of improving health outcomes for participants.

During the first year of the GHAP program (April 2012 to April 2013), data was collected to evaluate the implementation and initial program impact. Data was collected on individuals enrolled at screenings (N=211) and included demographic characteristics, health behaviors, blood pressure, and body mass index. Some of these screened individuals were ineligible or dropped out after initial screening. At the end of year one, 134 people were active participants in GHAP. Follow-up data was collected from these enrollees with three (N= 50) and six month (N = 14) surveys and also from primary care providers the participants visited. Also, qualitative data was collected from program staff during a focus group.

Preliminary Findings from year one of the Get Healthy Access Program are below:

Implementation:

- 4,516 people were screened in 178 screening events in the Louisville metro area. 750 people were found to be eligible.
- The number of initial enrollees is 211 (28% of those found to be eligible) and the number of active enrollees at the end of the first year of GHAP is 134 (18% of those found to be eligible).
- 89 of the individuals 211 enrolled initially were later excluded for failure to meet clinical enrollment criteria
- It was estimated that 300 people would be enrolled in GHAP at the end of year one. There were 134 actual enrollees at the end of year one. Reactions from staff collected during a focus group regarding differences between program expectations and observations are summarized below.
  - Enrollment was lower than expected for the first year due to the following reasons:
    - Comorbidity among potential enrollees was higher than expected.
    - Group interventions did not attract the number of participants expected.
    - Facebook was not as popular as expected.
- 33% (44/134) of enrolled participants had completed the program's group or individual intervention at the end of year one.
- At baseline, 14% (19/134) of active enrollees were participating in community resources, such as YMCA or Norton Healthcare programs at the end of one year, 50% (25/50) of those surveyed three months following their screening were participating in community resources.
- 42% (21/50) of surveyed participants (three month survey) used the social media component of the program.
- Components of program success, according to staff:
  - Optimistic and flexible staff that were able to make changes and solve problems quickly.
  - Connections made between enrollees and GHAP staff through interventions, phone calls, and text messages kept participants engaged.

- Recognition that screening events carried out in conjunction with another event were more successful than stand-alone screening events.
- Participants appreciate the service and have a need for it.
- Components of barriers to program participation, according to staff:
  - Some of the population may have contextual and environmental issues, such as substance abuse and mental illness that prevent enrollment.
  - Participants not eligible due to having other illnesses or already having a PCP.
  - Some enrollees unable to participate in group interventions due to limited time or no childcare.
  - Program elements seen as barriers include waiting for IRB approval and getting information to and from PCPs.

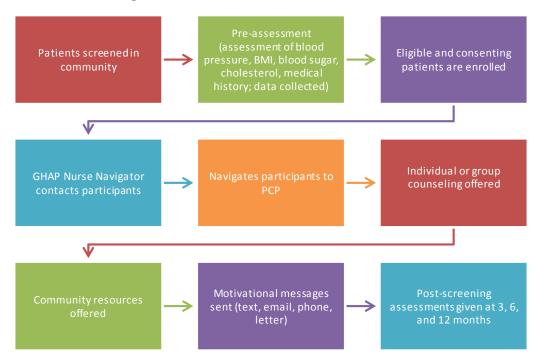
Impact:

- During the first year of GHAP, 98% of active program participants (131/134) were navigated to and met with a PCP at least one time
  - 46% (50/109) of those eligible to have a second PCP visit, met with a PCP twice.
- Of those who stated they smoked at baseline who were surveyed at three month follow-up, 53% (8/15) said they made at least one quit attempt.
- Of those who answered the physical activity question at baseline and three month follow-up, 51% (19/37) had increases in weekly physical activity frequency.
- Of those who answered the fruit and vegetable consumption question at baseline and three month follow-up, 37% (16/43) had increases in weekly fruit and vegetable consumption.
- Data shows that 55% (21/38) of enrollees with higher than normal blood pressure who had a second PCP visit had categorical decreases in which blood pressure moved from a higher category to a lower one.
- 25% (5/20) of enrollees with diabetes or prediabetes at the 1<sup>st</sup> PCP visit who also had a 2<sup>nd</sup> PCP visit, had a decrease in which HbA1c levels moved from diabetes to prediabetes or no diabetes (Hba1c level of 5.6% or less is normal; Hba1c level of 5.7% to 6.4% is prediabetes; Hba1c level of 6.5% or higher is diabetes).
- 10% (4/40) of enrollees with higher than normal BMI at the 1<sup>st</sup> PCP visit who also had a 2<sup>nd</sup> PCP visit, had a categorical BMI decrease.

### Background

The Get Healthy Access Program (GHAP) is administered by the Norton Healthcare Centers for Prevention and Wellness (CPW). The program offers cardiovascular screenings and education and navigates individuals with risk factors for cardiovascular disease and metabolic syndrome to follow-up care and evidence-based interventions to promote physical activity and dietary lifestyle changes. The overall goal of GHAP is to improve health outcomes for individuals participating in the program. In November 2011, CPW received funding from the Kentucky Healthy Futures Initiative (KHFI) to start GHAP. This funding helped to expand the current Cancer Prevention and Early detection community screening and navigation program to cardiovascular screening and navigation. The target population for GHAP is low-income, uninsured individuals in the Louisville Metro area.

The GHAP program offers community cardiovascular screenings to identify patients with risk factors for cardiovascular disease and metabolic syndrome. During the screening, program staff assess blood pressure, body mass index, and medical history. When indicated, individuals receive assessment of blood glucose and cholesterol. Along with screenings, program staff provide education and information to expand awareness of cardiovascular disease and stroke risk. Staff discuss initial findings with patients and individuals who are eligible for GHAP are asked to participate. Individuals eligible for GHAP are those age 18-64, having no primary care provider (PCP), having not been to a PCP for one year or more, and exhibiting obesity, pre-hypertension, pre-diabetes, and/or hyperlipidemia. Initially, having no health insurance was also an eligibility requirement, but this was changed during the first year. Those who consent to be in the program take part in many program elements, including interventions (group or individual) that educate on nutrition and physical activity; assistance finding a primary care provider and scheduling appointments; assistance accessing community resources, such as YMCA; and motivational messages by phone, text or email. The GHAP staff also contact the participant at three, six, and 12 months after the initial screening to conduct follow-up surveys (see Figure 1). At the end of the 12 month period, participants will receive a letter and certificate of completion.



#### Figure 1: Process of GHAP Program

At the time funding began, CPW began working with an outside evaluator to develop the subgrantee evaluation plan (SEP). The SEP was approved by the Corporation for National and Community Service (CNCS), the federal funding agency, in April, 2012, and the program began screening individuals at this time. The SEP outlines steps to conduct an implementation and impact evaluation of GHAP, which includes identification of indicators, data sources, and time frames for collection of data that will answer the implementation and impact evaluation questions below.

### **Implementation**

- 1. Was GHAP implemented as planned regarding screenings, participant enrollment, and participant retention?
  - a. Did the enrolled group engage in the program interventions as planned?
- 2. How much variation in implementation fidelity occurred?
  - a. On what aspects of implementation was the greatest variation?
- 3. What factors contributed to successful program participation or completion?
- 4. What barriers prevented successful program participation or ability to complete the program?

### <u>Impact</u>

- 1. To what extent has the health care navigation model been successful?
  - a. To what extent did enrolled individuals make contact with primary care medical providers?
  - b. To what extent did enrolled individuals make suggested lifestyle changes (e.g. diet, exercise, avoidance of tobacco) after beginning this program?
  - c. To what extent did health outcomes targeted by this project improve for participants?
- 2. Were enrolled individuals who use social media more likely to change behaviors than participants' not using social media?
- 3. Was there a difference in health outcomes based on the type of practice (community clinic, private non-profit, other)?

### Methods

Evaluation for GHAP during the first year included quantitative and qualitative methods. Quantitative data were collected during screenings with the intake form and at follow-up with the three and six month surveys were administered by telephone and in-person when participants were able to meet with GHAP program staff for interventions. The completed intake data collection forms and surveys were reviewed by program staff to detect errors and missing information prior to entry into an Access database by program staff. Then the data was checked for completeness by the program analyst. Medical chart data collected from program PCP visits was also entered into the database. This database was de-identified and provided to the evaluators after IRB approval was obtained.

To collect qualitative data describing the program and its performance, we conducted a focus group of nine program staff in Louisville on June 3, 2013. The focus group was facilitated by Mark Dignan and recorded by Kate Jones. The purpose of the focus group was to gain information on the successes and barriers of the first year of implementation of GHAP. The roles of the focus group participants include program assistant, nurse and lay health navigator, nurse practitioner, outreach coordinator, grants coordinator, strategic planning and evaluation, and principal investigator. Three participants were with the program since planning stages, three were with the program since it began (about one year and two months) and three started within one year or less. A summary of the findings from the focus group are available in Appendix B.

Detailed methods of data collection for the first year of GHAP are described below for both program implementation and impact.

### Implementation Evaluation Methods

The evaluation of the GHAP's implementation included the collection and analysis of program data from a variety of sources, listed in Table 1, which also includes the specific indicators used for the evaluation.

Data Source	Data Collection Method	Implementation Indicators
Program Tracking	Document review	<ul> <li>Number of screenings</li> <li>Number of individuals enrolled</li> <li>Number of enrollees completing follow-up survey</li> <li>Number of Active Participants (Participants retained)</li> <li>Number of enrollees participating in group interventions</li> <li>Number of enrollees participating in 1-on-1 interventions</li> </ul>
Enrollees	Baseline intake forms and follow-up participant surveys	<ul> <li>Number of enrollees accessing community resources</li> <li>Number of enrollees participating in social media intervention</li> </ul>
Staff	Focus Group	<ul> <li>Fidelity of Implementation, actual to plan</li> <li>Implementation success factors</li> <li>Implementation challenges</li> </ul>

### Table 1: Indicators and Data Sources: Implementation

For the first year of GHAP, the evaluation of the program's implementation included collecting information on the number of screenings that occurred, the number of individuals enrolled, and the number retained in the program. This information was collected from program tracking and the quarterly reports to KHFI. Implementation evaluation also included tracking the number of enrollees participating in group and one-on-one interventions, which was collected from the program tracking. The number taking part in community resources for diet, exercise and tobacco cessation, as well as the number using social media components of the program, were also tracked for implementation evaluation. This information was taken from the baseline intake form and the follow-up surveys. The number of participants who completed the follow-up surveys is also part of the evaluating the implementation of the program and this information was gathered from the KHFI quarterly reports, as well as program records. Also, the number of participants for which the program received information from the PCP (for those who visited a PCP after screening) was collected from PCP follow-up data.

Information on where staff felt there was variation in the intervention of GHAP versus what was planned was gathered from the staff focus group conducted after the first year of implementation. Information on major differences in GHAP's implementation versus the program's work plan was also collected from the focus group. This includes how the number of enrolled, the number of enrolled participating in interventions, and number of enrolled participating in social media differed from what the program planned and expected.

Information on environmental and program attributes that staff felt helped participants succeed in the program was collected during the staff focus group. Information on environmental and program elements that participants felt helped them to participate successfully in the program is also being collected with the 12-month follow-up survey and is not available yet.

Information on environmental and program attributes that staff perceived as barriers to successful program participation was collected during the staff focus group. Information on environmental and program elements that participants perceived as barriers to successful program participation is being collected with the 12-month follow-up survey and is not available yet.

### **Impact Evaluation Methods**

The evaluation of the GHAP's impact included the collection and analysis of enrollee data, listed in Table 2, which also includes the specific indicators used for the evaluation.

Data Source	Data Collection Method	Implementation Indicators
Primary Care Providers	Document review	<ul> <li>Number of enrollees with first and second PCP visits</li> <li>Blood pressure, blood sugar, Body Mass Index (BMI) or Waist Circumference</li> </ul>

#### Table 2: Indicators and Data Sources: Impact

Enrollees	Baseline intake forms and follow-up participant surveys	<ul> <li>Number of enrollees who met with a PCP during each follow-up period</li> <li>Number of enrollees who felt that meeting with a PCP helped somewhat or a lot to change behaviors</li> <li>Smoking, physical activity, fruit and vegetable consumption by enrollees</li> <li>Number of enrollees who used the social media component of the program (motivational messages by text or email)</li> <li>Number of enrollees who felt the social media component (motivational messages by text or email)</li> <li>Number of enrollees who felt the social media component (motivational messages by text or email) helped them change behaviors</li> <li>Blood pressure, blood sugar, BMI or Waist Circumference</li> </ul>
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Data on the number of program participants who met with a PCP at least once was gathered from the program tracking. GHAP enrollees visited two different PCPs—Shawnee Christian Healthcare Center (Shawnee) and Charasika Open Access Healthcare (Open Access). Also, the number of participants who met with a PCP during each follow-up period of those who were surveyed at three and six months was collected from the follow-up surveys. Information on the number of participants surveyed who said that meeting with a PCP helped somewhat or helped a lot to change behaviors was collected from the three and six month follow-up survey.

The number of participants surveyed who reported decreasing smoking or making quit attempts, increasing physical activity, or increasing fruit and vegetable consumption was collected with the three and six month follow-up survey data.

Data was also collected on participants' blood pressure, blood sugar, and Body Mass Index (BMI) or Waist Circumference (WC) at baseline screening and with the six month follow-up survey, which was in person, and during the PCP visits. To establish a consistent measurement the true baseline for these measurements was set to be the PCP measurements, where baseline is the first visit and follow-up measurements are from the second visit. This outcome data was also examined by each provider.

Data on the number of participants who used the social media component of the project and the number who report that social media helped them change behaviors was collected from the three and six month follow-up survey.

Differences in health behaviors measured at screening (smoking, physical activity, fruit and vegetable consumption) and health outcome variables measured at screening (blood pressure, blood sugar, and BMI) were reviewed and tested using statistical tests. These behavior and outcome data were examined

to identify differences in demographics, such as gender, race and age. Categorical demographic variable differences (gender and race) were analyzed using Chi-square tests. For continuous variables, t-tests and ANOVA were used for analyses.

### **Preliminary Findings**

### **Implementation**

# Was GHAP implemented as planned regarding screenings, participant enrollment, and participant retention?

We assessed the expected and actual reach of the screening effort to determine the fidelity of program implementation to the plan. During the first year of GHAP (from April, 2012 to April, 2013), 4,516 people were screened in 178 screening events in the Louisville metro area. This is an increase of 3,016 from the 1,500 screenings that were planned prior to the program implementation. Numbers of screenings are as follows; 2,582 BMI, 3,655 blood pressure, 928 blood sugar, and 256 cholesterol screenings occur red. Each of these screenings exceed expectations set during program planning; 1,082 more BMI; 2,155 more blood pressure; 678 more blood sugar; and 6 more cholesterol screenings took place than was planned (Figure 2).

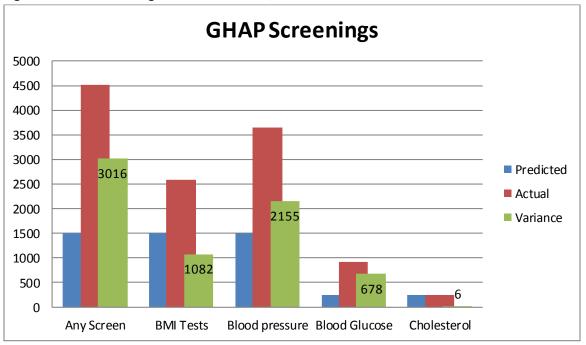


Figure 2: GHAP Screening Numbers: Planned, Actual and Difference

From these screenings, 750 people were found to be eligible and invited to participate in the intervention. The number of individuals who completed enrollment in the program during the first year

is 211. This is 89 (30%) less than program expectations of 300. The quarterly report submitted to KHFI in April, 2013 presented the number of active enrollees in the program at the end of the first year to be 138. However, this number includes participants who attended a PCP and later withdrew from the program or were found to be medically ineligible. The actual number of active enrollees at the end of the first year of GHAP is 134 or 45% of the expected enrollment.

#### Did the enrolled group engage in the program interventions as planned?

Participation in the program elements were included as indicators of participant engagement with the GHAP. During the first year of GHAP, 44% of participants eligible for follow-up (50/114) completed the 3-month follow-up survey. Of these 114 participants, 83 were eligible for 6-month follow up during the reporting period. 17% (14/83) of them completed the 6-month follow-up survey. Also during the first year, program staff obtained PCP follow-up information from 98% of active participants (131/134).

Data from the first year of GHAP implementation show that 33% (44/134) of participants completed the program's group or individual intervention. At the three month follow-up survey, 50% (25/50) were participating in community resources (11 YMCA/exercise program, 13 walking, 1 diet). This is an improvement from baseline (screening), where only 14% of all active participants (19/134) reported using community resources to help change behaviors.

The percentage of surveyed participants who reported using the social media component of the program was 42% (21/50) at the three month follow-up survey. This percentage was 50% (7/14) at the 6 month follow-up survey.

#### How much variation in implementation fidelity was there?

#### On what aspects of implementation was the greatest variation?

According to GHAP staff, there was variation from what was planned in multiple areas of the program during the first year of GHAP's implementation. First, staff noted that turnout for screening events varied across sites and that events that were in conjunction with another event conducted by the organization hosting the screening event, yielded a greater number screened than screenings that were not held with another event. Armed with this information, staff also expected more people to be enrolled at the end of year one, even though they felt the number of people enrolled at the end of the first year was an accomplishment. During program planning, it was expected that 300 people would be enrolled at the end of year one and the number of initial enrollees is actually 211 (134 (45%) active). Staff indicated that the comorbidity level of the population was higher than expected. Also during planning, GHAP staff expected to be able to include many PCPs in the group of PCPs that were used by participants. However, this turned out to not be feasible when the electronic health record system was implemented. Only two PCPs (community clinics) were used by GHAP participants during the first year. Finally, GHAP's implementation may have been affected from what was expected by the community where group interventions were not as popular as expected. Another difference from what was expected was a low turnout for the GHAP Facebook page, regarding the number of people who "like" the page.

### What factors contributed to successful program participation or completion?

The program attributes that staff felt helped participants succeed in the program were an optimistic team that was also flexible to make changes in schedules and quickly find solutions to problems that arose. Also, staff said that enrollees are likely to stay engaged in the program because of the connections being made between enrollees and GHAP staff each month through interventions, phone calls and text messaging. Staff also felt that the program has been successful because there is a well-recognized need in the population and people appreciate the service.

### What barriers prevented successful program participation or ability to complete the program?

Elements that staff felt were barriers to successful program participation during year one include people being uninterested in enrolling and people being ineligible to enroll. Staff felt that environmental or contextual issues that some potential participants may be dealing with in their lives may be causing them to not be ready or unable to participate. Some people may be dealing with substance abuse or mental illness. Others, who were thought to be eligible at screening, were actually ineligible because he or she did have a PCP but were not going as frequently as needed. Other barriers for participation in GHAP include limited resources for those who are enrolled. For example, enrollees felt they did not have enough money to join a gym when they are given recommendations to increase physical activity. Also, barriers for enrollees to participating in group interventions include not having childcare or time to devote to attending the group meetings. Staff found that individual interventions given by phone were more convenient to enrollees than group interventions.

Program elements that were found to be barriers to GHAP implementation were the IRB process delaying the start of GHAP initially. Also, having to fax reports to PCPs was a time-consuming process that staff felt hindered GHAP's implementation.

### Impact

### To what extent has the health care navigation model been successful?

**To what extent did enrolled individuals make contact with primary care medical providers?** During the first year of GHAP, 98% of active program participants (131/134) were navigated to and met with a PCP at least one time. Of those eligible to have a second PCP visit (participants had a second PCP visit three months after the initial PCP visit; participants eligible for a second PCP visit are those who had an initial PCP visit on January 31, 2013 or earlier), 46% (50/109) met with a PCP twice. Of those who met with a PCP at least once, 49% (64/131) went to Charasika Open Access Healthcare and 50% (66/131) went to Shawnee Christian Healthcare Center. Of those who met with PCP twice, 56% (28/50) went to Charasika Open Access Healthcare and 44% (22/50) went to Shawnee Christian Healthcare Center.

Of active participants who were surveyed for the three month follow-up survey, 66% (33/50) responded that they met with a PCP at least once since the screening. Of those surveyed for the

six month follow-up survey, 50% (7/14) said they met with a PCP at least once since the last survey. This percentage is lower than program data shows above, which is obtained by contacting PCPs directly to determine who has had a visit. This may in part be due to participants not considering the PCP they visited their own personal doctor or healthcare provider. Respondents indicated that meeting with a PCP influenced a change in healthy behaviors: 84% (32/38) said that meeting with a PCP somewhat helped or helped a lot to influence this type of change at three months and 77% (10/13) said it helped somewhat or a lot at 6 months.

# To what extent did enrolled individuals make suggested lifestyle changes (e.g. diet, exercise, avoidance of tobacco) after beginning this program?

Data from the baseline survey and the follow-up surveys provide results for lifestyle changes that were or were not made by participants (See Appendix A for table). Follow-up survey data is limited at the end of year one, as not all participants were eligible for follow-up surveys at three and six months, and no 12 month surveys were complete. More data will be available for the year two report and analyses will include changes from baseline at three, six and 12 months.

At baseline 36% (48/133; 1 missing) stated they were smoking. Of those surveyed for the three month follow-up survey 30% (15/50) responded that they smoked in the last month. Of those surveyed at the six month follow-up survey, 14% (2/14) said they smoked in the last month. However, none of those who were smoking at baseline had quit at follow-up. Of those who stated they smoked at baseline who were surveyed at three month follow-up, 53% (8/15) said they made a quit attempt. At six month follow-up, 100% (2/2) who were smoking at baseline had made a quit attempt.

At baseline, 23% (28/124) of participants said they were never physically active. At the three month follow-up survey, 18% (9/49) of surveyed participants said they were never physically active during the past month. Of those who answered the physical activity question at baseline and three month follow-up, 51% (19/37) had increases in weekly physical activity frequency. Of those who responded at baseline that they were not physically active who were surveyed at 3 months (7), five had been physically active in the past month.

At baseline, 82% (108/131) of active participants said they eat less than five servings of fruits or vegetables each day. At the three month follow-up survey, 83% (39/47) of surveyed participants said they eat less than five servings of fruits or vegetables each day. Of those who answered the fruit and vegetable consumption question at baseline and three month follow-up, 37% (16/43) had increases in weekly fruit and vegetable consumption. Of those who responded at baseline that they consume less than five servings of fruits or vegetables each day who were surveyed at 3 months, 17% (7/41) stated they now eat five or more servings of fruits or vegetables per day during the past month.

### To what extent did health outcomes targeted by this project improve for participants?

During the first year of GHAP, data was collected that shows improvements in participants' health outcomes (see Appendix A for table). Of participants who had a first PCP visit, 22% (29/130) had normal blood pressure, 50% (65/130) were hypertensive/had high blood pressure.

Data show that 55% (21/38) of enrollees with higher than normal blood pressure who had a second PCP visit had categorical decreases in which blood pressure moved from a higher category to a lower one (see Figure 3 for categories).

- Of enrollees found to be in hypertensive crisis (systolic higher than 180 or diastolic higher than 110) at the first PCP visit, three enrollees moved to a lower category at the second PCP visit (1 to normal and 2 to high blood pressure stage 2).
  - Of enrollees found to have high blood pressure stage two (excluding those in hypertensive crisis) at the first PCP visit (systolic from 160 to 180 or diastolic from 100 to 110), five enrollees had moved to a lower category at the second PCP visit (1 to normal, 2 to prehypertension, and 2 to high blood pressure stage one).
  - Of enrollees with high blood pressure stage one at the first PCP visit (systolic from 140 to 159 or diastolic from 90 to 99), seven enrollees had a lower category of blood pressure at the second PCP visit (5 prehypertension and 2 normal). Of enrollees with prehypertension at the first PCP visit (systolic from 120 to 139 or diastolic from 80 to 89), six enrollees had normal blood pressure at the second PCP visit.
- Data from first PCP visits also shows that 8% (9/119) of participants had diabetes (HbA1c levels 6.5% or above) and 45% (54/119) had pre-diabetes (HbA1c of 5.7 to 6.4%). Of those who had

Figure 3			
GHA	P Health	Outcome Categori	es
•	Body ma	ass index or	
	0	Overweight	25-29.9
	0	Obese	30-39.9
	0	Morbidly Obese	>40
•	Glucose	or	
	0	Increased risk	100-125
	0	Diabetes	>126
•	Blood Pre	essure	
	0	Pre-hypertensi	on 120-139/80-89
	0	Stage 1	140-159/>90
	0	Stage 2	>160/>90
•	Lipids:		
	0	Total	>240
	0	LDL	>160
	0	Triglycerides	>150

second PCP visits, 2% (1/42) had diabetes and 55% (23/42) had pre-diabetes. Of enrollees with diabetes or pre-diabetes at the first PCP visit who also had a second PCP visit, 25% (5/20) had a decrease in diabetic category at the second PCP visit. Two enrollees who were found to have diabetes at the first PCP visit measured in the pre-diabetes category at the second PCP visit. Three enrollees with pre-diabetes at the first PCP visit, were found to have normal HbA1c levels at the second visit.

• Some participants showed decreases in obesity, as defined by BMI or waist circumference (WC), from the first PCP visit to the second. At the first PCP visit, 65% (77/119) of enrollees were obese (BMI at or above 30) and 28% (33/119) were overweight (BMI from 25 to less than 30). At the second PCP visit, 61% (28/46) were obese and 39% (18/46) were

overweight. Of enrollees with higher than normal BMI (25 or above) at the first PCP who also had a second PCP, 10% (4/40) had a categorical decrease in BMI (all four enrollees moved from

obese to overweight). Significant differences were found in the BMI of males and females for those who are overweight or obese. A larger sample size is needed to examine differences further.

# Are enrolled individuals who use social media more likely to change behaviors than participants not using social media?

Data from the three month follow-up survey shows that 42% (21/50) of surveyed participants received text messages and/or emails as a part of GHAP; 50% (7/14) received text message and/or emails according to the six month follow-up survey.

When asked in the three month survey if the text and emails were motivational to change behaviors, (of respondents who received text/emails): 24% (5/21) said somewhat; 33% (7/21) said quite a bit; 24% (5/21) very motivational. For 6 month survey respondents who received text/emails, 71% (5/7) said somewhat, 14% (1/7) said quite a bit and 14% (1/7) said very motivational (Figure 4).

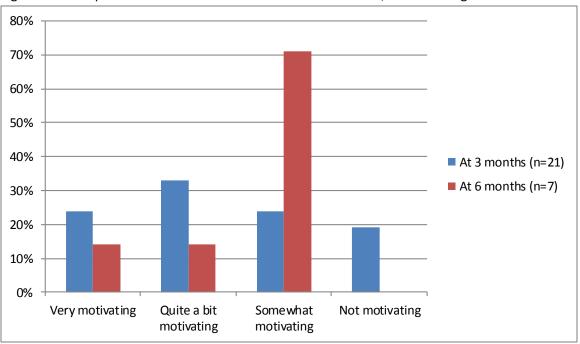


Figure 4: Participants' Assessment of Motivational Value of Text/Email Messages

As Figure 4 indicates, the 3 and 6-month surveys showed different patterns of response. Overall, it appears that enthusiasm for the text/email message component of GHAP decreased over time. Additional data from future surveys will be important to increasing understanding of the response to this intervention strategy and if it plays a role in participant behavior change.

# Was there a difference in health outcomes based on the type of practice (community clinic, private non-profit, other)?

Both PCPs used by participants in the GHAP program are community clinics that offer services on a sliding fee scale. Of the 21 enrollees with categorical decreases in blood pressure from the first PCP visit to the second, 48% (10/21) went to Open Access and 67% (14/21) went to Shawnee. Of those with numerical decreases in blood pressure, 45% (10/22) went to Open Access and 55% (12/22) went to Shawnee.

Of the five enrollees with categorical decreases in diabetes from the first PCP visit to the second, 40% (2/5) went to Open Access and 60% (3/5) went to the Shawnee. Of those with numerical decreases in HbA1c levels, 64% (9/14) went to Open Access and 36% (5/14) went to the Shawnee.

Of the 4 enrollees with categorical decreases in BMI from the first PCP visit to the second, 75% (3/4) went to Open Access and 25% (1/4) went to Shawnee. Of those with numerical decreases in BMI levels, 72% (18/25) went to Open Access and 28% (7/25) went to Shawnee.

While the number of participants described in the previous section on differences in health outcomes by practice type is small, the results may signal the beginning of positive results, particularly for those receiving care from Open Access. Future data will provide more evidence to review.

Findings for GHAP to date are summarized in Tables 3 and 4, which list evaluation questions, indicators, data sources, and current measurements. Descriptive statistics of active enrollees are available in Appendix A.

Evaluation Question	Indicator	Data Source	Current Measurement
<ol> <li>Was GHAP implemented as planned regarding participant enrollment and participant retention?         <ul> <li>Did the enrolled group engage in the program interventions as planned?</li> </ul> </li> </ol>	<ul> <li>a. # of screenings that occurred vs. #planned <ul> <li>i. BMI (1,500)</li> <li>ii. Blood Pressure (1,500)</li> <li>iii. Glucose (250)</li> <li>iv. Cholesterol (250)</li> </ul> </li> <li>b. # of individuals enrolled vs. planned (300 year 1; 300 year 2)</li> <li>c. # and % of enrolled participants who were retained in the program vs. goal</li> <li>d. # enrolled individuals: <ul> <li>i. Participating in the group or individual intervention</li> <li>ii. Currently receiving community resources: <ul> <li>1. YMCA</li> <li>2. Tobaccocessation</li> <li>3. YMCA Diabetes Prevention</li> <li>4. Norton Healthcare programs</li> <li>5. Other</li> </ul> </li> <li>e. Currently using social media <ul> <li>i. Text</li> <li>ii. Emails</li> </ul> </li> <li>f. Contacted by phone for 3-month data collection (of those who were able to be surveyed; those consenting on Jan. 31, 2013 or before)</li> <li>g. Contacted for 6-month in-person data collection (of those who were able to be surveyed; those consenting on Oct. 31, 2012 or before)</li> <li>h. Contacted by phone for 12-month data collection i. Via information from PCP</li> </ul> </li> </ul>	Program records; KHFI quarterly reports; screening intake and follow-up surveys; PCP follow-up data	Actual (4/2012-3/2013): a. 4,516 i. 2,582 ii. 3,655 iii. 928 iv. 256 b. 28% (211/750) initial enrollees c. 18% (134/750) active enrollees d. Enrolled: i. 44 completed group or individual intervention ii. Community Resources (contains duplicates —19 individuals responded they use community resources): 1. 14 (YMCA/exercise prog.) 2. 0 (Tobacco Cessation) 3. 1 (Diabetes Prevention) 4. 1 (Norton Program) 5. 1 (Diet Program) 6. 3 (Other) e. Currently using social media i. 42% (21/50) said they received text or emails at the 3 month survey; 50% (7/14) at 6 months f. 44% (50/114) (completed 3 month survey) g. 17% (14/83) (completed 6-month survey) h. 12-month data not available yet i. 98% (131/134) (Information from PCP)

	How much variation in implementation fidelity was there? a. On what as pects of implementati was the greatest variation?	<ul> <li>GHAP's intervention.</li> <li>Major differences of GHAP as implemented from the program's workplan, such as:</li> <li>b. # of enrolled</li> <li>a. # of enrolled individuals participating in each intervention</li> <li>b. # of enrolled individuals participating in social media</li> </ul>	Staff focus group conducted June 3, 2013	Screening events in conjunction with a nother event were more successful. The number enrolled at the end of year one was lower than expected; comorbidity of population higher than expected. Group interventions were not as popular as expected. Facebook not as popular as expected.
3.	What factors contributed to successful program participation or completion?	<ul> <li>helped them to participate successfully in the program.</li> <li>b. Environmental and program attributes that staff feel helped participants succeed in the program.</li> </ul>	12-month follow-up survey (not yet available) Staff focus group conducted June 3, 2013	Parti cipant data not yet available. Staff i dentified success factors as: Optimistic and flexible staff that were able to make changes and solve problems quickly. Connections made between enrollees and GHAP staff through interventions, phone calls, and text messages kept participants engaged. Participants appreciate the service and have a need for it.
4.	What barriers prevented successful program participation or a bility to complete the program?	<ul> <li>perceived as barriers to successful program participation.</li> <li>b. Environmental and program attributes that staff perceived as barriers to successful program participation.</li> </ul>	12-month follow-up survey (not yet available) Staff focus group conducted June 3, 2013	Participant data not yet available. Staff identified barriers as: Some of the population may have contextual and environmental issues, such as substance abus e and mental illness that prevent enrollment. Participants not eligible due to having other illnesses, having a PCP, or other reasons. Enrollees unable to participate in group interventions due to limited time or no childcare. Program elements seen as barriers include waiting for IRB approval and getting information to and from PCPs.

Table 4: GHAP Preliminary Findings: Impact				
<b>Evaluation Question</b>	Evaluation Question Indicator		Current Measurement	
<ol> <li>To what extent has the health care navigation model been successful?         <ul> <li>To what extent did enrolled individuals make contact with primary care medical providers?</li> <li>To what extent did enrolled individuals make suggested lifestyle changes (e.g. diet, exercise, avoidance of tobacco) after beginning this program?</li> <li>To what extent did health outcomes targeted by this project improve for parti cipants?</li> </ul> </li> </ol>	<ul> <li>a. #/and % enrolled met with PCP at least once <ol> <li>Community Medical As sociates</li> <li>Community clinics</li> </ol> </li> <li>b. #/and % of surveyed who met with PCP during each follow-up period?</li> <li>c. #/ and % of surveyed that indicated that meeting with a PCP somewhat or helped a lot to influence a change in healthy behaviors</li> <li>d. # decreased smoking or made quit attempts?</li> <li>e. # increased physical activity?</li> <li>f. # increased fruit and vegetable (F/V) consumption?</li> <li>g. # with decreases in blood pressure?</li> <li>h. # with decreases in blood sugar levels?</li> <li>i. # with decreases in obesity (defined by BMI or waist circumference)?</li> </ul>	KHFI quarterly reports; Follow-up surveys; PCP follow- up data	<ul> <li>From 4/2012-3/2013:</li> <li>a. 98% met with a PCP at least once (131/134) <ol> <li>49% (64/131) Open Access</li> <li>50% (66/131) Shawnee</li> </ol> </li> <li>b. 66% (33/50)3 month; 50% (7/14)6 month</li> <li>84% (32/38 answered) at 3 month; 77% (10/13 answered) at 6 month</li> <li>0% (0/15) decreased smoking and 53% (8/15) made quit attempt at 3 months; 0% (0/2) decreased smoking and 100% (2/2) made quit attempt at 6 months.</li> <li>e. 51% (19/37) of those who answered the physical activity question at baseline and 3 months had an increase in weekly physical activity during the past month.23% (3/13) of those who answered the physical activity question at baseline and 6 months had an increase in weekly physical activity during the past month.</li> <li>f. 37% (16/43) of those who answered the fruit and vegetable (F/V) question at baseline and 3 months had an increase in F/V consumption. Of those who answered the F/V questions at baseline and 6 months, 38% (5/13) had an increase in F/V consumption from baseline.</li> </ul>	

			g.	55% (21/38) of enrollees with a bove normal BP and a 2 <sup>nd</sup> PCP visit had a categorical BP decrease; 45% (22/49) of enrollees with 2 <sup>nd</sup> PCP had a numerical decrease in both systolic and diastolic
			h.	BP. 25% (5/20) of enrollees with diabetes or pre-diabetes at the 1 <sup>st</sup> PCP visit who also had a 2 <sup>nd</sup> PCP visit, had a categorical diabetes decrease; 33% (14/42) of enrollees with 2 <sup>nd</sup> PCP visit had a numerical decrease in HbA1c level. 10% (4/40) of enrollees with higher than normal BMI at the 1 <sup>st</sup> PCP visit who also had a 2 <sup>nd</sup> PCP visit, had a categorical BMI decrease; 54% (25/46) of enrollees with a 2 <sup>nd</sup> PCP visit had a numerical decrease in BMI.
2. Are enrolled individuals who use social media more likely to change behaviors than participants not using social media?	<ul> <li>a. #/ and % of enrolled individuals who used the social media component of this project</li> <li>b. #/ and % of enrolled individuals who report that social media helped them change behaviors</li> </ul>	Follow-up survey	a. b.	42% (21/50) received text/emails at 3 month survey; 50% (7/14) received text/emails at 6 month survey
3. Was there a difference in health outcomes based on the type of practice (community clinic, private non- profit, other)?	<ul> <li>For each type of provider (CMA and community clinic):</li> <li>a. # with decreases in blood pressure?</li> <li>b. # with decreases in blood sugar levels?</li> <li>c. # with decreases in obesity (defined by BMI or waist circumference)?</li> </ul>	PCP follow-up data	a. b.	

	a	12 enrollees had numerical
		decrease; 14 had categorical
		decrease in BP
	b	5 enrollees had numerical
		decrease; 3 had categorical
		decrease in blood sugar
	c.	7 enrollees had numerical
		decrease; 1 had categorical
		decrease in BMI

### Discussion

After the first year of implementation of GHAP, preliminary implementation and impact evaluation results show many program successes and also revealed some barriers. Over 3,000 more individuals were screened for the program than expected and of those, 750 were eligible for enrollment. Of the 750, 211 (28%) were initially enrolled and 134 (18%) became active enrollees. Fewer people became actively enrolled in the program than expected (134 versus 300) for year one. GHAP staff observed that participants preferred to participate in the program on an individual basis and were reluctant to enroll if only group sessions were offered. This pattern may be associated with potential loss of privacy in the group sessions. Barriers such as limited time and lack of childcare also reduced participation. However, enrollees did increase participation in community resources, such as YMCA, with GHAP enrollment from baseline (screening) to three month follow-up.

Initial impacts of the program after year one show many successes. Nearly all of those enrolled were navigated to a PCP and had at least one visit. Physical activity and fruit and vegetable consumption increased from baseline (screening) to three month follow-up. Also, blood pressure, diabetes, and BMI decreased among some individuals from baseline to follow-up. At the six month follow-up point, GHAP staff attempt to contact participants who were not reached for the three month follow-up to collect follow-up data. This will occur again at the 12 month follow-up point for those who were not reached. Staff will attempt to reach participants three times. Strengths of the program include optimistic and flexible staff that are able to find solutions to problems quickly. Also the staff was able to make connections with enrollees through in-person meetings, phone calls, and texts or emails, which helped retain enrollees in the program. In addition, the team was able to develop a sustainable framework with clinics to provide seamless service for participants.

Two program changes were made near the end of the first year. To increase enrollment, eligibility was opened to those with insurance. To retain enrollees in the program, incentives were provided to enrollees who complete follow-up surveys and PCP visits. Data should be monitored to determine if this does help to increase enrollment and retain enrollees.

# Appendix A

Descriptive statistics of GHAP active enrollees (n=134)				
Gender	#	%		
Female	102	76.1		
Male	32	23.9		
Race				
Asian	1	0.8		
Black/African American	108	80.6		
Native Hawaiian or	1	0.8		
Pacific Islander/Native				
American				
White/Caucasian	22	16.4		
More than one race	1	0.8		
Refused	1	0.8		
Ethnicity				
Hispanic/Latino	5	3.9		
Non-Hispanic	124	96.1		
Age (Mean)	45 years (Range: 19 - 63)			

Behavior	Baseline	3 Month	6 Month	Base to 3 month change	Base to 6 month change
Smoking	36% (48/133)	30% (15/50)	14% (2/14)	<ul> <li>0% (0/15) of smokers no longer smoking</li> <li>53% (8/15)of smokers made quit attempt</li> </ul>	<ul> <li>0% (0/2) of smokers no longer smoking</li> <li>100% (2/2) of smokers made quit attempt</li> </ul>
Physical Activity	23% (28/124) never physically active	18% (9/49) never physically active	0% (0/14) never physically active	<ul> <li>51% (19/37) increased any physical activity</li> <li>Of 7 enrollees who were never physically active at baseline and were surveyed at 3 months, 5 increased</li> </ul>	23% (3/13) increased any physical activity

	0201	020/	700/ /44 /4 /		physical activity to at least some	
Fruit and vegetable consumption	82% (108/131) eating less than 5 F/V per day	83% (39/47) eating less than 5 F/V per day	79% (11/14) eating less than 5 F/V per day	•	37% (16/43) had any increase in F/V consumption from baseline Of 41 enrollees who were eating < 5 servings of F/V per day at baseline and were surveyed at 3 months, 7 (17%) increased to 5 or more/day	31% (4/13) had any increase in F/V consumption from baseline

Health Measure	Screening	First PCP Visit	Second PCP Visit	Change from 1 <sup>st</sup> to 2 <sup>nd</sup> PCP		
Blood Pressure (BP)				• 55% (21/38) of enrollees with E		
Hypertensive	47%	50%	18%	above normal who also had a 2		
	(62/132)	(65/130)	(18/49)	PCP visit, had a categorical BP		
Pre-	40%	28%	35%	decrease		
hypertensive	(53/132)	(36/130)	(17/49)	• 45% (22/49)of enrollees with 2		
Normal	13%	22%	29%	PCP visit had a numerical		
	(17/132)	(29/130)	(14/49)	decrease in both systolic and		
				diastolic BP		
Blood Sugar				• 25% (5/20) of enrollees with		
Diabetes	-	8%	2%	diabetes or pre-diabetes at the		
		(9/119)	(1/42)	1 <sup>st</sup> PCP visit who also had a 2 <sup>nd</sup>		
Pre-diabetes	-	45%	55%	PCP visit, had a categorical		
		(54/119)	(23/42)	diabetes decrease		
Normal	-	47%	43%	• 33% (14/42)of enrollees with 2		
		(56/119)	(18/42)	PCP visit had a numerical		
				decrease in HbA1c level		
BMI				• 10% (4/40) of enrollees with		
Obese	60%	65%	61%	higher than normal BMI at the		
	(72/121)	(77/119)	(28/46)			

Overweight	35% (42/121)	28% (33/119)	39% (18/46)	1 <sup>st</sup> PCP visit who also had a 2 <sup>nd</sup> PCP visit, had a categorical BMI
Normal	5% (6/121)	8% (9/119)	-	<ul> <li>decrease</li> <li>54% (25/46) of enrollees with a 2<sup>nd</sup> PCP visit had a numerical decrease in BMI</li> </ul>
Waist Circumference (WC) Male >40 in. or Females >35 in.	76% (31/41)	50% (7/14) (3- month)	57% (4/7) (6- month)	7% (1/14) of enrollees with 3-month follow-up WC measurement had a decrease in numerical WC from screening

### Appendix **B**

#### **GHAP Focus Group Summary**

On June 3, 2013, a focus group was conducted with GHAP program staff. Mark Dignan facilitated and Kate Jones took notes. The purpose of the focus group discussion was to gather information on the first year of GHAP's implementation. Nine people who work with the GHAP program in some way participated in the discussion, with roles that include program assistant, nurse and lay health navigator, nurse practitioner, outreach coordinator, grants coordinator, strategic planning and evaluation, and principal investigator. Three participants were with the program since planning stages, three were with the program since it began (about one year and two months) and three started within one year or less.

When asked about the biggest differences, in terms of how GHAP was implemented versus what was planned or expected, participants provided information about various parts of the program. First, turnout for screening events varied across screening sites. Staff found that screening events that were in conjunction with a partner hosting another event yielded more people screened than if staff were to hold an event on their own or with a partner and no corresponding event. One focus group participant stated that radio advertisements were placed early on in the program, but she did not "see where it impacted turnout." Determining where to hold screening events were "trial and error" at times, according to another focus group participant. She and another focus group participant indicated that networking and developing a relationship with potential partners helped determine screening sites.

Other staff said that the number of people enrolled is not what was expected for the one year time frame of the program. At the time of the focus group, there were about 219 people enrolled in GHAP. At one year, the group expected to have 300 enrolled in the program. One focus group participant stated that two barriers for enrollment include people who are not interested and people who are ineligible. Some people who were screened and showed interest in the program and enrolled, but did not stay with the program because they were not interested later. Another focus group participant said that

some potential enrollees say the program "sounds good," but are not ready and, at that point, are not interested in discussing it further. Also, a potential enrollee may have a disease that could be complicated or interfered with. Another focus group participant added that the comorbidity level is much higher than initially anticipated for this population. Some people screened who were considered to be eligible for GHAP, were actually ineligible because he or she did have a PCP, but were not going as frequently as needed.

One focus group participant stated that the insurance eligibility requirement has changed, but no difference has been seen yet since this change has only been in the last couple of months. Other barriers to eligibility or being interested in enrolling are issues that are ongoing in the lives of the target population, such as substance abuse or mental illness. Another participant added to this, saying screenings in the poorest areas often have many other barriers, such as financial challenges, concern about the ability to pay the electric bill for example, that take priority over health.

Another difference in GHAP's implementation from what was expected was that group interventions were not as popular as expected. Individual interventions are often done on the phone, which are more convenient for enrollees. Another focus group participant confirmed this and said that enrollees' needs are barriers for group interventions. For example, they may not have child care or have been in school or work all week and don't have time. Another focus group participant said that getting to the PCP may be more important to the enrollee than participating in interventions. She added that the cooking demo intervention, where there is an intervention along with free food, is more successful.

One other difference in the implementation of GHAP, versus what was expected, is regarding the social media aspect of the program. A focus group participant said that enrollees who signed up to receive text messages will receive one motivational text message every month and appointment reminders. Also, the program maintains a Facebook page and makes updates to it twice a week. A different focus group participant stated that there was a low turnout for Facebook, regarding the number of people who "like" the page. Another focus group participant added to this saying, "it's the way social media is set up; if people say they like us, others would see that." Texting is considered more private than Facebook where all personal information is available.

Barriers to implementing GHAP include those described above, such as people who are not interested in enrolling or are ineligible due to substance abuse or other issues. Environmental or contextual issues that some potential participants may be dealing with in their lives may be causing them to not be ready or uninterested in participating. One focus group participant stated that, for enrollees, not having resources to do what is recommended by GHAP is a barrier. For example, often when she suggests exercises to a be done at home. Also, one focus group participant described a barrier of the program to be letting people know about it. She stated that there are so many things going on with the target population that 'rising above the noise level' is a challenge.

Another barrier to implementing GHAP was described by a focus group participant as an administrative barrier. She stated that a lot of time is taken to fax reports to PCPs. It would help if the electronic health

record system were in a place where it would be easier to communicate with doctor offices so that it would be more "seamless." Another administrative barrier shared by another focus group participant is that the IRB process slowed things down and even held the program up at times. It was somewhat of a challenge to keep the staff motivated.

When asked about the biggest factors of success for the first year of GHAP, focus group participants stated that they felt the program has been successful because there is a need in the population and people appreciate the service. Another focus group participant agreed with this and said that people who use the program can become a better person.

One focus group participant stated a big factor of success was the "eternal optimism of the team." Someone else added to this, saying that being flexible was a success factor, where staff was able to make changes "on the fly." For example, if they were trying to find a partner to hold a screening and things did not work out, the staff would be able to go back and reevaluate. Another focus group participant confirmed this and said that the strategy meetings were beneficial.

Focus group participants also said that enrollees are likely to stay engaged in the program because of the connections being made between enrollees and GHAP staff each month through interventions, phone calls and text messaging. Data collection is not a burden for enrollees. The main data collection is during the screening and follow-up surveys are short.

Focus group participants also stated that they feel the Norton Healthcare name adds value to the GHAP program for the target population. They feel Norton Healthcare is respected in the community.

Looking ahead for GHAP, one focus group participant expressed optimism about the hard work from year one, in terms of data collection. She stated it has been labor intensive, but seeing the results is promising. She also felt that the program would be able to use the lessons learned from year one and maximize on that to move forward for year two to help those in the community. Also, she was encouraged by the possibilities for expansion to other areas and moving to a wider scale. Another participant said they thought it would be helpful for enrollees if the program were extended to help them after one year in terms of resources for them and checking on progress.

Some focus group participants shared positive moments that they received from working with GHAP. One participant said that during a screening, they found a woman with extremely high blood pressure. Even though she was ineligible for GHAP, the staff were able to immediately get her across the street to a health clinic that was able to able to help her. Another participant shared that feedback they receive from people they are screening is encouraging. She said people she sees during screenings may say, "Thank you,' 'I'm really interested,' 'I want to change,' or 'I needed to see somebody.'" Another focus group participant said they feel good when they call someone to check in and hear that they are working and making progress. Someone else said they appreciated it when a woman came to have her blood pressure checked at a screening and when she proceeded to tell the woman about GHAP, she already was enrolled. She was coming to check on her progress, so it was a good feeling to the focus group participant that the woman was engaging in the program and taking an interest in her health. In summary, the focus group participants are optimistic about the program and feel it is making a difference in a community that has a need for GHAP services. Lessons learned from year one include working with partners who hold community events and collaborate screening events with those, rather than holding them separately. Also learned from year one is that there may be contextual issues in the lives of some potential enrollees that may be inhibiting them from enrolling in the program. Possible solutions include using community resources that address these issues more. Other lessons learned include focusing more on individual interventions rather than group interventions, as it is more convenient and private for enrollees. Also, it was learned that using Facebook as a way to engage enrollees is not effective, but, for those who use text messaging, sending motivational text messages appears to be. Lessons learned for the administrative pieces of GHAP include allowing extra time for IRB review and approval. Success factors for year one of GHAP include an optimistic, flexible team that works together to plan and overcome barriers. Success is also due to the program staff making connections with enrollees on a regular basis, through interventions, phone calls, and text messages. The GHAP staff look forward to year two of the program and using what they have learned from the first year to improve and expand their program.