



Addressing Health Disparities Among Homeless in Alachua County through Community-Based Participatory Research.

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# Addressing Health Disparities Among Homeless in Alachua County through Community-Based Participatory Research.

## Abstract

Introduction. In states such as Florida that did not expand Medicaid, a large number of economically disadvantaged individuals do not qualify for subsidies to buy health insurance through the Affordable Care Act (ACA) <sup>2</sup>. This leaves the health needs of Florida's homeless population largely unaddressed.

Nearly 48.1% of Alachua County's homeless population has disabling conditions <sup>16</sup>. This confirms a pressing need to understand the homeless population's healthcare needs, knowledge, and barriers in accessing healthcare. Methods. We used a Community-Based Participatory Research model in conducting health fairs and needs assessment surveys, incentivizing participation, and providing education about existing resources. The surveys were conducted at two homeless meal service sites and consisted of 22 questions regarding access to healthcare, utilization, and satisfaction. Health fairs consisted of blood pressure, blood glucose, and mental health screening. Patient participation was encouraged through games, prizes and food. Results. Of the population we surveyed, 100% have income levels below \$11,490, therefore all uninsured fall into the ACA coverage gap. Those less than 65 years of age do not qualify for Medicare unless disabled. Some qualify for Medicaid as shown in tables. Fifty-eight percent were uninsured and did not get any treatment for their illnesses. Additionally, 67% had no knowledge of free local healthcare clinics. Discussion/Conclusion. The majority of this population falls into the ACA Coverage Gap, lacks knowledge about free community clinics, and inappropriately uses the ED. Future implications of this research involve advocacy to expand Medicaid in Florida and enroll those who are eligible for health insurance. Vital goals include outreach by free healthcare clinics to make healthcare more accessible, as well as building trust with the community through continued outreach initiatives. A community-Based Participatory Research Model is an effective tool to increasing collaboration among diverse members of the community in order to bring meaningful and positive change to the health of populations.

## Keywords

Keywords: Affordable Care Act coverage gap; health fair; homeless population; health disparities; Alachua County; Community Based Participatory Research

## Cover Page Footnote

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## **Addressing Health Disparities Among Homeless in Alachua County through Community-Based Participatory Research.**

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**Keywords:** Affordable Care Act coverage gap; health fair; homeless population; health disparities; Alachua County; Community Based Participatory Research

### **INTRODUCTION**

Homelessness extends beyond the developing world; it is a global phenomenon that continues to plague prosperous nations like the United States. According to the 2014 Annual Homeless Assessment Report, at a given time, nearly 578,424 people in the United States were estimated to be homeless (Henry, Cortes, & Buck, 2014). There is a strong association between homelessness and poor health outcomes (National Coalition for the Homeless, 2011). Homelessness can be a result of poor health. In addition, the state of homelessness can lead to new health problems and exacerbate existing ones (National Health Care for the Homeless Council, 2011). Homeless individuals suffer from disproportionately increased rates of health problems, have higher mortality rates than the general population, and frequently encounter barriers in accessing healthcare. Forty-eight percent of the homeless have disabling conditions, which include physical, developmental, mental health ailments, drug or alcohol addiction issues, and HIV/AIDS (City of Gainesville/Alachua County Office on Homelessness, 2013). Homelessness, which puts this population at higher risk for factors such as residential instability and insecurity, poor hygiene, malnutrition, and increased exposure to violence and stress, often leads to a combination of physical, psychological, and social problems (National Health Care for the Homeless Council, 2011).

Despite the disproportionately high prevalence of complex health problems among the homeless, they have historically had very low health insurance rates (DiPietro, Artiga, & Gates, 2014). The Affordable Care Act (ACA) aimed to reduce the number of uninsured by expanding Medicaid to all low-income adults who were previously ineligible. However, the Supreme Court ruling in 2012 to make Medicaid expansion a state option made healthcare coverage inaccessible to homeless populations living in states like Florida that opted out of the expansion. Florida with 41,542 homeless individuals has the third highest number of the nation's homeless population (Henry, Cortes, & Buck, 2014). Alachua County, considered one of the smaller counties in Florida, has nearly 2,102 homeless individuals (Bryan, 2015). Without expansion of Medicaid, adult homeless individuals in Alachua County who are childless, non-pregnant and non-disabled are not eligible for Medicaid. Those with children have to meet a median income limit of 44% of the poverty line (an annual income of \$8,840 for a family of three in order to qualify (The Henry J. Kaiser Family Foundation, 2015). Furthermore, those who earn below the poverty line (\$27,724 for a family of three in 2015) do not qualify for ACA subsidized insurance (U.S. Department of Health & Human Services, 2015). While employees could potentially obtain health coverage through their employer, most homeless individuals are unemployed, work for small companies with less than 50 employees or have part time employment (The Henry J. Kaiser Family Foundation, 2015). As a result, many homeless adults in Alachua County who do not meet the limited Medicaid eligibility requirements and those who earn below the poverty line fall into a 'coverage gap'.

The lack of access to health insurance poses significant challenges to the homeless who have disproportionately higher rates of health problems and poor living conditions. We recognize that beginning to solve these complex and challenging problems requires a multifaceted approach. We have utilized a Community-Based Participatory Research (CBPR) model to begin addressing the coverage gap among the homeless of Alachua County. The W.K. Kellogg Foundation's Community Health Scholars Program defines CBPR as:

*"a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities"* (U.S. Department of Health & Human Services, 2015).

CBPR is recognized as a powerful method of engaging diverse members of the community in conducting research and developing innovative solutions to community health problems. It has also been shown as an effective tool for better utilizing research findings in influencing the development and improvement of health systems, programs and policies (U.S. Department of Health & Human Services, 2015).

We utilized the CBPR method in accomplishing the following goals:

1. Conducting a survey assessing demographics, healthcare needs, health services utilization, health insurance coverage and barriers to accessing safety net primary care services among the homeless population in Alachua County.
2. Organizing health fairs where the homeless were screened for common chronic conditions like hypertension, diabetes and psychiatric illnesses, provided consultation with a physician on site, referred to free safety net clinics and provided with health education.
3. Providing information about and connecting homeless individuals with local free safety net clinics, mental health services and other services for low-income individuals.

4. Building trust and increasing participation in health promotion events through recreational activities and incentives.
5. Conducting evaluations of participant experience at health fairs.
6. Building collaboration between safety net clinics and homeless shelters.
7. Founding a student health organization dedicated to improving the health of the homeless.
8. Presenting survey results and a report of experiences working with the homeless to government officials, representatives of safety net clinics and students.

In this paper we will present our survey findings, the process with which we utilized the CBPR method in accomplishing our goals and discuss steps taken to translate data findings into action. While our efforts were targeted to a small homeless population in Alachua County, our strategies may be applied to similar populations across the nation.

## **METHODS**

### **Setting, Partnerships, and Participation**

The project took place during the months of June and July 2014 in Alachua County's city of Gainesville, FL. The participants of the surveys and health fairs are homeless individuals who were residing in Alachua County's city of Gainesville, FL at the time that the survey and health fairs were conducted. Approximately 127,488 people, including 49,785 University of Florida students, reside in Gainesville, FL (University of Florida Admissions, n.d.). Of this population, nearly 1000 were experiencing homelessness during the course of this project (City of Gainesville/Alachua County Office on Homelessness, 2013).

This project, funded by the Arnold P. Gold Foundation's Student Summer Fellowships Program was a collaborative effort between University of Florida medical and undergraduate students, Project Downtown Gainesville (PDG), a local non-profit organization that provides food and other basic necessities to the impoverished homeless in downtown Gainesville, GRACE Marketplace, a center that provides shelter and comprehensive support services to the homeless in Alachua County as a part of the county's 10- year initiative to end homelessness, the Alachua County Healthcare Safety Net Collaborative (SNC), a collaborative of individuals and organizations representing safety net clinics and other healthcare organizations for the underserved in Alachua County and Talk Therapy Inc., a local non-profit that provides free mental health counseling to the underserved. All of the partners were invested in improving the health conditions of the homeless population in Alachua County.

Since the homeless population in Gainesville is transient, the locations, dates and times of our health fairs were strategically selected to maximize the number of participants. One of the sites selected for the health fair was Downtown Gainesville's Bo-Diddley Community Plaza, where approximately 50-60 homeless individuals regularly attend PDG's lunch services every Saturday. The second location chosen was GRACE Marketplace, the homeless one-stop in Gainesville.

### **Survey Instrument**

The surveys were created using the Lime Survey software tool. They were designed in order to: 1) assess the healthcare status, coverage, experiences, needs and utilization of this population, 2) identify the barriers this population faces in accessing and utilizing healthcare services, 3) assess knowledge and utilization of free community health resources, 4) assess the population's need for other non-medical community services and 5) provide Gainesville's Safety

Net Collaborative, other homeless service providers, and policy makers with relevant and comprehensive information on the medical and non-medical needs of the city's homeless population.

Three surveys that were approved by the University of Florida IRB-02 were administered through the course of this project. The first survey (Appendix 1) was administered at the first health fair, which took place in partnership with PDG at the Bo-Diddley Community Plaza in June 2014. The survey was comprised of 22 questions and 7 categories which included: Patient Experience and Knowledge, Self-Assessed Health Status, Healthcare Utilization and Barriers, Demographics, Socioeconomic Characteristics, and Healthcare Coverage and Needs for Medical and Non-Medical Services.

The second (Appendix 2) and third surveys (Appendix 3) were administered during the second health fair that took place at GRACE Marketplace on July 2014. The second survey also had 22 questions and 7 of the same categories as the first survey as well as additional follow-up questions. Three additional questions assessed flu, zoster, and pneumococcal vaccination status and were added to the Self-Assessed Health Status category. Additionally, question 8 from the Healthcare Utilization and Barriers category regarding the use of the ED was modified to include follow-up questions regarding reasons for visiting the ED and treatments received. These questions were added in order to better distinguish between emergent and non-emergent reasons for visiting the ED. Two additional questions were also added to this category in order to assess access to and barriers faced in accessing prescription drugs. Also in this category, an added question assessed whether patients recommended the free healthcare clinics they have utilized. This was done in order to avoid asking compound questions since in the previous survey, this question was compounded with another question. Additionally, another question (question 20) was added in order to assess what healthcare services the community would find most useful. This question was added in order to give homeless service providers a better understanding of specific healthcare services needed by the community.

The third survey was designed for those who were surveyed at the first health fair but also present at the second health fair at GRACE Marketplace. Since this population is transient, we wanted to administer a separate survey to this subset of individuals in order to prevent administering duplicate surveys to the same individuals. This survey included of eight questions and assessed for experience and participation at the first health fair at the Bo-Diddley Plaza, knowledge gained from the Bo-Diddley Plaza health fair, use of free healthcare clinics after participating in the Bo-Diddley Plaza health fair, and healthcare service needs.

### Evaluation Questionnaire

Evaluation questionnaires (Appendix 4) comprising six questions were also administered to health fair participants in order to evaluate the health fair and improve quality of future fairs. Because we conducted two health fairs at different locations and the target homeless population is often transient and difficult to track, we found an immediate assessment of the program to be most feasible for the scope of this project. As a result, our Evaluation Questionnaire was designed using the "Precede-Proceed" model, a model of program planning and assessment which focuses on determining the immediate effects of the program and whether the goals of the program were carried out (Hecker, 2000). The questionnaire assessed ways participants learned about the health fair, what screenings/activities they participated in, what screenings and/or activities they would find educational in the future, what knowledge they gained from the



experience, their overall opinion of the fair as well as suggestions on what they would improve about the health fair.

#### Procedure

During our previous work with this population, we experienced difficulties motivating patients to participate in our survey and health outreach initiative. When we conducted our first needs assessment survey at one of PDG's lunch events in February of 2014, only 25 of the 56 people present were willing to be surveyed. Similarly, when we partnered with the University of Florida College of Medicine's Local Spring Break Health Outreach Project to bring the Mobile Outreach Clinic to one of PDG's lunch services in March of 2014, less than 10 of the 57 people present utilized the clinic. These experiences informed our decision to come up with a more innovative way of surveying and providing healthcare to this population. In order to motivate patients and increase participation, we administered the surveys during the health fairs and incentivized participation in our surveys and health screenings through food, games, and prizes. In addition, the health fair was advertised through flyers at both Bo-Diddley Plaza and GRACE Marketplace for one week before the date of the events.

The first health fair and needs assessment survey took place in collaboration with PDG on June 28, 2014 from 1 PM to 4 PM at Gainesville Florida's Downtown Bo-Diddley Community Plaza. The second health fair and needs assessment survey took place on Wednesday, July 16, 2014 from 1 PM to 4 PM in the Chapel of GRACE Marketplace. As mentioned above, this date, time, and location were chosen in order to target the large number of homeless people who regularly attend PDG's Saturday lunch service and services at GRACE Marketplace.

*The procedures carried out at both health fairs are as follows:*

#### Volunteers and Training

At the Bo-Diddley Community Plaza Health Fair, a total of 20 PDG undergraduate volunteers were recruited to administer the surveys and assist with other aspects of the fair. PDG volunteers were specifically recruited since they have a more established relationship and experience working with this population. For the health fair at GRACE Marketplace, a total of 30 volunteers were recruited from various University of Florida undergraduate pre-medical organizations. Volunteers were recruited to verbally administer the survey and write out responses in order to avoid potential literacy barriers. All volunteers were given information about the population, the health fair, and trained on how to administer the surveys. All volunteers were also given t-shirts identifying them as volunteers for the event.

At each health fair, a total of 4 medical students were recruited in order to conduct the health screenings. All medical student volunteers were also informed about the population, the health fair, and free community health resources and trained on how to use the Neil-Wingkun Health Screening Form (Appendix 5) and bus maps to free clinics detailing directions from Bo-Diddley Plaza or GRACE Marketplace to all the free community healthcare resources. All medical student volunteers were asked to wear scrubs in order to distinguish themselves as healthcare providers.

A volunteer physician was also present at each health fair in order to supervise the screening and to do patient consultations when necessary. The physician was also given information about the health fair, the survey, and the Neil-Wingkun Health Screening Form.

#### Setup

##### *a. Clinic Tables:*

Two clinic tables were set up, where two medical students per clinic table could screen, educate, and refer patients. Each table contained a scale, calculator, blood pressure cuff, stethoscopes, glucose reader and strips, needle sticks, alcohol swabs, band aids, gloves, hand sanitizer, hazardous waste disposal container, Neil-Wingkun Health Screening Forms, bus maps, list of dental resources, contraceptives, and stickers.

*b. Mental Health Screening Table:*

This table was only available at the GRACE Marketplace health fair. It was staffed by 3 licensed therapists from Talk Therapy Inc., a local non-profit that provides free mental health counseling. The therapists screened patients for mental health and signed up a number of patients for counseling at their clinic.

*c. Skin Cancer Prevention Table:*

This table was only available at the GRACE Marketplace Health Fair. It was staffed by volunteers from a UF undergraduate organization called Skin Cancer Prevention Force, which is dedicated to the prevention and early detection of Melanoma. Volunteers taught the patients about skin cancer and ways of incorporating sun safety into their lives. They also distributed sunscreen and educational pamphlets about skin cancer.

*d. Prizes Table:*

The prizes table located next to the Clinic table, had two volunteers and included t-shirts as well as prizes. The t-shirts were specifically designed for the event and included information about the health fair, GRACE Marketplace, PDG meal services, and free community health resources. The t-shirts were designed with the intent of advertising and promoting free medical and non-medical homeless services provided in the community. All participants who completed the Needs Assessment Survey were given t-shirts. The rest of the prizes included items such as hats, sunglasses, personal fans, dental kits, deodorants, hand sanitizers, lotions, soap, batteries, flashlights, non-perishable food items, water bottles, clothing, socks, and bags. These items were selected as prizes since they were the most commonly requested items on a needs assessment survey that we conducted in February of 2014. Each of the prize items were categorized into different ticket groups (1 ticket prizes, 2 ticket prizes, 3 ticket prizes and 4 ticket prizes). Participants had to get a health screening and win tickets at the health fair games to exchange for prizes.

*e. Evaluation Questionnaire Table:*

This table, which was situated in front of the prizes table, had one volunteer who assisted in administering the evaluation questionnaire. Participants were asked to fill out the questionnaire after claiming prizes.

*f. Art Table:*

This table, which had one volunteer, was equipped with water colors, paint brushes, sketch pencils, and paper. Health fair participants were encouraged to either create an art of their own or paint pre-made drawings. They also received tickets for participation. This table also had a poster board with information on GRACE Marketplace. This poster was made in order to inform the participants of the health fair about the new homeless center that opened up and the services that it offered.

*g. Games:*

The games at the health fair included a ring toss, basketball, soccer (only at Bo-Diddley Plaza), and a bucket toss. Each game had a volunteer who assisted participants and gave out tickets for scoring points.



### Step-by-Step Procedure

1. Both health fairs began with food being served.
2. Soon after food was served, 10-15 volunteers equipped with pens and surveys on clipboards administered the Needs Assessment Surveys to all interested homeless individuals. Surveyors were instructed to privately conduct the surveys one on one in order to ensure confidentiality, establish rapport, and prevent the participants from being influenced by the opinions of others around them.

At the second health fair at GRACE Marketplace, those who had completed a survey at the first health fair were given a different follow-up survey assessing experience, participation and knowledge gained from the first health fair.

3. After completing the Needs Assessment Survey, volunteers thanked the participants and walked them over to the Prizes Table where they were given a t-shirt for filling out the survey.

The t-shirts were strategically placed next to the rest of the prizes being given out in order to entice participation in other aspects of the health fair. The volunteers distributing t-shirts were instructed to inform participants that they could play games and win prizes if they got health screenings at the clinic tables. If they showed interest, the volunteer who administered their survey walked them over to the clinic table where they could receive screening.

4. At the clinic table, a volunteer greeted the patients, explained the screenings being offered at the clinic table, and informed patients about the presence of a physician on site. This volunteer then gave patients a number and directed them to a waiting area where they could sit before being screened. Those who were interested in speaking with a physician were given a separate number and asked to wait in a separate waiting area.

5. At the Clinic, medical students: 1) administered blood pressure and glucose screenings and calculated BMI, 2) educated patients about high blood pressure, diabetes and the importance of primary care, 3) informed patients about free community health resources, 4) gave patients bus maps with directions to free clinics from either Bo-Diddley Community Plaza or GRACE Marketplace, 5) distributed condoms, and 6) referred patients to the physician on site or to appropriate free clinics when necessary. The medical students utilized the Neil-Wingkun Health Screening form, which when filled out by staff, is given to patients, providing the results of their screening and a list of free local healthcare services.

Post screening at the Bo-Diddley Plaza Health Fair, the patients' Neil-Wingkun Health Screening Form was folded so that confidential patient information was not visible. A sticker was then placed on the backside of the form. The sticker on the form served as an 'entrance ticket' to play the games. Patients who were referred to other clinics were instructed to take the form which included screening results and other relevant documentation from the physician on site.

Post screening at the GRACE Marketplace Health Fair, patients were directed to the mental-health screening table where they could be screened for mental health by licensed therapists. Those who were assessed to benefit the most from a course of brief psychotherapy were signed up for free counseling sessions at the South West Advocacy Group (SWAG) Family Resource Center accessible via the city's bus route. After the mental health screening, the Neil-Wingkun Health Screening Form was folded by the licensed therapists and a sticker placed on the back side of the form. The patients were then encouraged to visit the Skin Cancer Prevention Table and to play games in order to win prizes.

6. All who had been screened, were encouraged to participate in the various games available. They received tickets for scoring points on each game and for participating at the art table.

7. After playing games and winning tickets, patients were then directed to the prize table where they could claim various prizes depending on the number of tickets they had won. After claiming their prizes, they were then encouraged to go to the evaluation questionnaire table and answer a few questions evaluating the fair.

8. At the evaluation questionnaire table, a volunteer assisted participants in filling out the questionnaire. Another volunteer at this table also thanked participants for attending the health fair, answered questions and encouraged them to visit the free community health resources they learned about at the health fair.

## RESULTS

Data from both survey sites were combined in order to get a large sample size more representative of the larger homeless population in the county. Only results from the combined data are presented in this paper. In questions where more than one answer could be chosen, each of the answer choices is analyzed separately, and thus the percentages cannot be added together.

A total of 73 people obtained a meal, 65 people were screened and 69 people were surveyed at both sites (Table 1). The number of participants was greatly increased from a previous local mobile clinic health outreach effort that took place at a homeless meal service site a year prior. At that outreach event, which did not have any incentives for participation in health promotion activities, only 10 of 57 homeless individuals present at the meal service were willing to get free health screening and medical consultation by a physician (Table 2). At the current health fair, 69 of the 73 homeless individuals who obtained meals participated in health screening (Table 1).

Table 1. Number of Participants

Total Population at Meal Site	Screened	Surveyed	Screening Participation
73	69	65	95%

Table 2. Number of Participants at Previous Bo-Diddley Health Outreach in 2014

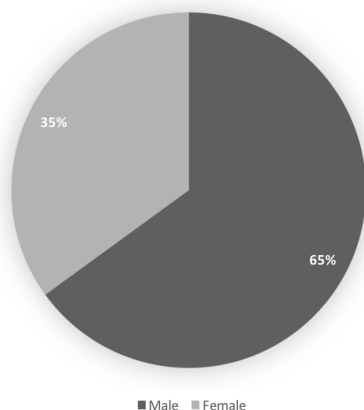
Total Population at Meal Site	Screened	Screening Participation
51	10	95%

### Demographics:

The majority of participants, 65%, identified as male while 35% identified as female (Figure 1). None of those surveyed identified themselves as transgender. 99% of the surveyed population was between the ages of 18 and 65 while 1% were over the age of 65 (Figure 2). African Americans made up the majority of those surveyed at 53% while Caucasians made the second largest group at 38%, followed by Hispanics at 8% and Native Americans at 1% (Figure 3). None of the participants identified as Asian or Pacific Islander. Of those surveyed, 16%

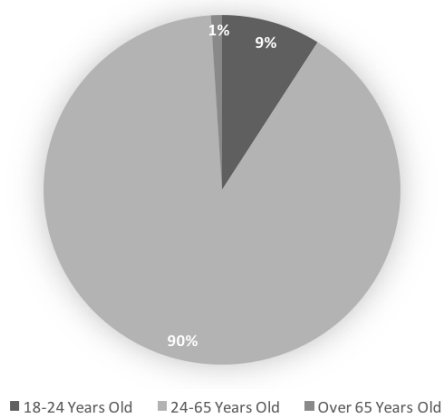
identified as a military veteran (Figure 4). Of those surveyed a 100% reported having income levels below \$11,490, the poverty line at the time the survey was conducted (Figure 5).

Figure 1. Gender



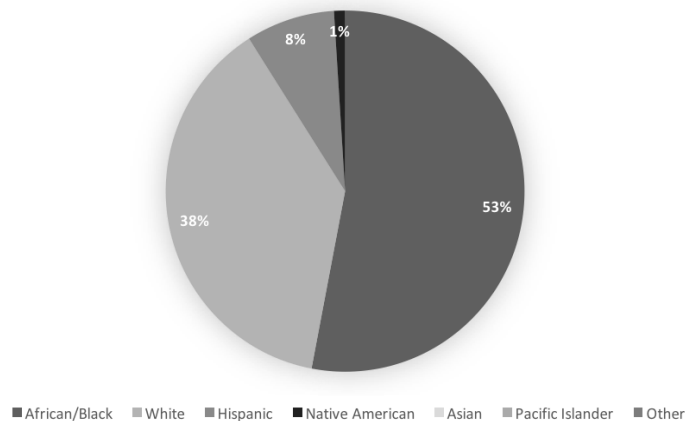
n=69

Figure 2. Ages of Participants



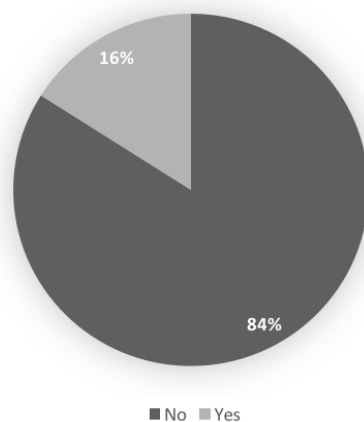
n=69

Figure 3. Race



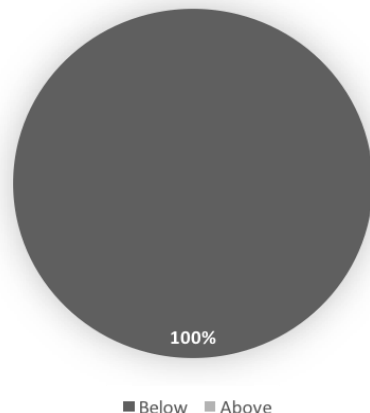
n=69

Figure 4. Are you a military veteran?



n=69

Figure 5. Participants with income below poverty line (\$11,490)



n=69

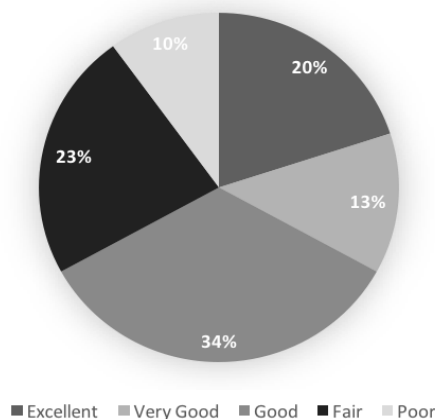
#### Self-Assessment of Health Status:

67% described themselves as having good health designated by assessing their health as excellent, very good or good while 33% assessed their health as fair or poor (Figure 6). Though the majority of those surveyed rate their health as excellent or very good, 70% reported having disabilities and/or chronic physical health problems (Figure 7).

#### Utilization of Medical Treatment for Disabilities and/or Chronic Health Conditions:

58% reported not receiving medical treatment for disabilities and/or chronic conditions (Figure 8). Of those surveyed, 22% reported using the local emergency department, 19% reported utilizing Helping Hands Clinic (a free clinic that primarily serves the homeless), 18% reported not getting treatment unless it was an emergency and 8% reported using the VA Hospital (Figure 9).

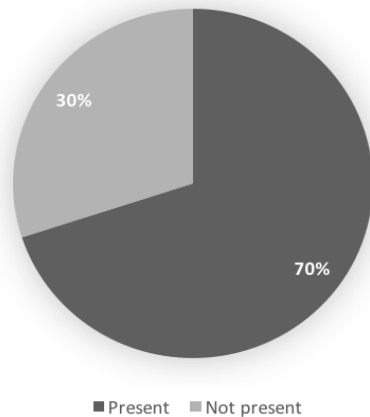
Figure 6. Self Assessment of Health



n=69

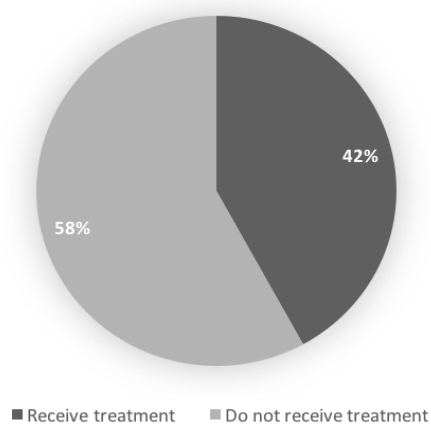
Figure 7. Disabilities and/or chronic physical health problems





n=69

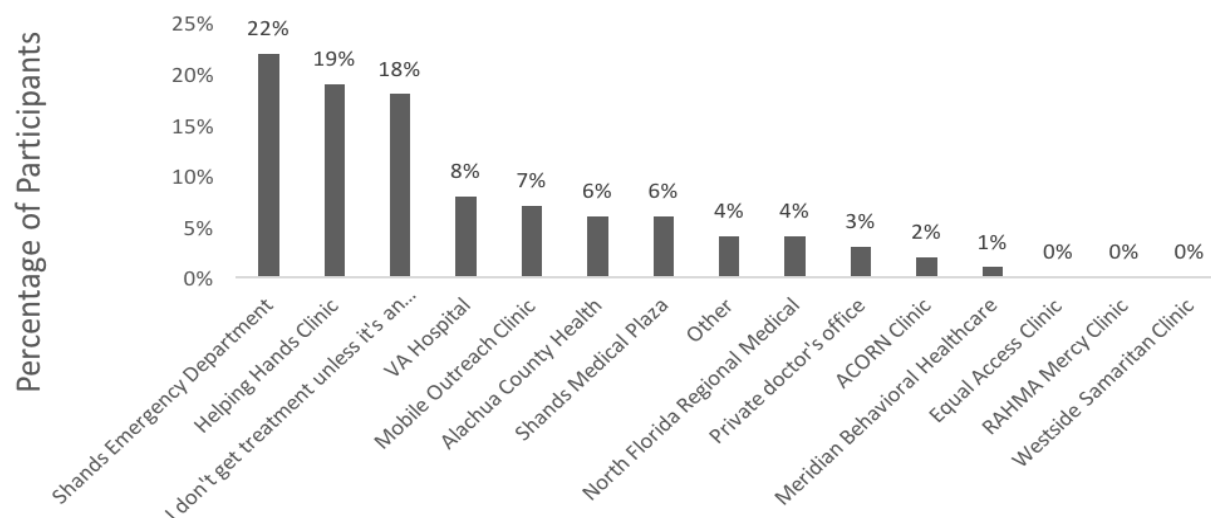
Figure 8. Receive medical treatment



n=69

Figure 9. Sources of Treatment

124 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

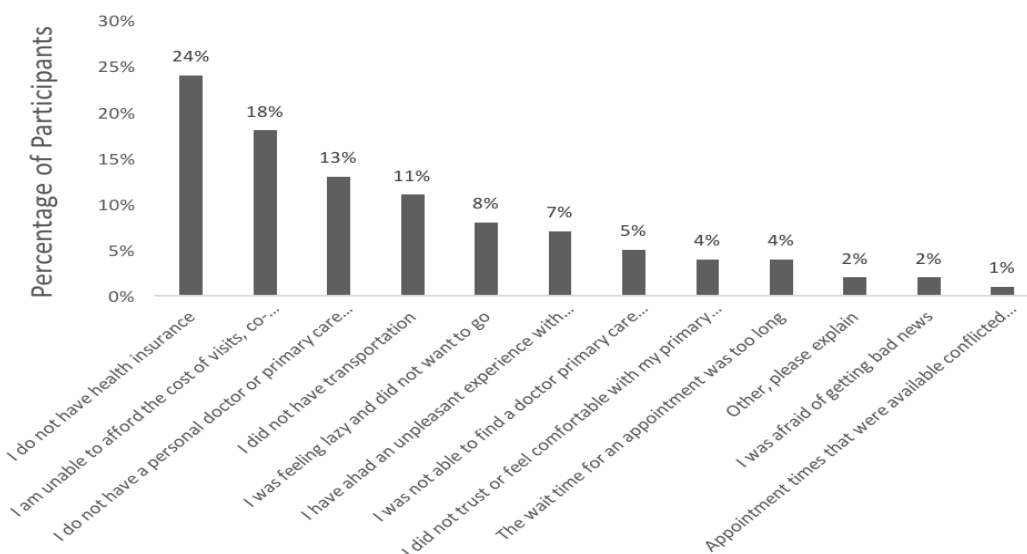


n=69

Barriers to Receiving Medical Care:

24% of those surveyed reported lack of healthcare insurance as the main reason why they did not receive medical care when they needed it while 18% cited inability to afford cost as a reason (Figure 10). 13% reported not having a personal doctor or primary care provider as a reason, 11% reported transportation as a primary barrier to receiving medical care while 7% reported unpleasant experience with healthcare providers as a reason (Figure 10).

Figure 10. Reason for not receiving medical care



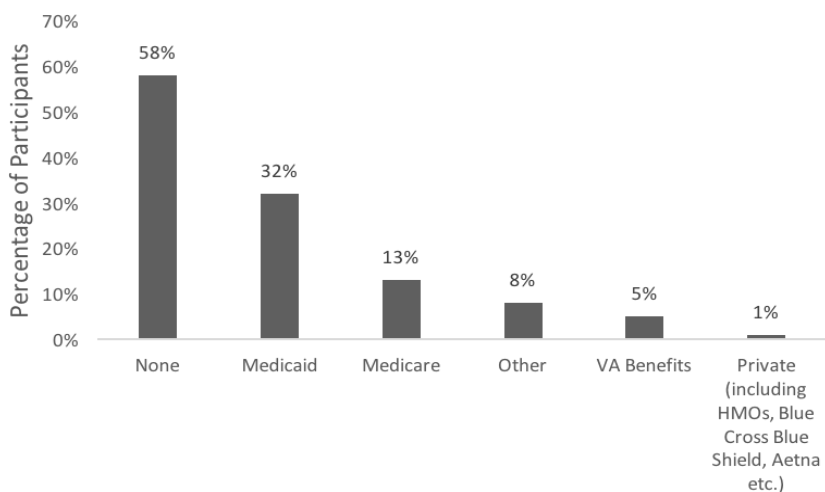
n=69

Health Insurance:

Of those surveyed, 58% reported not having any form of health insurance, 32% reported using Medicaid, 13% reported using Medicare (Figure 11). 5% reported using VA Benefits and

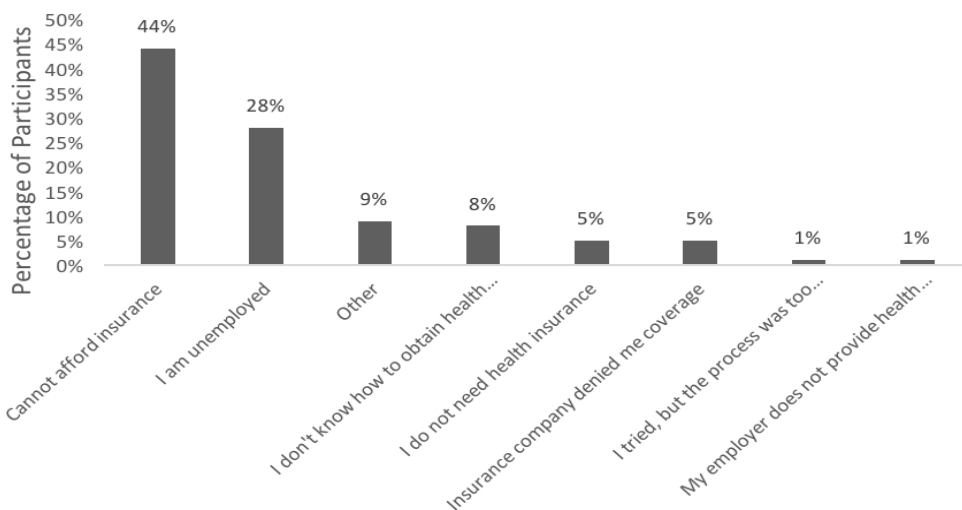
only 1% used private health insurance (Figure 11). 44% reported inability to afford insurance as a primary reason for being uninsured while 28% cited unemployment as a reason (Figure 12).

Figure 11. Insurance



n = 69

Figure 12. Reason for Being Uninsured

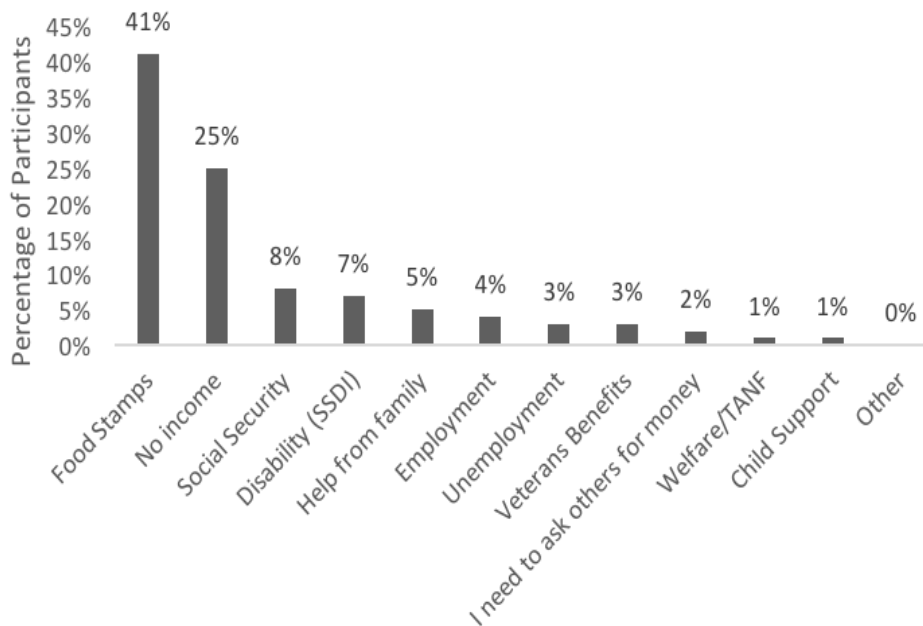


n = 40

Sources of Income:

41% reported food stamps as their main source of income, 25% reported having no income while 8% and 7% claimed social security and disability as their main source of income, respectively (Figure 13). 100% of the participants reported income levels less than \$11,490 (Figure 5).

Figure 13. Sources of income

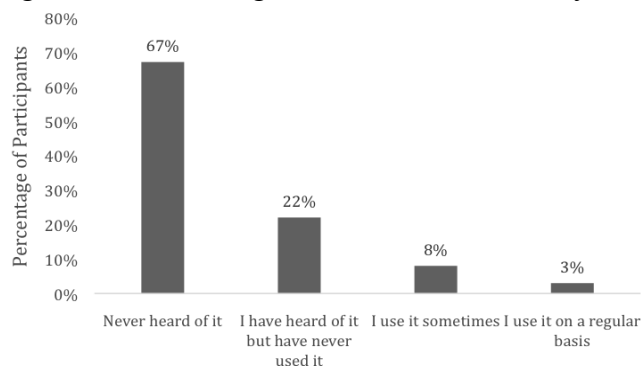


n = 69

Knowledge and Use of Community Health Resources:

67% reported not having heard of any of the eight local safety net clinics, 22% reported having heard of at least one of the local safety net clinics but never having used them, 8% reported using at least one of the clinics sometimes and only 3% reported using at least one of the safety net clinics on a regular basis (Figure 14).

Figure 14: Knowledge and Use of Community Health Resources

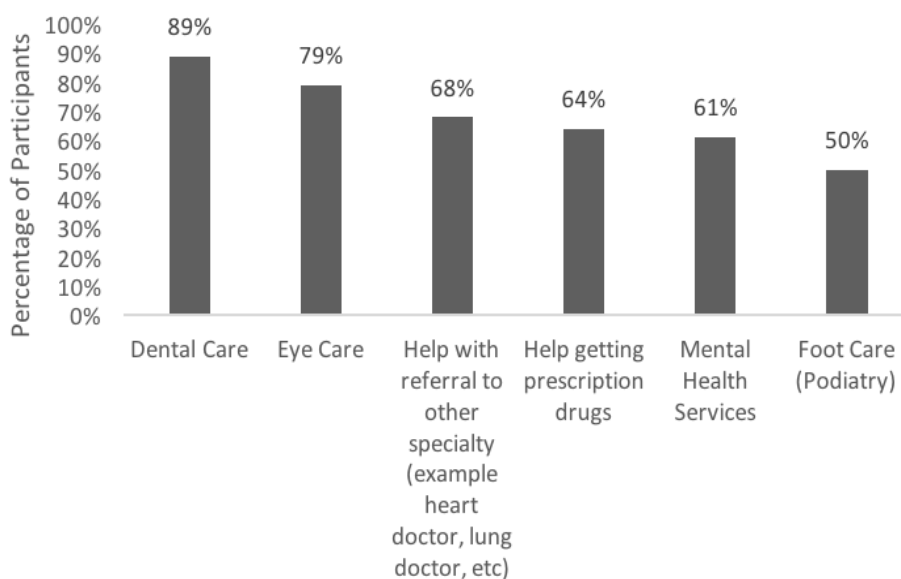


n=69

Health Care Needs:

Of those surveyed, 89% reported the need for dental care, 79% for eye care, 68% for assistance with referral to other specialty care, 64% for help getting prescription drugs, 61% for mental health services and 50% for foot care (Figure 15).

Figure 15. Services Needed



n=69

#### Translating Data into Action

The results of the data were presented to University of Florida faculty, students and community members as well as national conferences. These presentations have inspired follow-up research projects about the homeless in Alachua County and have led to the start of a student-run organization dedicated to improving the health of the homeless in our community. A comprehensive report of this survey data that was presented to the City Commission of Gainesville was also instrumental in the City's decision to begin building a health clinic for the homeless at GRACE Marketplace. Moreover, survey results and recommendations that came out of this project influenced University of Florida Mobile Outreach Clinic's decision to provide healthcare services at GRACE Marketplace twice a month. The Alachua County Healthcare Safety Net Collaborative (SNC) has also used survey results to guide program development and service implementation.

### **DISCUSSION/CONCLUSION**

#### Survey Results

In this paper, we discussed the results of healthcare utilization survey conducted by the homeless population in Alachua County. Through our surveys and work with the population, we have identified a list of problems that contribute to the poor health outcomes of this population.

A majority of those we surveyed suffer from chronic medical conditions. This finding is consistent with national data that show disproportionately high rates of health problems among homeless populations (National Health Care for the Homeless, n.d.). While the high burden of disease in this population makes appropriate treatment imperative, a majority of those surveyed report not having received treatment for their health conditions (Figure 7).



Our findings also support current literature in acknowledging the challenges that homeless populations face in accessing and utilizing healthcare services. The most common barriers to obtaining healthcare services reported by those surveyed included lack of healthcare insurance and inability to afford costs of visits, copayments and deductibles, lack of knowledge about free community clinics, transportation problems and unpleasant experience with healthcare providers.

Without the expansion of Medicaid in the state of Florida, a majority of those we surveyed are not eligible for Medicaid or ACA subsidies unless they meet other criteria such as disability or parenthood. This places them in the ACA 'coverage gap' and limits their access to healthcare services. In addition, lack of access is exacerbated by poor knowledge and use of free community clinics.

These obstacles to accessing care present serious challenges to improving the health of the homeless. Without adequate access to care, their health status continues to worsen and inappropriate and costly use of the Emergency Department increases. It is imperative that we advocate for improved access to healthcare insurance in these populations. Funding of their healthcare through either Medicaid or ACA subsidies will be a key financing component for the healthcare services desperately needed in this population. Prevention of disease and promotion of health at the primary care level is also important to reducing health related morbidity and mortality and emergency room costs related to homelessness. It is also important to educate the population about existing healthcare resources and services and dispel misconceptions about safety net clinics. Through our work with this population we learned that most had misconceptions about safety net clinics. A number of them believed that they needed a form of healthcare insurance in order to utilize services. It is important that safety net clinics and other assistance organizations continually inform such populations about eligibility criteria. Moreover, it is critical that we make health clinics physically accessible to homeless populations who are less likely to have good access to transportation. Providing healthcare services near homeless shelter sites and utilizing mobile clinics are important ways of alleviating some of the barriers this population faces in accessing healthcare. In addition, we found incentivizing health promotion events to be an effective way of increasing patient participation. In a previous health outreach event with this population, we attempted to provide health screening, health consultation with a doctor and health education at a local homeless meal service site. This effort was without additional incentives and had a participation rate of only 18% (Table 1). In our most recent health fairs, which had games and prizes however, participation jumped to 95% (Table 2). By incorporating participation-based incentives like games and prizes into our health fairs, we were able to markedly increase the number of patients who participated in health screenings and health education activities.

#### Utility of Community-Based Participatory Research Approach

This paper also outlined the ways with which we collaborated with diverse members of the community in conducting surveys, health fairs and outreach efforts. We found the CBPR model to be very effective in allowing us to meet our goal of reducing health disparities among the homeless population in Alachua County. The emphasis of this model on collaboration was instrumental to our success. By working with diverse community members who shared common goals, we were able to gather meaningful data, influence change and ensure continued work dedicated to the elimination of health disparities. The participation of key stakeholders in the design and implementation of our research and overall project was key to increasing

participation in our research and in designing and implementing projects that made meaningful contribution to governmental and systems level change. Sharing our experience and data with the wider community also led to the beginning of projects dedicated to continued engagement with Alachua's homeless community. The utilization of similar models by other medical and/or college students across the nation could help increase the effectiveness of action-focused research and community outreach efforts.

## APPENDIX

### Appendix 1.

#### Needs Assessment Survey for Bo-Diddley Plaza Fair

##### Patient Experience and Knowledge

1. What has your experience been like with healthcare?
2. What free clinics have you heard about in this community?

##### Self-Assessed Health Status

3. Would you say in general your health is:

Please choose only one of the following:

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor

4. Do you have any disabilities and/or chronic physical health problems? If yes, please explain

Please choose only one of the following:

- ☐ Yes (explain)
- ☐ No

5. Do you receive any treatment for these problems? If yes, please explain.

Please choose only one of the following:

- ☐ Yes (explain)
- ☐ No

##### Healthcare Utilization and Barriers

6. Where do you go to get treatment for medical problems?

Please choose all that apply:

- ☐ I don't get treatment unless it is an emergency
- ☐ Private doctors' office
- ☐ Equal Access Clinic
- ☐ Mobile Outreach Clinic
- ☐ RAHMA Mercy Clinic
- ☐ Helping Hands Clinic
- ☐ Westside Samaritan Clinic
- ☐ ACORN Clinic
- ☐ Shands Emergency Department
- ☐ North Florida Regional Medical Center
- ☐ Other:

7. Why do you use the clinic or hospital that you usually go to?

Please choose all that apply:

- ☐ I receive very good service
- ☐ I like the doctors
- ☐ It is easy for me to get there
- ☐ It is easy for me to get an appointment
- ☐ I don't need an appointment
- ☐ I can get it whenever I need it
- ☐ It is free or cheap
- ☐ They accept my insurance
- ☐ I don't have another choice
- ☐ Other:

8. In the past year, how many times did you go to emergency room to receive medical care?

9. In the past year, was there a time when you needed medical care but did not get it?

Please choose only one of the following:

- ☐ Yes
- ☐ No

10. If yes, what are the main reasons for why you did not receive medical care when you needed it?

Please choose all that apply:

- ☐ I do not have health insurance
- ☐ I do not have a personal doctor or primary care provider
- ☐ I am unable to afford the cost of visits, co-payments and deductible
- ☐ I did not trust or feel comfortable with my primary care doctor
- ☐ I have had an unpleasant experience with healthcare providers
- ☐ I was not able to find a doctor or primary care provider willing to serve me
- ☐ I did not have transportation
- ☐ Appointment times that were available conflicted with my work schedule
- ☐ The wait time for an appointment was too long
- ☐ I was afraid of getting bad news
- ☐ I was feeling lazy and did not want to go
- ☐ Other, please explain.

11. From the reasons you mentioned in the previous question (Q10), on a scale from 1-10, rate how much of a problem each of your choices were, with 1 being NOT A PROBLEM, and 10 being a MAJOR PROBLEM.

Please choose the appropriate response for each item:

- ☐ I do not have health insurance
- ☐ I do not have a personal doctor or primary care provider
- ☐ I am unable to afford the cost of visits, co-payments and deductible
- ☐ I did not trust or feel comfortable with my primary care doctor
- ☐ I have had an unpleasant experience with healthcare providers
- ☐ I was not able to find a doctor or primary care provider willing to serve me
- ☐ I did not have transportation
- ☐ Appointment times that were available conflicted with my work schedule
- ☐ The wait time for an appointment was too long

131 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

- I was afraid of getting bad news
- I was feeling lazy and did not want to go
- Other, please explain.

12a. Have you ever heard of the following community health resources?

Please choose the appropriate response for each item:

(Choices are “Never heard of it”, “I have heard of it, but never used it”, “I use it sometimes”, and “I use it on a regular basis”).

- Equal Access Clinic
- Mobile Outreach Clinic
- RAHMA Mercy Clinic
- Helping Hands Clinic
- Westside Samaritan Clinic
- Dental Services (ACORN Clinic)
- Domestic Violence (The Source Program)
- Smoking Cessation Program (Community Health and Family Medicine)

12b. If selected the “I am aware but have never used it” for any of the clinics mentioned on the previous question (question 12a), please explain why.

13. Overall, of the community health resources you have used, how do you rate the quality of the services you have received? Would you recommend them to someone else?

Please choose the appropriate responses for each item:

(Choices are “Not Applicable (Never Used)”, “Poor”, “Satisfactory”, “Excellent”, “Would you recommend it to others?”).

- Equal Access Clinic
- Mobile Outreach Clinic
- RAHMA Mercy Clinic
- Helping Hands Clinic
- Westside Samaritan Clinic
- Dental Services (ACORN Clinic)
- Domestic Violence (The Source Program)
- Smoking Cessation Program (Community Health and Family Medicine)

14. Do you have any other comments or concerns you would like to add regarding healthcare in your community?

About You

15. Gender

- Male
- Female
- Transgender

16. Age

17. Race

Please choose all that apply:

- African/Black
- White
- Hispanic
- Native American
- Asian

132 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

- Pacific Islander
- Other:

18. Are you a military veteran?

Please choose only one of the following:

- Yes
- No

19. How long have you lived in Alachua County, Gainesville, Florida?

Socioeconomic Characteristics and Healthcare Coverage

20. Do you receive any of the following sources of income and if so approximately how much each month?

Comment only when you choose an answer.

Please choose all that apply and provide a comment:

- No income
- Employment
- Help from family
- Child Support
- Veterans Benefits
- Social Security
- Disability (SSDI)
- Food Stamps
- I need to ask others for money
- Welfare/TANF
- Unemployment
- Other:

21. What type of health insurance do you have?

Please choose all that apply:

- None
- Medicaid
- Medicare
- VA Benefits
- Private (Including HMOs, Blue Cross Blue Shield, Aetna, etc.)
- Other:

21a. If you answered “None” on question 21, why do you currently not have health insurance?

Please choose all that apply:

- Insurance company denied me coverage. If so, please tell us what date you were denied coverage. Date:
- Cannot afford insurance
- I don't know how to obtain health insurance
- I am unemployed
- My employer does not provide health insurance
- I do not need health insurance
- I tried, but the application process was too burdensome for me.
- Other:

22. Knowing we can't offer every service all the time, how often do you think the services should be available?



133 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

Please choose the appropriate response for each item:

(Choices are “7 days a week”, “Weekdays only”, “Once a month”, “Four times a year”,  
“Once a year”, “Do not need at all”)

- ☐ Free Health and Wellness Services
- ☐ Dental Services
- ☐ Substance Abuse Services
- ☐ Mental Health Services
- ☐ Further Education
- ☐ Job Training
- ☐ Permanent/Affordable Housing Assistance
- ☐ Assistance Paying First Month’s Rent
- ☐ Assistance Paying for Utilities
- ☐ Assistance Obtaining Food Stamps
- ☐ Assistance Obtaining social security/disability
- ☐ Temporary Housing/Shelter
- ☐ Free Meals
- ☐ Disability Services
- ☐ Transportation Services
- ☐ Legal Services
- ☐ Free clothing
- ☐ Free toiletries
- ☐ Other, please specify:

**Appendix 2.**

Needs Assessment Survey for GRACE Marketplace

Patient Experience and Knowledge

1. What has your experience been like with healthcare? Please tell us more about that.
2. What free clinics have you heard about in this community? How did you hear about these?

Self-Assessed Health Status

3. Would you say in general your health is:

Please choose only one of the following:

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor

- 4a. Do you have any disabilities and/or chronic physical health problems? If yes, please explain

Please choose all that apply and provide a comment:

- ☐ Yes
- ☐ No

- 4b. Do you receive any treatment for these problems? If yes, please explain.

Please choose all that apply and provide a comment:

- ☐ Yes
- ☐ No

134 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

5a. In the past year, have you received the flu shot? If no, please explain why not.

- ☐ Yes
- ☐ No (explain)
- ☐ I don't know

5b. If you are over 60 years of age, have you received the Zoster Vaccine for Shingles? If no, please explain why not.

- ☐ Yes
- ☐ No (explain)
- ☐ I don't know

5c. If you are over 65 years of age, have you received the Pneumococcal Vaccine for Pneumonia? If no, please explain why not.

- ☐ Yes
- ☐ No (explain)
- ☐ I don't know

Healthcare Utilization and Barriers

6. Where do you go to get treatment for medical problems?

Please choose all that apply:

- ☐ I don't get treatment unless it is an emergency
- ☐ Private doctors' office
- ☐ Equal Access Clinic
- ☐ Mobile Outreach Clinic
- ☐ RAHMA Mercy Clinic
- ☐ Helping Hands Clinic
- ☐ Westside Samaritan Clinic
- ☐ ACORN Clinic
- ☐ Shands Emergency Department
- ☐ North Florida Regional Medical Center
- ☐ Alachua County Health Department
- ☐ VA Hospital
- ☐ Shands Medical Plaza
- ☐ Meridian Behavioral Healthcare
- ☐ Other:

7. Why do you use the clinic or hospital that you usually go to?

Please choose all that apply:

- ☐ I do not get medical treatment
- ☐ I like the doctors
- ☐ It is easy for me to get there
- ☐ It is easy for me to get an appointment
- ☐ I don't need an appointment
- ☐ I can get it whenever I need it
- ☐ It is free or cheap
- ☐ They accept my insurance
- ☐ I don't have another choice
- ☐ I use the Veteran Affairs Hospital
- ☐ Other:

135 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

8a. In the past year, how many times did you go to an emergency room to receive medical care?

8b. If you can remember, what was/were the reason(s) for the visit(s)?

8c. What treatment(s) did you receive?

9a. In the past year, was there a time when you needed medical care but did not get it?

Please choose only one of the following:

- ☐ Yes
- ☐ No

9b. If yes, what are the main reasons for why you did not receive medical care when you needed it?

Please choose all that apply:

- ☐ I do not have health insurance
- ☐ I do not have a personal doctor or primary care provider
- ☐ I am unable to afford the cost of visits, co-payments and deductible
- ☐ I did not trust or feel comfortable with my primary care doctor
- ☐ I have had an unpleasant experience with healthcare providers
- ☐ I was not able to find a doctor or primary care provider willing to serve me
- ☐ I did not have transportation
- ☐ Appointment times that were available conflicted with my work schedule
- ☐ The wait time for an appointment was too long
- ☐ I was afraid of getting bad news
- ☐ I was feeling lazy and did not want to go
- ☐ Other, please explain.

10a. In the past year, was there ever a time when you needed a prescription drug but you could not get it?

Please choose only one of the following:

- ☐ Yes
- ☐ No

10b. If you chose yes in Q10a, why were you not able to get the prescription medication(s) that you needed?

Please choose all that apply:

- ☐ I could not afford it
- ☐ The doctor would not prescribe it for me
- ☐ I did not have a means of getting to the pharmacy
- ☐ I did not think I needed it
- ☐ Other:

11a. Have you ever heard of the following community health resources?

Please choose an appropriate response for each item:

(Choices are “Never heard of it”, “I have heard of it, but never used it”, “I use it sometimes”, and “I use it on a regular basis”).

- ☐ Equal Access Clinic
- ☐ Mobile Outreach Clinic
- ☐ RAHMA Mercy Clinic
- ☐ Helping Hands Clinic
- ☐ Westside Samaritan Clinic
- ☐ Dental Services (ACORN Clinic)

136 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

- Domestic Violence (The Source Program)
- Smoking Cessation Program (Community Health and Family Medicine)

11b. If selected the “I am aware but have never used it” for any of the clinics mentioned on the previous question (question 12a), please explain why.

11c. Of the following community health resources you have used, how do you rate the quality of the services you have received? Would you recommend them to someone else?

Please choose the appropriate responses for each item:

(Choices are “Not Applicable (Never Used)”, “Poor”, “Satisfactory”, “Excellent”).

- Equal Access Clinic
- Mobile Outreach Clinic
- RAHMA Mercy Clinic
- Helping Hands Clinic
- Westside Samaritan Clinic
- Dental Services (ACORN Clinic)
- Domestic Violence (The Source Program)
- Smoking Cessation Program (Community Health and Family Medicine)

11d. Of the following community health resources from question 11a that you have used, would you recommend them to others? Why or why not? Please explain.

Please choose the appropriate responses for each item:

(Choices are “Yes”, “Uncertain”, “No”).

- Equal Access Clinic
- Mobile Outreach Clinic
- RAHMA Mercy Clinic
- Helping Hands Clinic
- Westside Samaritan Clinic
- Dental Services (ACORN Clinic)
- Domestic Violence (The Source Program)
- Smoking Cessation Program (Community Health and Family Medicine)

12. Do you have any other comments or concerns you would like to add regarding health care in your community?

About You

13. Gender

- Male
- Female
- Transgender

14. Age

15. Race

Please choose all that apply:

- African/Black
- White
- Hispanic
- Native American
- Asian
- Pacific Islander
- Other:

137 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

16. Are you a military veteran?

Please choose only one of the following:

- ☐ Yes
- ☐ No

17. How long have you lived in Alachua County, Gainesville, Florida?

Socioeconomic Characteristics and Healthcare Coverage

18. Do you receive any of the following sources of income and if so approximately how much each month?

Comment only when you choose an answer.

Please choose all that apply and provide a comment:

- ☐ No income
- ☐ Employment
- ☐ Help from family
- ☐ Child Support
- ☐ Veterans Benefits
- ☐ Social Security
- ☐ Disability (SSDI)
- ☐ Food Stamps
- ☐ I need to ask others for money
- ☐ Welfare/TANF
- ☐ Unemployment
- ☐ Other:

19a. What type of health insurance do you have?

Please choose all that apply:

- ☐ None
- ☐ Medicaid
- ☐ Medicare
- ☐ VA Benefits
- ☐ Private (Including HMOs, Blue Cross Blue Shield, Aetna, etc.)
- ☐ Other:

19a. If you answered “None” on question 19a, why do you currently not have health insurance?

Please choose all that apply:

- ☐ Insurance company denied me coverage. If so, please tell us what date you were denied coverage. Date:
- ☐ Cannot afford insurance
- ☐ I don't know how to obtain health insurance
- ☐ I am unemployed
- ☐ My employer does not provide health insurance
- ☐ I do not need health insurance
- ☐ I tried, but the application process was too burdensome for me.
- ☐ Other:

20. Which of the following healthcare services would be most useful for your community?

Check all that apply and rank your top 3 choices.

Please choose all that apply and provide a comment:

- ☐ Dental Care



138 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

- Eye Care
- Foot Care (Podiatry)
- Help getting prescription drugs
- Help with referral to other specialty (example heart doctor, lung doctor, etc)
- Mental Health Services

21. Knowing we can't offer every service all the time, how often do you think the services should be available?

Please choose the appropriate response for each item:

(Choices are "7 days a week", "Weekdays only", "Once a month", "Four times a year", "Once a year", "Do not need at all")

- Free Health and Wellness Services
- Dental Services
- Substance Abuse Services
- Mental Health Services
- Further Education
- Job Training
- Permanent/Affordable Housing Assistance
- Assistance Paying First Month's Rent
- Assistance Paying for Utilities
- Assistance Obtaining Food Stamps
- Assistance Obtaining social security/disability
- Temporary Housing/Shelter
- Free Meals
- Disability Services
- Transportation Services
- Legal Services
- Free clothing
- Free toiletries
- Other, please specify:

End

22. Do you have any questions or concerns?

### **Appendix 3.**

Survey for those who attended Bo-Diddley Plaza Fair and GRACE Marketplace Fair

#### **Experience and Participation**

1. What was your overall experience at the Bo-Diddley Plaza Health fair?

Please choose only one of the following:

- Excellent
- Very good
- Good
- Fair
- Poor

2. What activities did you participate in at the Bo-Diddley Plaza Health Fair?

Please choose all that apply:

- ☐ Survey
- ☐ Blood Pressure Check
- ☐ Blood Sugar Check
- ☐ Games and Prizes

3. What did you learn from the health fair at the Bo-Diddley Plaza?

4. Did you get a deeper understanding of high blood pressure, diabetes, and free local healthcare services from the Bo-Diddley Plaza Health fair? If no, please explain why not and we'd love it if you could give us some suggestions on how to improve the fair.

Please choose all that apply and provide a comment:

- ☐ Yes
- ☐ Somewhat
- ☐ No

5. Can you name free healthcare centers that you learned about at the health fair and tell us anything that you know about them?

6. At the Bo-Diddley Plaza Health Fair, were you told that you had high blood pressure, high blood glucose or that you are overweight?

Please choose only one of the following:

- ☐ Yes
- ☐ No

7. Since you attended the health fair at Bo-Diddley Plaza, have you visited any of the free clinics you were informed about? If yes, please tell us about which ones and how the experience was. If no, please tell us why not.

8. Which of the following healthcare services would be most useful for your community? Check all that apply and rank your top 3 choices.

Please choose all that apply and provide a comment:

- ☐ Dental Care
- ☐ Eye Care
- ☐ Foot Care (Podiatry)
- ☐ Help getting prescription drugs
- ☐ Help with referral to other specialty (example heart doctor, lung doctor, etc)
- ☐ Mental Health Services

#### **Appendix 4.**

##### **Evaluation Survey**

1. How did you learn about the health fair?

Please choose all that apply:

- ☐ Flyers
- ☐ Friends
- ☐ Project Downtown Volunteers
- ☐ Other:

2. Which screenings/activities did you participate in?

Please choose all that apply:

140 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

- ☐ Blood Pressure Screening
  - ☐ Blood Sugar Check
  - ☐ Mental Health Screening
  - ☐ Substance Abuse Disorder Screening (e.g. drugs, alcohol, etc.)
  - ☐ GRACE Information Table
  - ☐ Needs Assessment Survey
  - ☐ Fair Games and Prizes
3. What other screenings and/or activities would be educational in the future?
4. What did you learn today that you might be able to use?
5. What is your overall opinion of the health fair?
- Please choose all that apply:
- ☐ Excellent
  - ☐ Ok
  - ☐ Bad
6. What would you improve about the fair?

141 Addressing Health Disparities Among Homeless in Alachua County through  
Community-Based Participatory Research  
Hirpa and Iqbal et al.

Appendix 5.

Name \_\_\_\_\_ Clinic Site \_\_\_\_\_ Date \_\_\_\_\_

My Heart Rate today is _____ beats per minute (bpm).	Normal heart is between 60 to 100 bpm. For an adult, a normal resting heart rate ranges from 60 to 100 bpm. For a well-trained athlete, a normal resting heart rate may be as low as 40 to 60 bpm. IN healthy adults, a lower heart rate at rest generally implies more efficient heart function and better cardiovascular fitness. Although, there's a wide range of normal, an unusually high or low heart rate may indicate an underlying problem. Consult your doctor if your resting heart rate is consistently above 100 bpm (tachycardia) or below 60 bpm (bradycardia) – especially if you have other signs or symptoms, such as fainting, dizziness, of shortness of breath. (Source taken from <a href="http://www.mavoclinic.com">www.mavoclinic.com</a> )		
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My height is _____ Inches.	My weight is _____ Pounds (lbs).	My body mass index (BMI) is _____	$BMI = \frac{\text{(weight in pounds)}}{(\text{Height inches}) \times (\text{Height inches})} \times 703$
			Normal BMI = 18.5 - 24.5 Overweight BMI = 24.5 - 29.9 Obese BMI ≥ 30

My Blood Pressure is _____ (Systolic)/ _____ (Diastolic)	Diagnosis (Circle One) Normal Prehypertension Stage One Hypertension Stage Two Hypertension	Systolic Pressure (mmHg) < 120 120 to 139 140 to 159 > 160	Diastolic Pressure (mmHg) < 80 80 to 89 90 to 99 ≥ 100	What should I do now? See a physician within two months See a physician as soon as possible
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Blood pressure is determined by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. The more blood you heart pumps and the narrower your arteries, the higher your blood pressure. **Uncontrolled high blood pressure (hypertension) increases your risk of serious health problem, including heart attack and stroke.**

My Blood Glucose Level is _____ mg/dL (Circle one below)	Non - Fasting Patients Blood Glucose (mg/dl) Normal Less than 199 Elevated 200 or greater Fasting patients Normal 85 – 99 Borderline 100 – 125 Elevated 126 or greater	What should I do now? See a physician as soon as possible See a physician within two months See a physician as soon as possible	Diabetes is diagnosed when blood glucose is consistently elevated or a person with high glucose has unquestionable symptom of diabetes such as increased urination and or increased drinking of fluids.
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Medications: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

Next Visit: \_\_\_\_\_

REFERENCES

- Bryan, C. (2015). *2015 Count of Homeless People in Alachua County in Shelters, Unsheltered, and Identified as Students in Public Schools*. Retrieved from Scribd: <http://www.scribd.com/doc/254737795/2006-2015-Point-In-Time-Counts>
- City of Alachua County. (2005). *City of Gainesville/ Alachua County 10-Year Plan to End Homelessness*. Retrieved from Gainesville Region/Alachua County Empowerment: [http://www.alachuacounty.us/Depts/BOCC/Documents/\[pp.1-58\]GRACECOMPLETE.pdf](http://www.alachuacounty.us/Depts/BOCC/Documents/[pp.1-58]GRACECOMPLETE.pdf)
- City of Gainesville/Alachua County Office on Homelessness. (2013, May 2013). *North Central Florida Continuum of Care 2013 Point In Time Survey*. Retrieved from Helping Hands Clinic, Gainesville: <http://hhcg.org/OtherPages/PointInTimeSurvey05-13.pdf>
- DiPietro, B., Artiga, S., & Gates, A. (2014). *Early Impacts of the Medicaid Expansion for the Homeless Population*. Retrieved from The Henry J. Kaiser Family Foundation: <http://kff.org/uninsured/issue-brief/early-impacts-of-the-medicaid-expansion-for-the-homeless-population/>

- Hecker, E. (2000). FERIA de Salud: Implementation and Evaluation of a Community Wide Health Fair. In *Public Health Nursing* (Vol. 17.4, pp. 247-256).
- Henry, M., Cortes, A., & Morris, S. (2013). *013 Annual Homeless Assessment Report (AHAR) to Congress- Part 1 Point-in-Time Estimates of Homelessness*. Retrieved from United States Department of Housing and Urban Development: <https://www.onecpd.info/resources/documents/AHAR-2013-Part1.pdf>
- Henry, M., Cortes, A., Shivji, A., & Buck, K. (2014). *The 2014 Annual Homeless Assessment Report (AHAR) to Congress*. Retrieved from The U.S. Department of Housing and Urban Development: <https://www.hudexchange.info/resources/documents/2014-AHAR-Part1.pdf>
- National Coalition for the Homeless. (2009). *Healthcare and Homelessness*. Retrieved from National Coalition for the Homeless: <http://www.nationalhomeless.org/factsheets/health.html>
- National Health Care for the Homeless Council. (2011). *Homelessness & Health: What's the Connection?* Retrieved from National Health Care for the Homeless Council: [http://www.nhchc.org/wp-content/uploads/2011/09/Hln\\_health\\_factsheet\\_Jan10.pdf](http://www.nhchc.org/wp-content/uploads/2011/09/Hln_health_factsheet_Jan10.pdf)
- National Health Care for the Homeless Council. (2011). *Homelessness & Health: What's the Connection?* Retrieved from National Health Care for the Homeless Council: [http://www.nhchc.org/wp-content/uploads/2011/09/Hln\\_health\\_factsheet\\_Jan10.pdf](http://www.nhchc.org/wp-content/uploads/2011/09/Hln_health_factsheet_Jan10.pdf)
- National Health Care for the Homeless. (n.d.). *What is the official definition of homelessness?* Retrieved from National Health Care for the Homeless: <https://www.nhchc.org/faq/official-definition-homelessness/>
- The Henry J. Kaiser Family Foundation. (2015). *Medicaid Income Eligibility Limits for Adults as a Percent of the Federal Poverty Level*. Retrieved from The Henry J. Kaiser Family Foundation: <http://kff.org/health-reform/state-indicator/medicaid-income-eligibility-limits-for-adults-as-a-percent-of-the-federal-poverty-level/>
- U.S. Department of Health & Human Services. (2015). *2015 Poverty Guideline*. Retrieved from Office of the Assistant Secretary for Evaluation and Management: <http://aspe.hhs.gov/2015-poverty-guidelines>
- U.S. Department of Housing and Urban Development. (2012). *Linking Housing and Health Care Works for Chronically Homeless Persons*. Retrieved from U.S. Department of Housing and Urban Development: <http://www.huduser.org/portal/periodicals/em/summer12/highlight3.html>
- United States Census Bureau. (n.d.). *Gainesville, FL QuickFacts*. Retrieved from United States Census Bureau: <http://quickfacts.census.gov/qfd/states/12/1225175.html>
- United States Interagency Council on Homelessness. (2013). *Experiencing Chronic Homelessness*. Retrieved from United States Interagency Council on Homelessness: <http://usich.gov/population/chronic>
- University of Florida Admissions. (n.d.). *Stats and Facts for Prospective Students*. Retrieved from University of Florida Admissions: <http://www.admissions.ufl.edu/ufprofile.html>
- University of Michigan School of Public Health. (n.d.). *Community Health Scholars Program Goals and Competencies*. Retrieved from University of Michigan School of Public Health: <http://www.sph.umich.edu/chsp/program/index.shtml>