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**DATE:** September 30<sup>th</sup>, 2016  
**TO:** Charles Kistler, First State Community Action Agency  
**FROM:** Daniel Bausch and David Carroll, APPRISE  
**SUBJECT:** Findings from In-Depth Client Interviews of First State RRHACE Participants

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The purpose of this memo is to furnish First State Community Action Agency (First State) with findings from in-depth client interviews conducted by APPRISE for the Repair Replace Heaters and Conserving Energy (RRHACE) program. APPRISE staff interviewed recent RRHACE participants to ask them about their experience in the program, including their reason for seeking assistance, their recollection of the inspection process, and their interactions with First State staff and subcontractors.

These client interviews are part of a comprehensive Process Evaluation described in the APPRISE memo submitted to First State on 12/21/2015. The purpose of this Process Evaluation is to provide First State and the Delaware Department of Health and Social Services (DHSS) with information to assess whether the program model is meeting the stated objectives, to confirm if protocols and procedures are being successfully implemented, and to identify any barriers to service delivery that need to be addressed through program modifications. This memo is one of several memos providing findings related to the RRHACE program's heating equipment assessment and services.

## I. RRHACE Program Description

The RRHACE program is designed to provide eligible low-income Delaware homeowners with a customized set of free services that match each household's needs. Those services include the following:

- Heating Equipment Assessment and Services – The status of the heating equipment is assessed and equipment is repaired or replaced as needed.
- Healthy Homes Assessment and Services - The status of the housing unit and household are assessed on an array of Healthy Homes indicators and services are provided to address potential hazards in the home.
- LIHEAP Assurance 16 Services – Staff identify opportunities for clients to reduce the amount of energy they use and to improve the household's ability to maintain their energy services.

The core program component of RRHACE is the heating equipment assessment and services. The program process for heating equipment assessment and services is as follows:

1. A homeowner with a broken or malfunctioning main heating system applies for RRHACE services at one of fifteen DHHS State Service Centers. Eligible clients' paperwork is sent to First State.
2. First State reviews the client's paperwork and contacts the client to enroll them in the program and schedule a Site Inspection visit.
3. First State inspectors conduct a Site Inspection at the client's home. The Site Inspection includes an assessment of the heating system, a brief client interview to capture data on household and home characteristics, and the provision of an EcoKit with energy-saving measures. During the Site Inspection, the First State inspectors determine whether a client's heating system will be repaired or replaced, or if the work will be deferred due to substantial problems in the home that prevent work from going forward.
4. If the Site Inspection determines the heating equipment will be repaired or replaced, First State solicits bids from licensed subcontractors who participate in the program. Each subcontractor that is asked to submit a bid is provided with the Site Inspection information and client paperwork. The subcontractors contact the client and schedule a visit to assess the broken or inoperable heating unit and develop a bid.
5. First State reviews subcontractor bids and selects a subcontractor to complete the work.
6. The selected subcontractor contacts the client to schedule a time to complete the heating system repair or replacement work.
7. The selected subcontractor visits the home and completes the heating system repair or replacement work. In addition, programmable thermostats are installed in homes with nonprogrammable thermostats.
8. First State inspectors schedule and complete a Final Inspection visit at the client's home. The Final Inspection includes an assessment of the new or repaired heating system and a brief client interview asking about the client's experience with the subcontractor and their awareness of the work completed. If the Inspector identifies problems or deficiencies with the work, the subcontractor is contacted to rectify the problem prior to receiving payment. If the Inspector determines the work was completed according to the final work scope, the job is considered complete.

This timeframe for the heating equipment assessment and services varies from a few days for emergency crisis situations to several weeks before the work is completed.

## **II. In-Depth Interview Purpose**

One tool to help program evaluators understand how a program is implemented is in-depth interviews with program participants. While information collected on program forms or using formal surveys can provide important data on program participants, in-depth interviews allow independent researchers to get a detailed picture of the experiences and perceptions of a sample of participating clients. In-depth interviews use a semi-structured approach where specific questions and topics are discussed, but the interviewee can elaborate on specific points, and the interviewer can ask customized follow-up questions.

APPRISE conducted in-depth client interviews to help answer the following key questions about the RRHACE heating equipment assessment and services:

- Reasons Clients Apply for Assistance – What are the circumstances that lead homeowners to apply for the program? Have clients' heating systems malfunctioned or become inoperable shortly before participation, or have clients experienced loss of main heat for several months or years? What do clients do to stay warm prior to program intervention?
- Client Characteristics – What are common characteristics of the clients who participate in the program?
- Application, In-Take, and Scheduling – How do clients become aware of the program? Do clients view the application and in-take process as simple and straightforward? What were client experiences with scheduling inspection visits and subcontractor visits?
- Site Inspection Visits – Do clients understand what was done during the initial site inspection? Did the inspectors describe their findings and communicate next steps to the client?
- Heating Equipment Repair and Replacement – Are clients aware of the work that took place? Did the subcontractor provide the client with information about the work? Did the subcontractors explain how to properly maintain and monitor the heating equipment? Have clients experienced any problems since the repair or replacement took place?
- Final Inspection Visits – Do clients understand and recall what was done during the Final Inspection?
- Interactions with First State – Were First State staff interactions with clients characterized by professionalism, courtesy, and respect?
- Interactions with Subcontractors – Did subcontractors conduct their work with professionalism and courtesy?
- Perceptions of Program Outcomes – Do clients report changes in their energy bills after receiving program services? Have clients perceived improvements in their health, comfort, or safety? What do clients believe was the biggest benefit of the program? What do clients believe they would have done absent the program?
- Overall Satisfaction – Are clients satisfied with the program process and outcomes? What do clients believe can be done to improve the program?

### **III. RRHACE In-Depth Interview Approach**

APPRISE worked with First State staff to select clients for the in-depth interviews as follows:

1. APPRISE reviewed the full list of program participants. APPRISE randomly selected three clients that had work completed and invoiced in late 2015 and who were not identified as crisis clients designated as Code Red or Code Purple.

2. First State selected three additional clients that were designated as crisis clients and had work completed and invoiced in late 2015.

Although the six selected clients received program services during approximately the same time period, the clients varied in county of residence, type of services received (repair or replacement), main heating fuel, and client type (crisis or regular).

- County – One client was from Sussex County, three were from Kent County, and two were from New Castle County.
- Type of Services Received – Four clients received new heating systems and two received heating system repair work.
- Main Heating Fuel – Three clients used natural gas, one client used oil, one client used propane, and one client used electric main heat.
- Client Type – Three clients were designated as crisis clients in an emergency situation, while three were regular assistance clients.

Once the six clients were selected, First State staff sent APPRISE scanned forms for all six clients in order to prepare for conducting the interviews. Prior to the interviews, First State called the clients to explain the research effort, to encourage participation, and to notify them that APPRISE Senior Policy Analyst Daniel Bausch would be calling.

Mr. Bausch began calling the clients on April 7, 2016 to schedule a phone interview. Clients were called between 9 AM and 5 PM, making multiple attempts and leaving messages on every other attempt.

Interviews were completed with all six targeted clients. Interviews were completed using an Interview Guide that included topics and questions to structure and direct the interview. Interviews were recorded with respondent approval. Interviews took place between April 7, 2016 and April 22, 2016. The average interview length was approximately 23 minutes.

Following the interviews, APPRISE staff reviewed the interview notes and recordings and drafted interview summaries.

#### **IV. In-Depth Interview Findings**

This section provides a summary of the findings from the in-depth client interviews.

##### **Reasons Clients Apply for Assistance**

- Three of the six clients had inoperable or malfunctioning heating equipment for more than six months. These clients indicated having an inability to pay for heating equipment repairs or new heating units at the time the problem first occurred, and each mentioned substantial efforts to find potential sources of assistance.
- Four of the six clients mentioned concerns about the safety of their household due to the risk of fire from malfunctioning heating equipment, space heaters, or the use of the fireplace or stove to heat their home. One of these clients said flames came out of her malfunctioning heating unit prior to a contractor disconnecting the unit from the combustible fuel source.

- Two clients mentioned concern for their health as a motivating factor for seeking assistance. Both have chronic breathing diseases, and one has other substantial medical issues. One of these clients said “I was afraid of ending up in the hospital”.
- Clients reported using the following supplemental heat sources to stay warm after their primary heating equipment failed.
  - All six clients said they used room space heaters.
  - One client mentioned using the fireplace.
  - One client reported using the kitchen stove.
- One client reported that a pipe at the extremity of her home burst after the heating unit failed.
- One client who had experienced problems with the heating system for several years and reported having a chronic breathing disease mentioned the presence of a musty odor due to mildew in her heating vents. She described dropping disinfectant down the vents to address this problem.

#### Client Characteristics

- Interviewed clients varied in the number of members and the composition of their households.
  - Two clients had families with multiple young children. One of these clients was a working single mother who had recently purchased her home.
  - One client lived with another adult in the home.
  - Three clients lived alone.
- Two clients reported being senior citizens on fixed incomes. Three clients mentioned being employed during their program participation.
- Five of the six clients indicated they have received bill payment assistance or weatherization services prior to participating in RRHACE.

#### Client Application, In-Take, and Scheduling

- Clients varied in their prior awareness of the RRHACE program and in how they heard about program services.
  - Two clients were aware of the program prior to their heating equipment failure. One client was aware of the program through her job, while the other was aware of the program due to participation in First State’s Summer Cooling Assistance Program.
  - One client contacted Catholic Charities for assistance and was referred to the program.

- One client called Delaware 2-1-1 for assistance and was referred to the program.
- One client visited a State Service Center for help and learned about the program.
- One client was told about the program by job contacts.
- All six clients indicated that the program application process was simple, fast, and not burdensome.
- Clients reported differing experiences with scheduling.
  - Three clients said scheduling was fairly easy and quick.
  - Two clients mentioned First State and the subcontractors were flexible and worked to accommodate their schedules.
    - One client reported that visits were scheduled around his work schedule.
    - One client said scheduling “was very easy. I gave them a timeframe that I would be available and they didn’t have a problem with it”.
  - One client reported that scheduling was problematic. The client reported “there was no scheduling at all...[First State] told me they will pop in when they are finished from one place to the other. There wasn’t even a timeframe”.

#### Site Inspection Visits

- All six clients remembered the Site Inspection visit. In general, clients recalled the inspectors visually examining the heating system, attempting to turn the heating unit on, checking for gas leaks (if applicable), taking pictures of the unit, asking questions, and discussing the next steps.
- Five of the six clients recalled receiving the EcoKit measures and using at least some of the measures. One client reported installing and using all of the EcoKit measures. Three clients mentioned First State inspectors installing measures or asking if the client would like measures installed, including faucet aerators and light bulbs.

#### Heating Equipment Repair and Replacement

- All six clients recalled the subcontractor visits and the heating equipment repair or replacement work.
- One client indicated concern with the amount of time between the inspection and the subcontractor bid visits. “I kept bugging [First State] and calling them for someone to come out and do an estimate [for the work] until they did it”.
- One client mentioned scheduling visits with the subcontractors was challenging. “The process took a while...the third company took a while before [they called and we scheduled] and they came out”.

- All six clients reported that the repair or replacement work was completed by the subcontractor in one day, often in a few hours. Clients reported the work was done in a timely manner.
- All six clients reported that the subcontractors cleaned up after the work was completed.
- Three of the four clients that received a new heating system indicated they received the heating system manual from the subcontractor. One did not recall receiving this.
- One of the four clients that received a new heating system remembered receiving warranty information from the subcontractor. Three of the four clients indicated they had no recollection of receiving warranty information.
- One client that received heating system repairs reported that the subcontractor staff mentioned providing a new filter, but never returned to provide this.

#### Final Inspection Visits

- All six clients remembered the Final Inspection visit. In general, clients recalled the inspectors visually examining the heating system, checking for gas leaks (if applicable), taking pictures of the unit, and asking about the client's satisfaction with the repair or replacement work.
- Clients generally reported that the Final Inspection took place a few days or a week later. One client said the visit occurred a few weeks after the subcontractor work was completed.

#### Interactions with First State

- All six clients reported positive interactions with First State inspectors and staff. One client said he felt "included and involved". Another mentioned the inspectors were "explanatory and gentlemen-like...I felt safe and comfortable".

#### Interactions with Subcontractors

- All six clients reported positive interactions with the subcontractors that examined their heating equipment and conducted the repair or replacement. Clients indicated subcontractor staff were courteous, professional, and efficient.

#### Perceptions of Program Outcomes

- Three clients reported lower heating bills as a result of participating in the program, one client said she anticipated lower heating bills next winter, one client reported expecting higher bills next winter due to the repair of her broken heating system, and one client said it was too soon to tell.
- One of the three clients who reported lower bills said that there was a 90% difference in costs since the heating system was replaced.
- All six clients mentioned improved comfort due to restored heat. Two clients also said the new heating unit was quieter than the old unit.



- The client who experienced a musty smell from mildew reported that the smell ceased and the mildew issue was resolved following the program's interventions.
- When asked what the biggest benefit of the program was, clients reported various benefits, including the following:
  - Keeping my family comfortable in the winter
  - Helping older residents
  - Helping seniors who cannot afford large bills
  - Resolving the problem in a timely manner
  - Providing heat to people who cannot afford repairs and helping them to stop using dangerous space heaters
  - Providing a free program and First State's very nice and efficient staff.
- Clients provided important information about what they believe they would have done without the program's assistance.
  - Three clients said they believed they would have continued to use space heaters or other supplemental heat sources as their primary source of heat.
  - One client said she would have continued to search for assistance from other programs.
  - One client said "I don't have any help with my age...I don't know what [else] I was going to do".
  - One client said that she would have left her home without the program. "I would have had to leave the house because I couldn't afford [to replace the heating unit]".

#### Overall Satisfaction

- All six clients reported overall satisfaction from their participation in the program. Clients were enthusiastic about the program, indicated they would tell others about the program, and expressed gratitude for the services they received.
- Two clients provided recommendations for improving the program.
  - One client said an expedited process for subcontractors to provide bids for the work would make the program faster.
  - Another client said that the program should improve the scheduling process by providing a more limited time window for when visits and inspections might occur, improving customer experience.



## **V. Recommendations**

Although the client in-depth interviews were only conducted with six clients and are not representative of the RRHACE participant population, the interview findings provide important insight into participant program experiences and perceptions of RRHACE. This section presents recommendations based upon the in-depth client interview findings.

1. Several interviewed clients indicated that they experienced a long-term disruption in their heating, but they were unaware of the RRHACE program until recently. First State should continue to raise awareness of RRHACE via the DHSS State Service Centers, working with partner organizations, and conducting outreach activities to reach eligible low-income homeowners.
2. The small sample of clients that were interviewed reported a variety of different organizations that referred them to RRHACE. This finding shows that a network of referral organizations is important for ensuring that all different types of clients are reached and provided with the opportunity to participate. First State should build off of current success by continuing to broaden the network of program partners that share information about the program. Particularly, First State should seek out organizations that serve vulnerable populations and operate in areas that do not currently have strong representation in the program.
3. Generally, clients reported no specific issues with communicating with First State and subcontractors to schedule visits. But, this process of scheduling multiple visits can be time-consuming and logistically challenging, as one client indicated and as one subcontractor separately reported during subcontractor in-depth interviews. First State should investigate the option of potentially coordinating visits, such as by scheduling the Site Inspection visit and the subcontractor bid visits for the same morning or afternoon. This approach could reduce the burden on respondents and lower program costs for First State and the subcontractors.
4. One client expressed dissatisfaction with the scheduling of inspections due to large time windows and visits at unexpected times. First State should work to improve the scheduling process for inspection visits. This should include the goal of providing all clients with a two to three hour time window for when the inspectors may arrive, as well as providing reminder notifications.
5. Clients showed a high level of appreciation and satisfaction with First State staff, subcontractor personnel, and their overall program experience. But, clients did provide information indicating program procedures may not be uniformly implemented and program services could be improved. First State should seek to build upon the existing accomplishments of the program by working with the inspectors and subcontractors to ensure that procedures are consistently followed and all clients receive comprehensive program services.