Utah Asthma Healthy Homes Program Evaluation

Prepared by:

Holly Uphold, PhD, Utah Asthma Program Epidemiologist

with help from

Kellie Baxter, BS, Utah Asthma Program Health Program Specialist

Tiffany Brinton, BS, CHES, Salt Lake County Asthma Program Coordinator

Andrea M. Jensen, CHES, AE-C, Utah County Asthma Program Coordinator

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Executive Summary

Asthma is an important public health issue in Utah. In Utah, 8.7% (1) of adults and 6.4% (1) of children currently have asthma. An estimated $31.6 million was charged for asthma-related emergency department visits and hospitalizations in Utah during 2014 (1).

Multi-component asthma home visiting programs can help to address the asthma burden by providing asthma self-management and in-home trigger reduction education, while also facilitating linkages to the healthcare system, schools, and/or home remediation services.

This evaluation utilizes data from various sources to provide a clear picture of the Utah Asthma Home Visiting Program (UAHVP). The purpose of this evaluation was to examine the current status of the UAHVP and determine fidelity to program implementation and sustainability of the program. The Utah Asthma Program is also required to collect data for performance measures as stated by the grant that funds the UAHVP, therefore, another purpose of the evaluation was to ensure that all necessary data was being collected in an efficient way.

Key Findings

Data

- All necessary data is being collected, and most records were complete. There were no obvious patterns of missing data.
- Data collection and participant tracking processes varied between asthma program coordinators (APCs).
- Data collection tools are easy to use and understand. Formats were clear, and data reporting processes were easy and did not consume too much time.

Program Effectiveness

- Both APCs and program participants feel the program has been very beneficial.
- There were increases in test scores from pre- to post- tests in asthma knowledge.
- Recruiting participants and clinics from target areas has proved to be difficult.
- Incentives may have a small impact on program intake and retention.
- Medication content is the most beneficial education component.

Barriers to Implementation

- Scheduling appointments.
- Contacting participants for follow-ups.
- Getting correct information from participants.
- Trigger assessment may make participants feels criticized.
- Physical and social barriers that keep participants from implementing program.

Partners

- Additional LHD partner funding sources, program focus, program criteria, and leadership focus are important factors in having a successful partnership.
- Clinics are easiest to work with when: they approach APCs, APCs work with "someone high up," or have previously worked with the UAP.
- Barriers to working with health care clinics include extra time and work to get consent forms.
- Non-clinic partners have produced many referrals.
- School referrals have been low because most students do not have severe enough asthma to qualify for the UAHVP.

Customer Satisfaction Survey Results

- 94% of participants reported being completely satisfied with the program.
- About 81% of participants were completely comfortable with having a home visitor in their home.
- About 56% of participants reported referring to program materials all the time.
- More than 80% of participants "strongly agreed" that each visit greatly increased their ability to manage their asthma.

Recommendations

This evaluation had many recommendations; the more significant ones are listed below. Please see report for a full list of recommendations.

- Work with UAP staff, local health districts (LHDs), and partners to create a plan to address data collection, reporting, and tracking issues.
- Incorporate an in-depth review of medications into visit 3.
- Create a spiral bound "trainer" book with color-coded forms in order of visit with instructions on how to fill out the form and a script for APCs to use.
- Work with APCs to create a referral plan for schools.
- Create a protocol for collecting and updating participant information on a regular basis.
- Work with APCs to develop a plan to address social issues.
- Ensure that partners/APCs work with the highest administrative level.
- APCs should continue to provide incentives to participants, including mattress/pillow covers.
- Continue to monitor participant satisfaction and make adjustments to the program as needed.

Introduction

Asthma is an important public health issue in Utah. In Utah, 8.7% (1) of adults and 6.4% (1) of children currently have asthma. Additionally, the median cost per asthma related hospitalization charges in Utah have steadily increased from 2004 (about $4,500) to 2013 (about $9,800) (1). An estimated $31.6 million was charged for asthma-related emergency department (ED) visits and hospitalizations in Utah during 2014 (1). In order to improve asthma management and reduce costs, partners must work together to identify populations with a large asthma burden and address barriers such as lack of access to care, poor housing conditions, lack of knowledge about asthma, proper medical care, and the benefits of asthma management.

Multi-component asthma home visiting programs can begin to address barriers to care by providing asthma self-management and in-home trigger reduction education, while also facilitating linkages to the healthcare system, schools, and/or home remediation services. The Utah Asthma Program (UAP) and partners, Salt Lake County (SLC) and Utah County Local Health Districts (LHDs), created a Utah specific multi-component home visiting program called the Utah Asthma Home Visiting Program (UAHVP). They reviewed programs from other states and completed a comprehensive literature review. They used the National Asthma Education and Prevention Program (NAEPP) as a guide to ensure that the program included comprehensive asthma management strategies. The workgroup determined the number of visits and the content for each visit. Program materials were formatted by the UAP and shared with LHDs who are currently being funded to implement the program in their areas.

Each month the UAP health program specialist (HPS) meets with the LHD asthma program coordinators (APCs) to discuss successes, barriers, and changes needed to make the program more efficient and effective. There are still several program elements in the development process. These include a cultural competency plan and a trainer manual for future UAHVP implementers.

Creating and implementing the UAHVP has been an iterative process. Several issues have surfaced throughout the implementation process; however, good communication and involvement from stakeholders has helped create timely and effective solutions.

Utah Asthma Home Visiting Program (UAHVP)

The UAHVP is a free program that offers in-home asthma education and trigger reduction services. There are three in-home visits over a period of four months which consist of comprehensive asthma management as defined by the NAEPP. Each visit is conducted by two APCs (preferably one that can speak Spanish) and lasts about 60 to 90 minutes, and there are two follow-up calls at six and 12 months. The UAHVP is currently only offered to individuals living in Utah County and Salt Lake County. Additionally, only those that have been diagnosed with persistent, not well-controlled asthma based on NAEPP guidelines are eligible for the program. However, if a potential participant does not have poorly controlled asthma as defined by his/her asthma control test (ACT) score then he/she may still be eligible for the program if they have had one emergency department (ED) visit, hospitalization, urgent care visit, or oral steroid use in the past 12 months.

Participants receive $50 gift cards ($10 for each call/visit). They also receive a pillow and mattress cover. The $50 gift cards are temporary incentives that were left over from a previous project. There are currently no plans to continue the monetary incentives; however, each APC gets $1,000 per year to buy pillow and mattress covers.

See the UAHP implementation timeline in Figure 1 and logic model in Appendix A.

Figure 1.

Evaluation Purpose

The purpose of this evaluation was to examine the current status of the UAHVP and determine fidelity to program implementation and sustainability in order to pave the way for the development of a business case, data collection for performance measures (PMs), future evaluations, and program expansion. The UAP will use the findings from this evaluation to streamline program processes and data collection methods and ensure effectiveness and sustainability.

Methods

An evaluation group which consisted of the UAP epidemiologist, UAHVP HPS, and LHD APCs worked together to create the evaluation plan. The evaluation was carried out using a mixed methods design in order to enhance the validity of evaluation findings and to help develop questions for the key informant interviews. The quantitative data analyses included primarily descriptive statistics. The qualitative data was analyzed for common themes. Quantitative data from program participants was used to help formulate questions about recruiting participants.

Evaluation Questions

1. To what extent do program materials, processes, and resources address performance measures (PMs) and asthma management?

2. Is the process for collecting and reporting data efficient and effective?

3. To what extent has the program been implemented as planned?

4. What methods have been successful in identifying and referring participants?

Data Collection

Data collection methods included: key informant interviews, document reviews, the Asthma-call Back Survey (ACBS), customer service surveys, and UAHVP participant data. The key informant interviews were moderated by the UAP epidemiologist and each interview was done separately and in person with each LHD APC. The document review included all documents used to administer the UAHVP and documents used to guide the implementation of the program. The ACBS is a survey that is conducted annually and assesses several components of asthma, including asthma control and asthma symptoms. The ACBS sample is representative of adults and children in Utah with asthma. The customer service surveys are anonymous surveys given to the UAHVP participants at the end of each visit. The participants are left alone to fill out the survey which is then placed in a sealed envelope and given back to the APC. The UAHVP data consists of data collected throughout varies stages of the program and includes an asthma knowledge test, an asthma control test, assessments on how to use inhalers and spacers, demographic information, home trigger assessments, and asthma control indicators like emergency department (ED) visits in the past 12 months.

Data Analysis

The key informant interviews were analyzed using Bryman's Four Stages of Coding to identify themes. Additionally, the evaluation questions were used to guide the development of themes in the key informant interviews and analyze the program content. ***The themes/findings are highlighted in orange throughout this report.*** A public health information specialist from the Violence Injury and Prevention Program examined the program documents and gave feedback on the design and usability of each document. The quantitative data from the ACBS, customer service surveys, and the UAHVP data were analyzed using SAS and Excel.

Results

To what extent do program materials, processes, and resources address performance measures and asthma management?

Performance measures are important because they are one method used to measure the UAP program progress. Additionally, the UAP is required to report yearly performance measures to the Centers for Disease Control and Prevention (CDC). Certain data elements must be collected in order to calculate performance measures per CDC definitions. These data elements include demographic data and measurements of asthma management like asthma control tests (ACTs), ED visits, access to health care, asthma knowledge, etc.

Program materials and processes were created to collect data for performance measures and to measure program processes. The data collection process begins by collecting data via paper form from the program participant in their home. The APC then reports required data (they do not report identifiable information) by entering information into an online survey generated by Survey Monkey. The UAP can then access the data via Survey Monkey.

Performance measure data collection processes and quality

The UAHVP data was assessed to determine if all the necessary data was being collected to calculate performance measures. This included calculating performance measures using the UAHVP data and CDC performance measure (PM) Definitions. ***All necessary data is being collected and the UAP should be able to report on all required CDC PMs***.

Data completeness was also assessed and it was found that ***most records were complete*** meaning that program participants had most of their data from each data collection point (intakes, visit 1 PMs, pretest, visit 2, visit 3 PMs, posttest). There were ***no obvious patterns or significant numbers of missing data***. Although the data was complete, ***the format made it difficult to analyze***.

The data was difficult to analyze in Survey Monkey because each form or visit exports into a separate Excel sheet. Inconsistent participant IDs made it difficult to match participants across visits. APCs said that ***having separate forms for data entry was easiest***. However, the UAP and partners should reevaluate the data collection process. One possibility would be to allow APCs access to previously submitted data so they can change and update participant information as they move through the program.

Other ways to make data analysis easier would be to make some adjustments to the assignment of participant IDs. ***The system for assigning participant IDs is complex*** and with a growing number of participants it will make merging the data difficult. Currently, the participant ID consists of an SL for Salt Lake County participants and a UC for Utah County, the year, the participant number, a letter if there are multiple family members, and GHHI (Green and Healthy Homes Initiative) or DO if the participant was referred to GHHI or dropped out of the program. It would be more efficient to enter most of this

information into a separate data entry space rather than in the participant ID. There will be fewer chances for errors making data merging easier. It will also make it easier to identify participants by these characteristics.

While analyzing the data it became clear that some data could be reported in a more useable format. ***The answer for each pre/post asthma knowledge question was being reported yet no overall score was calculated/reported.*** It would be more efficient if only the score was recorded for the asthma knowledge quiz rather than the answer to each question. However, data related to each specific question could still be used to assess the difficultly, usability, and validity of the pre and post test questions.

There are several additional data elements that should be considered during data collection in Survey Monkey. There is an ***extensive amount of data being collected (via paper forms)*** on home triggers and modifications but these items are ***not being recorded in Survey Monkey***. The specific utility of this information would need to be determined before time is spent entering the data; however, it may be useful to know which triggers are commonly reported in participant homes. This information could be used to identify the most prevalent asthma triggers and identify areas where more or less funding would be needed to address these triggers with things like pillow and mattress covers. Finally, participant qualification status is collected but ***enrollment status is not***. Enrollment status and why enrollment was declined by the participant would be useful for identifying possible issues with the referral system or barriers to program implementation.

Program Content

The majority of the UAHVP ***content and tools came from peer-reviewed information, validated information, or from the CDC***. Kellie Baxter, Health Program Specialist for the UAP, was the lead in creating the home visiting program materials. She received regular input from stakeholders including APCs, the UAP epidemiologist, UAP staff, and other home visiting partners. The asthma education flip chart was created from materials acquired from other states and organizations doing successful home visiting programs. Furthermore, partner input was used to select the components of the UAHVP flip chart, participant workbook, and in-home assessments all while ensuring that the NAEPP educational guidelines were met. Additionally, the asthma control test (ACT) is a validated, widely-used test. The knowledge gain test (pre/post format) was constructed from a literature review and from previous Utah knowledge gain tests.

Each APC is using the same program content. However, one LHD created a PowerPoint of asthma triggers (in both English and Spanish) to show before the walk through during the visit 2 home assessment. The PowerPoint contains information on what asthma triggers are, what they look like, where to find them, and how to remediate or avoid them. The APC said that the PowerPoint "makes a good introduction to the (home) assessment, which is good because it (the home assessment) can be perceived as intrusive." The PowerPoint helps build the rapport between the APC and program participant before the home walkthrough. This is a great resource that should be shared with other partners implementing the UAHVP.

APCs found the medication content of the program the most beneficial because most participants have "a severe lack of medication knowledge." One APC reported that a "participant noticed a big difference now that she is using her spacer. She also noticed a difference in making sure she waits one minute between puffs. She felt like more of the medicine from the second puff made it to her lungs." An in-depth review of medications should be a permanent component of visit 1 and visit 3 because the medication content has been so beneficial and most participants lack initial knowledge. Additionally, each household should receive a medication chart listing the different types and kinds of medications. A free one can be found at http://www.health.state.mn.us/asthma/documents/MedsLetterSized.pdf .

Program Effectiveness

Overall, APCs and program participants ***felt that the program has been very beneficial.*** One APC noted that participants, "really enjoy seeing the increase in the ACT score after the 3rd visit" and "when a participant sees a change it can motivate them to keep implementing the change."

Several participants were quoted as saying their quality of life had significantly improved since participating in the program:

- "Since we started the program, our daughter's asthma problems have drastically reduced."
- "His asthma is the best it's ever been in the 16 years we have been married!"
- "Now, he sleeps through the night and is feeling much better."

Program effectiveness as reported in the APC home visiting notes:

- "The family recently all became sick with bronchitis and the mom was worried that the son would be back in the emergency department at least once or twice with his asthma symptoms (which is what usually happened.) She was shocked that he did not get sick. While they were in the house and miserable, she said he was outside jumping on the trampoline. She couldn't believe it! "
- "She said she loved the asthma home visiting program so much that she was trying to figure out who else she knew that had asthma and could refer to the program."
- "Overall, she is happy that she has made changes and is feeling better and more in control!"

In addition to self-reported improvements, ***the Program was also effective in increasing asthma knowledge***. About, 74% of participants had an increase in their asthma knowledge score from the pretest to the posttest. Of those who had an increase, all had an increase of 20% or more.

Are the processes for tracking, collecting, and reporting data efficient and effective?

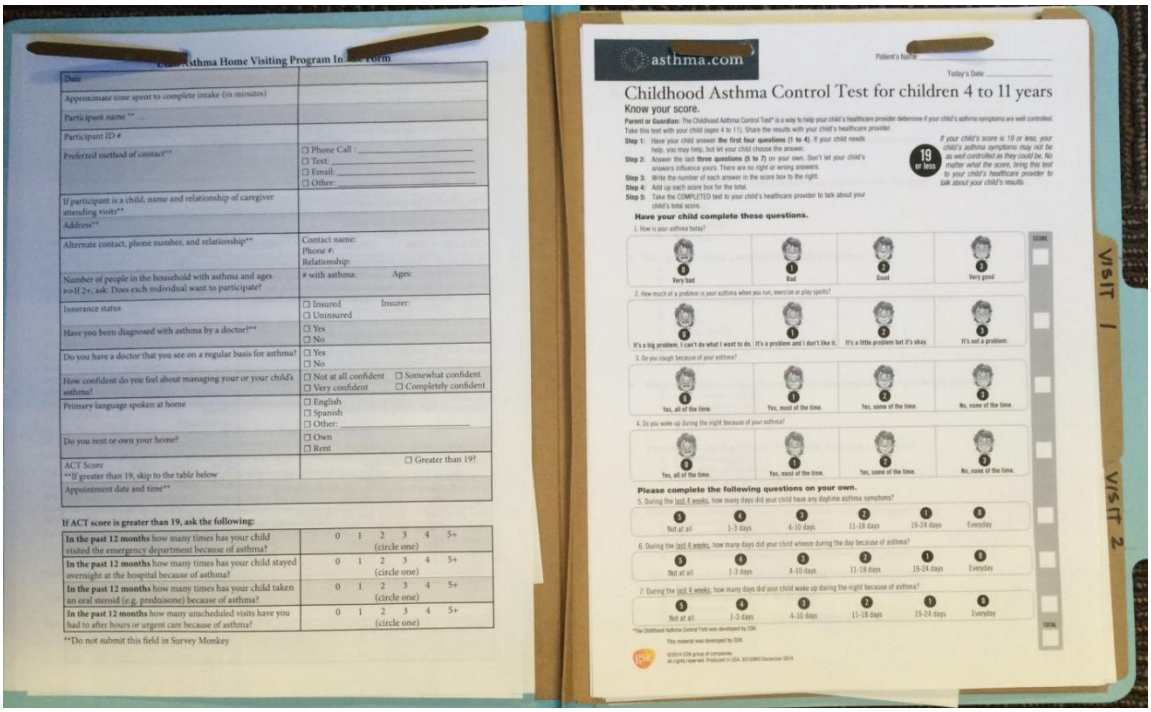
Each APC was given full autonomy in creating the processes for tracking and reporting their data. However, each APC is required to use the UAP data collection forms and submit their data into Survey Monkey. APCs can enter data into Survey Monkey at their convenience.

Data Collection Processes

APCs reported different processes for collecting the data. APC1 has a different folder for each participant. The forms are clipped in by the order of the visit and then by the order of data collection that happens during the visit (Figure 2). She reported that "it gets complicated because you have to take out the paper and turn it around then papers start falling on the floor…it's just hard to keep track of."

It was also mentioned that ***data can be difficult to collect*** because "it's in so many different places- some forms are hard to use." Some forms are hard to use because they switch back and forth between data that needs to be reported by the APC (i.e. was referred to a specialist) and data that comes from the participant (i.e. ACT, address, etc.). She said "I can't just read down the list of questions on a form, you have to skip around and really think about what you're asking". She has begun highlighting the questions that the participant needs to report. Overall, she said that her ***system "works ok" but there is room for improvement.***

Figure 2.



APC2 has a similar process for collecting data. She sorts the data collection sheets by visit, but instead of clip folders she uses manila envelopes. She reported that her process ***"works great"*** and ***"the key is having papers organized onto clipboards and ready to go before the visit."*** Additionally, she has the other APC ready to hand her forms as they move through the material. She reported that ***"having two people is key."***

APCs should work together to incorporate forms quickly and easily into the home visit to improve data collection efficiency. Not only does this keep the visit moving along smoothly but it also keeps both APCs actively involved in the visit. The UAP UAHVP HPS should document this process for other partners including the APC1 to implement in future.

The APCs and the Violence Injury and Prevention Program (VIPP) public information specialist had the following suggestions to improve recording the data:

- Compile the participant information into one section- make the distinction more obvious between information that the APC can fill out and what needs to be collected from the participant.
- Create a spiral bounded book with color-coded forms in order of visit and data collection with instructions on how to fill out the form and what to say about it (see Figure 3 for an example).
- If a book is not feasible, then combine forms into one PDF in order of visit. This will keep APCs from having to open and print multiple documents.
- Number the documents in order of visit so it is easy to distinguish if one is missing.
- Label/title all the forms clearly and concisely (the ACT is missing a title).
- Create a checklist that ensures all important data is collected. Have it reference where the data should be collected (e.g. the ACT score is found on page 1).

Figure 3. is an example taken from Stephanie Evergreen's blog post, "How to create an award winning report" (3). A tiny colored dot is placed next to each major chapter of the report. This color codes the content making it easier to distingiush between sections throughout the report. This type of format could be used to create a workbook for each particpaint.

Figure 3.

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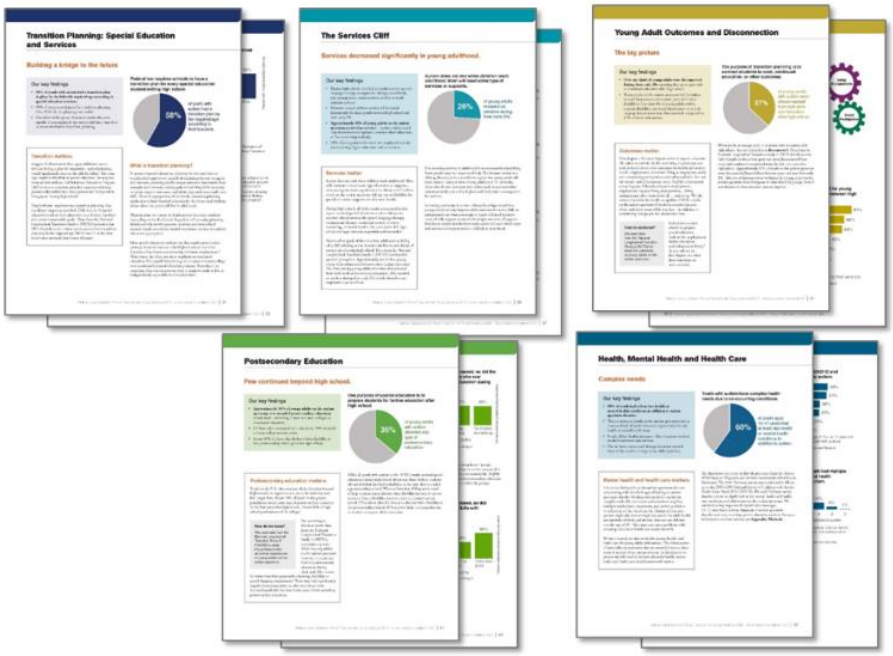
Color-coded dots and corresponding section headings



There was one data collection process that varied between APCs. The ACT is administered during the intake to determine eligibility for the program and is administered again at visit 1 to be compared to the visit 3 ACT. One APC pointed out that doing the ACT at intake and during visit 1 was unnecessary because the time between the intake call and 1st visit is too short to capture any changes. Therefore, she reported only doing the ACT at visit 1 if the visit was scheduled for more than a week after the intake. This process should be clarified and written into the procedures for implementing the program.

Participant Tracking

Tracking participant data is important because the data collection process is complex. There is a substantial amount of data required for each program participant and this data is collected at different times throughout the program. ***Each APC had a different but similar technique for tracking participant data collection and participation (i.e. completed visit 1, needs a follow-up call, etc.)*** Each used an Excel spreadsheet with the participant names and data status. They both used colors to identify which visits had been completed and what information was missing.

Participant tracking was reported to be one of the more difficult parts of program implementation. One APC reported that "even using Excel to track participants is hard because you have to scroll through pages and pages and know what you are looking for." Additionally, "it's hard to keep track of people, especially those who cancel last minute and need to reschedule." One APC used her calendar reminders to alert her to call or follow-up with someone. When asked what the hardest part of tracking participants was, she said, "***The hardest part is keeping track of the people you are waiting on things for.***" It is easy to forget about a participant while waiting for them to return a call or schedule a follow-up visit.

The UAHVP HPS has researched participant tracking software but was unable to find an affordable option that fits the needs of the program. A simple and easy participant tracking process should be created so that all APCs are tracking participants the same way. It will become increasingly difficult to keep track of participant information as the UAHVP expands. Using a modified version of Excel as provided by an APC, (see Figure 4.) could be used to track program participants. However, a process should be standardized for tracking participants and their data even if it is only Excel. The APCs and the UAHVP HSP should create and record this process.

Figure 4.

Track data needed for each participant at each visit.

Track participation

Declined/ Not Eligible			Completed Prog
Participant ID	**Visit 1**		
	Data Collected	**Visit Status**	**Enterted into Survey Monkey**
A	ACT [] Knowledge Quiz [] SAAM [] Customer Satisfaction Survey [] PM Sheet [] Time tracked []	Completed [] Reschuled []: X/X/XX at X:XX. Updated calendar [] Cancelled []	NA
B	ACT Knowledge Quiz SAAM Customer Satisfaction Survey PMs	Yes	Yes
C	ACT Knowledge Quiz SAAM Customer Satisfaction Survey PMs	Yes	Yes
	ACT Knowledge Quiz SAAM Customer Satisfaction Survey PM	NA	

Data collection tools

The APCs were asked how they felt about each of the data collection tools and if there was anything that stood out as especially difficult or easy. It was mentioned again ***that the information required from the APC and the information required from the participant needs to be more distinct and separate.*** It was also mentioned that using the ***Excel spreadsheet and toggling back and forth for reporting return on investment (ROI) data was difficult***, and perhaps a paper copy would be easier to use. Additionally, it was mentioned that ***keeping track of ROI data*** like time spent at each visit, calling people, following up, and tracking miles, copies, and incentives ***was "tedious and difficult"***; "it's the little miscellaneous things

that are hard to keep track of. What do I count and what don't I count?" The UAP should reassess how to collect this data and when this data is no longer needed.

Overall, both APCs said ***the data collection tools were easy to use and understand*** and that the ***formats were clear***. ***However, there were some suggestions from APCs to improve some of the tools.*** These included:

- Put the five different self-administration of asthma medication checklists (SAAMs) on their own piece of paper (both APCs had this suggestion).
- For participants that cannot read well, it can be time consuming to read the knowledge quiz to them. The UAHVP HPS and funded LHDs should work together to address this issue.
- Cut out/down the instructions at the top of the ACT because nobody reads them and make room for more important information like name, participant ID, and date.
- Add a place on visit 1 to record if a participant has an asthma action plan and/or an inhaler.

The validity and reliability of the data collection tools should be assessed, particularly those which have not had any prior validity and/or relatability testing. This includes materials created by the UAP like the asthma knowledge test and the home trigger assessment form. One APC mentioned that even with education just prior to the post asthma knowledge quiz "they always miss the medication questions." These questions include content about the physiological reactions of an asthma attack and what types of medications affect each of these reactions (see Figure 5). This is difficult information and perhaps these questions could be changed to assess self-monitoring knowledge since this is an important component of self-management education. Sarah Gill, CDC Asthma Evaluator, provided some examples of these types of questions that address asthma action plans and modified versions of these questions can be found in Figure 6.

Figure 5. Commonly missed questions (answers are highlighted)

1. What do quick-relief medications do for your body? (circle only <u>one</u> answer)
    a. Neutralizes or reduces acid in the stomach
    b. Reduces inflammation in the airways
    c. Reduces pain
    d. Reduces muscle constriction around the bronchi and bronchioles

2. What do controller medications do for your body? (circle only <u>one</u> answer)
    a. Neutralizes or reduces acid in the stomach
    b. Reduces inflammation in the airways
    c. Reduces pain
    d. Reverses muscle constriction around the bronchi and bronchioles

These questions can also be used to start a conversation about personalized asthma self-management.

Figure 6. Examples of Asthma Action Plan Questions

1. What happens when you're in the green/yellow/red zone?
2. What steps do you take when you're in the green/yellow/red zone?
3. Why is it important to have an AAP? Who should have copies of your AAP? How often should you get a new AAP/have it reviewed by your doctor?

Data Reporting

APCs were asked about the ease of submitting data, and both mentioned that the ***process was easy and did not consume too much time.*** The process for data reporting includes the following: each APC collects the data (ACT, PMs, demographic info., etc.) via paper and pencil at each visit. The data is then entered into Survey Monkey (without identifiable information) where the UAP staff can then access the data.

Each APC has a different timeline for entering the data into Survey Monkey. One APC keeps the participant folders in a lockbox until they "start to pile up" and will then enter the information into Survey Monkey. She also spends time after each visit cleaning up the folders and ensuring that all the data has been collected. In comparison, the other APC will enter the data after each visit. Each APC should continue with the process that works best for them; however, there may be times when data needs to be up-to-date in Survey Monkey. This may happen when the UAP needs to report on CDC PMs. Open communication between UAHVP partners and the UAP is important for ensuring that data is updated as needed. Additionally, as one APC said in relation to data entry, "routine is key." Having a routine will help to ensure that data is not lost before data entry.

To what extent has the program been implemented as planned?

Target Areas

One goal of program implementation was to target high asthma burden areas. The criterion for success was to have 80% of participants from targeted areas. Each APC selected their target areas (e.g. zip codes) within their LHD based on asthma data that demonstrated a high asthma burden. ***Recruiting***

participants specifically from target areas has proved difficult due to challenges in recruiting, referrals, and clinic partnerships (to be discussed in the following section).

From August 2015 to July 2016, one APC had enrolled 23 participants and the other had enrolled 24 participants. ***Although the goal of 80% of participants from target areas was not reached, success was achieved because the large majority of program participants (74%, Table 1) came from areas with a high asthma burden***. One APC said that it is difficult to get participants from target areas because "the referral system is not working." There is a lack of support and participation from school nurses and clinics. Most participants are contacting APCs through posters and are being referred through partner programs like WIC which makes getting referrals from target areas challenging. Referral systems are addressed in another section of this report.

Overall, about 36% of program participants were from target areas, and this ranged from 26% in LHD1 to 46% in LHD2 (Table 1). LHD1 had about 91% of program participants from areas that had a statistically higher burden of asthma when compared to the state (Table 1). LHD2 had about 58% from areas with a statistically higher burden, and overall about 74% of program participants were from areas where the asthma burden was higher than the state (Table 1).

Table 1.

	Percent of participants from targeted areas	**Percent of participants from small areas+ with a high asthma burden++ higher than the state***
LHD 1	26%	91%
LHD 2	46%	58%
Total	36%	74%

+ Areas are determined based on specific criteria, including population size, political boundaries of cities and towns, and economic similarity.
++Includes ED rates, adult prevalence, hospitalizations
*Statistically higher than the state

An important consideration is that the goal of 80% was set after the program had started and was not a goal in which LHDs had been actively working towards. Additionally, these data (Table 1.) only include areas where the rates were statistically higher than the state. This means that there may be areas with higher rates but these differences do not appear due to insufficient data.

Most participants were from areas that had a high trigger burden. ***About 50% of the areas were UAHVP is currently being implemented have a high prevalence of 2+ triggers reported in homes*** of those with asthma when compared to the state (differences were not statistically significant) (2). LHDs did not initially use prevalence of home triggers as criteria for selecting their target areas.

Program Completes

As of July 12, 2016 there were 42 participants enrolled, six drop outs, and ***100% of the participants (n=36) have completed the program*** as defined by completing at least 60% of the sessions (two out three home visits). This is an impressive completion rate and speaks to the hard work and dedication of those who created and implemented the program.

Barriers to Implementation

There are several barriers to implementing an asthma home visiting program (3). These include: reluctance of families to accept home visits, inability to maintain follow-up due to a transient population, difficulty scheduling appointments, and poor compliance with recommendations (3). ***Difficulty scheduling appointments and contacting participants for follow-ups are some of the biggest barriers to the UAHVP implementation***. As mentioned by the APCs:

- "getting in touch with them again is difficult"
- "hardest thing is getting a hold of people"

APCs mentioned that contact is difficult because of:

- Changing phone numbers,
- The inability to text "texting would be really helpful, especially for the younger generation that primarily texts or email."
- Participants miss a call and try to call back the generic LHD number. Then participants get a message for the entire health department.

APCs had several ideas to make contacting participants easier. These included:

- Making sure to collect multiple forms of contact on the intake form, like email address and alternate phone number. One APC said that although this information is on the form, "it is often not collected in practice."
- "At visit 1, have participants fill out the forms or have them verify that all the information is correct, like name spelling and email address."
- "Contacting participants through social media like Facebook messaging."
- "Texting capabilities would be really helpful, like a track phone for texting", or "have a QR code to scan on the home visiting advertisement flier."

Additionally, one study found that a successful retention system included collecting and frequently updating alternate contact information while following a structured follow-up contact protocol that includes phone, mail, and home-visit elements (3). ***The UAP should ensure that there is a protocol for collecting and updating information on a regular basis.***

Another way to address barriers to contact and follow-up is to use tools like Google Voice. One APC uses Google Voice which forwards participant calls to her office phone and will also send participant text messages to her email. This eliminates the need for a special cell phone. She finds it useful for

confirming appointments with people because they can text back at their convenience. She said, "people respond really well to it especially if they work all day and have a hard time talking on the phone." This tool should be used by all APCs. The other APC said she had tried to use this tool but has had trouble setting it up. The UAP should work with the APCs to ensure that this service is working.

Another potential barrier to implementation is related to the trigger assessment during visit two. A common concern from APCs was that they do not want participants to feel criticized when asking about their cleaning habits. One APC said that she "really uses the first visit to build trust." However, ***the trigger assessment form has the potential to make the participant feel criticized*** because it is a check list of how often a participant cleans their home. Both APCs recognized that assessing home triggers could be implemented in a way so as not to offend the participant. For example, APCs mentioned:

- "I just try to ask in a roundabout way or just observe the surroundings and make a guess."
- "I use a PowerPoint to educate about triggers and remediation and then ask things like, what triggers do you see in this room?"

Using the PowerPoint to help participants identify triggers in their home is a great way to assess sensitive issues like cleaning practices. ***The trigger PowerPoint should be incorporated into the visit 2 curriculum.***

There are both physical and social barriers in the home that home visitors must overcome. ***One of the biggest barriers is addressing underlying family and social issues not related to asthma***. One APC said, "Asthma is not the number one priority. It's hard to reach them when basic needs are not met and families are in crises mode." Physical home environments are another barrier to implementation. For example, one APC said that, "parents may be busy and distracted by kids." She uses her tablet to show the children movies while she talks with the parents. She also uses asthma coloring books to entertain the children.

Remediation Partners

Remediation partners are important to the UAHVP because they have the ability to do major trigger remediation like carpet removal and installment of air purifiers. They can also offer expertise on identifying and removing triggers. One APC said that, "He (remediation partner) will see things that I do not see."

Each APC has a different process (see Figure 7) and experience working with different remediation partners. For example, one APC said, "Our organization (remediation partner) is very supportive." The other APC said that, "We are still trying to create a process for working together." Ideally, remediation partners should have similar participant criteria as the UAHVP and have flexible schedules. They must also be willing to create a process for working together with APCs which includes clearly defined roles and responsibilities.

Figure 7. Roles and Responsibilities of Remediation Partners

	Characteristics of partnership organization	***Roles and responsibilities of remediation partner***	***Outcomes***
APC1	• Primarily funded by a federal grant • Strict program criteria • Focuses on more than just asthma • Can be challenging to work with due to funding constraints	• Can do extensive home remediation • APC may not accompany remediation partner on their visit and they do not give education or collect data • APC will do education and collect data from visit 2 at visit 3 • APC would like to see remediation partner do more education on their visit • Remediation partner is very good about prioritizing UAHVP participants so that the participants can be seen within the UAHVP timeline • Remediation partner has sent several referrals to the APC	• "It's hard to refer to Organization A because of income requirements" • "very useful when it works out" • "organization A has sent several referrals (to the UAHVP)"
APC2	• Non-profit organization; primarily funded through donations • Only offers expertise and does not offer remediation services • Focuses on building homes • Supervisor is very supportive of healthy homes • Few funding constraints	• Remediation partner will accompany APC on home visit 2 • Remediation partner has expert knowledge on identifying and remediating triggers • Remediation partner does not have the capacity to do extensive remediation • Remediation partner has great ideas for helping UAHVP participants and will offer suggestions for the homes he does not visit	• "Very lucky to have person X, he/she is very knowledgeable" • "He/she will see that thing I don't, like mold on the bathroom fan- it's great to have an expert"

Working with remediation partners can be very beneficial especially when they have expertise or can offer remediation services. However, there are partnership characteristics that can make working with some partners more successful than others. A more thorough evaluation of partnerships should be completed; however, it seems from these partnerships that funding sources, program focus, program criteria, and leadership personalities are important factors in having a successful partnership. There are remediation partners that can only provide expertise but are less restrained by funding and program

criteria compared to those that can do large home remediation projects but can only help a few UAHVP participants due to their strict funding or program requirements. Ideally, APCs should try to work with both types of partners (if available). Ensuring that UAHVP participants are seen by remediation partners within the program's timeline is important and will hopefully remain a priority for remediation partners.

What methods have been successful in identifying and referring participants?

Each APC was given autonomy in choosing referral partners. Priority was given to partners who worked in target areas, as identified by asthma burden data, and those who were implementing the Utah Pediatrics Improvement for Clinical Quality (UPIQ) improvement project. Additionally, both APCs choose to work with partners within their LHDs who serve vulnerable populations like Women, Infants, and Children (WIC) and BeWise.

Referrals came from clinics, posters and fliers, American Lung Association's (ALA) Open Airways participants, and partner organizations like Green and Healthy Homes Initiative (GHHI), WIC, and BeWise. Part of the referral process with clinics includes a report from the APC back to the health care clinic with information that the clinic has identified as important.

Referral Partners

Clinics

Although APCs try to get referral partners like clinics from target areas, ***one APC said that several referral partners have come from "happy accidents" and are not necessarily located in target areas***. She said that she would meet an interested partner at a clinic or health fair. Additionally, ***clinics are easiest to work with when they approach APCs about referring their patients. Both APCs mentioned that clinics seem initially interested but do not follow through***. No clinic/physician has declined to be a referral partner; however, one APC said that she had to turn down a potential partner because she did not have the appropriate resources (e.g. materials in Somali).

Successful processes for working with clinics as referral partners include ***"working with the executive director of a health system or someone high up"*** because "the word is coming from the top down." However, to achieve success "individual physicians must buy-in to the process." Additionally, ***working through UPIQ "has helped open doors." Barriers to working with clinics as referral partners include the extra time and work to refer patients.*** Additional work includes having physicians coordinate consent forms that allow the physician to share the patient's information with APCs. One APC got around this barrier by getting verbal consent from the patient through the physician. She will then have the patient sign the consent form at home visit 1.

Non-clinic

Both APCs mentioned that getting referrals from programs like BeWise, GHHI, WIC, and via posters in the hallways of the LHD have been fruitful and have led to the majority of their referrals. This relationship works well because these programs have institutional support to work together (all located in the same LHD) and have a large population that fit the UAHVP criteria. For example, WIC has lots of clients from low SES backgrounds with asthma and GHHI works with those who have poorly managed asthma. One APC said that she "is lucky" to have an infrastructure that can support a referral system and that she has good relationships with her referral partners. ***Both APCs said that working with organizations within the LHD is the easiest because they share the same place, calendars, and infrastructure***. Although this system may work for the current LHDs, it may not be sustainable or replicable for other partners trying to implement the UAHVP either because their LHDs may not have the same institutional support or they may not be part of a LHD.

School referrals have been disappointing. ***Most kids in the ALA Open Airways do not qualify for the UAHVP because they do not have poorly controlled asthma***. Additionally, there have been several institutional issues with ALA. They have a high turnover rate with employees making it hard to keep people who are trained in the UAHVP processes and data collection methods.

Methods and Processes Used to Identify and Refer Potential Participants

Both APCs mentioned that the current ***referral system is not working as well as it should.***

- "referral pool is weak"
- "the referral system is not working" for both clinics and schools

APCs also mentioned that ***clinics are not producing adequate referrals***. One APC said that her relationship with a high level executive has been instrumental in getting clinics on board "it is easy to get into those clinics because it's coming from the top level down." However, this approach has not resulted in many referrals because there needs to be buy-in from individual physicians.

APCs are using passive referral channels which mean relying on clinic staff to make referrals as they think of it or from poster/fliers in public areas. One study found that active referrals (e.g., using clinical billing data, chart reviews, asthma registries, or school lists) to generate recruitment lists for program outreach were much more effective in recruiting for asthma home visiting programs when compared to passive referral systems (4). One APC ***expressed frustration with the passive referral systems*** saying, "School nurses and clinics say they will refer but never follow through and this has made getting referrals difficult from targeted areas." Although passive referral systems are not ideal, they can still be successful. For example, ***both APCs have received many referrals from passive systems like posters in the hallways of the LHD.***

There were several innovative ways that APCs have found referrals. These include:

- Asking participants if they know anyone with asthma who would like to participate in the program.

- Presenting to coordinated care clinics not identified through UPIQ to offer them UPIQ services along with UAHVP and referral system.
- Working with the environmental epidemiology team to have them flag asthma cases reported in the surveillance system. No referrals have come from this yet but it is an interesting avenue to pursue.
- Creating videos to promote the UAHVP through social media and to play on screens in clinics.

Although there are issues with the number of referrals, ***the quality of referrals is high. About 67% of referrals have come from LHD or UAP partners which is close to the UAP benchmark of 70%. About 4% of referrals do not meet the UAHVP criteria***. Referrals who do not meet criteria are offered other resources. ***About one-third of referrals decline the UAHVP***. Reasons for declining to participate included being too busy and not wanting someone going through their homes. One APC thought there might also be a language barrier contributing to those who decline. ***APCs should create a strategy for dealing with people who report too little time to complete the program and those with a language barrier.***

Contacting a Referral

The UAP created a standardized script for partners to use when contacting a referral for the UAHVP. However, ***each APC had a slightly different method for follow-up with referrals***. APCs will initially contact a referral and attempt to enroll them in the program; however, if the referral does not answer or needs a call back, then each APC has a different way of following up. One APC will suggest a time to call back a referral or let them suggest a reasonable time. She has found that text message reminders about the call back have been successful. The other APC will call a referral and then send an email if no one answers. She will then call back in one week. Additionally, both APCs use an Excel sheet to keep track of referrals. The UAP and partners should create a process for contacting referrals.

Incentives

Incentives may have a small impact on program intake and retention. One APC mentioned that she uses the incentives to "sell" the program to potential participants "I try to sound upbeat…gift cards and mattress covers are a good incentive." One APC thinks that the gift cards "get people excited and helps with retention… especially for the 6-month follow-up." The mattress and pillow-covers seem to be a nice consolation prize but not the driving force behind participation. One APC mentioned that "some people are surprised to get them." However, the home assessment itself seems to be an incentive. One APC said, "Participants are excited for the home assessment." Additionally, not one participant mentioned the gift cards or the pillow and mattress covers in the comments section of the customer satisfaction survey when asked what they liked most about the program.

Customer Satisfaction

Overall, program participants are satisfied with the program. When asked how the visits could be improved almost everyone said "nothing" or that the program was "perfect." Additionally, the majority

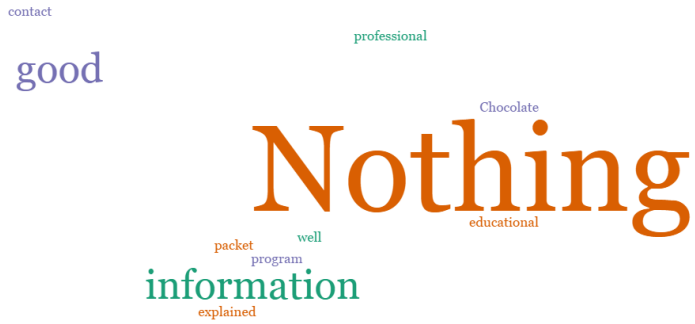
of participants said “nothing” when asked what should be added to program. Below (Figure 8 and 9) are word clouds from these open-ended questions. Word clouds are used to highlight how often a word is used in a body of text. Essentially, a word cloud is a pictorial depiction of words, the larger the word, the more often it was mentioned in the responses.

Figure 8.

How could this visit (includes visits 1-3) be improved?

Figure 9.

What else should be included in the program?



Overall, program participants are very satisfied with program and are learning skills that will help improve their asthma. By the end of visit 3, about 94% of participants reported being completely

satisfied and about 6% said they were very satisfied with the services they received from the UAHVP. About 94% of participants said the number of visits in the program was about right with 6% saying there were too few visits. One hundred percent of participants said that the time between visits was about right. About 81% of participants were completely comfortable with having an APC in their home. Finally, about 56% of participants reported they referred to program materials all the time. Below is a table summarizing the results of the customer satisfaction survey.

Each visit ranked high in satisfaction and based on the customer satisfaction surveys it appears that the length, content, spacing, and quality of the visits is optimal and of the highest quality. The large majority of participants reported that all visits were "excellent," that the education materials were easy to understand, and that the content will improve their quality of life and help improve their asthma (Table 2). ***Visit 2 scored lowest in ease of education materials and the ability to improve quality of life (Table 2).*** A more in-depth evaluation using customer service satisfaction surveys should be completed as more surveys are finished.

Table 2.

	Visit 1 (n=24)	Visit 2 (n=18)	Visit 3 (n=16)
Rated the overall visit as excellent*	95%	93%	78%
The education materials were completely easy to understand**	70%	55%	81%
Strongly agree that this visit will increase my ability to manage asthma***	80%	83%	81%
Strongly agree that this visit will improve my quality of life***	75%	67%	75%
The length of the visit was about right++	95%	100%	100%
The amount of information covered in this visit was about right++	100%	100%	94%

Scale:* excellent, good, fair poor; ** completely useful/comfortable, very useful/ comfortable, somewhat useful/comfortable, not at all useful/comfortable; *** strongly agree, agree, disagree, strongly disagree; +all the time, frequently, occasionally, never; ++ too short, about right, too long.

<u>APC Final Thoughts</u>

When asked what each APC wanted from this evaluation they both responded with wanting to know what the other person was doing and what was working well for them. The evaluator plans to share this evaluation report with both APCs and to actively engage them in creating an "Action Plan". Additionally, one APC said she wanted to know why it is difficult to get referrals from clinics that initially seem interested. This question will be answered in an evaluation planned for 2017. She would also like to see the data collection process be less cumbersome.

Conclusions

Overall, the implementation of the UAHVP has been successful. Performance measure results show that the program is effective at increasing asthma management skills. Participants reported a better quality of life and more confidence in managing their asthma after participation in the program. Asthma knowledge tests scores and ACTs improved from visit 1 to visit 2. The program is being implemented in target areas and areas of high need. The quality of referrals is high; very few people are turned away because they do not fit the criteria. Excellent things have been reported by program participants about the APCs implementing the program. These include: APCs are very knowledgeable and well received by participants, and participants feel safe having them in their homes.

The UAP and partners plan to create a trainer manual aimed at helping train future UAHVP implementers. Using the information from this evaluation should help focus the content of the training manual by highlighting processes that need to be clarified and written into procedure.

This evaluation was completed before any of the 6 or 12 month follow-ups were finished. Therefore, when there is adequate data, a "mini" evaluation should be completed to assess the implementation of the follow-up calls.

Updates

Several months after the completion of this evaluation, Mike Johnson, MD, a physician manager at Primary Children Hospital, became a partner with the UAHVP and began sending referrals. This resulted in twice as many qualified referrals in two weeks than in the entire year combined. Factors that have made this partnership successful include having a high-level asthma champion and an IT infrastructure to flag patients who have two or more asthma-related ED visits in the past year.

The Utah ALA chapter was recently disbanded. The UAP has decided to discontinue Open Airways until an evaluation can be completed to identify barriers to program implementation. The UAP hopes to reinstate the Open Airways program using APCs in the next year or seek alternative means of self-management in schools.

An evaluator from Partnerships for Health, has offered to share their processes for collecting, documenting, and tracking data for their asthma home visiting program. Their processes appear to address many of the aforementioned concerns and issues with the UAHVP data collection. A conference call to discuss their processes has been arranged with the UAHVP staff to learn more about the feasibility, tools, and resources needed to implement their processes.

Recommendations

Recommendations that have a star (*) next to them are items that should be considered for inclusion in the trainer manual. This evaluation highlighted areas that would benefit from a more in-depth evaluation. These include a more thorough evaluation of data quality and collection methods, a more comprehensive partnership evaluation, and a more in-depth evaluation of the clinic referral system. The clinic referral system evaluation is included in the five year evaluation plan.

Performance Measure Data Collection Processes and Quality

- Only record the final score from the asthma knowledge quizzes (pre/post).
- Use asthma knowledge questions specific data to assess the difficultly, usability, and validity of the pre and post test questions.
- Discuss the possibility of allowing each APC access to Survey Monkey in order to make changes to their data.
- Work with UAP staff, LHDs, and partners to create a plan to address data collection and tracking issues.
- Consider collecting data on home triggers and modifications in Survey Monkey.
- Consider adding enrollment status and why someone declined to the intake form.

Program Content

- Incorporate Salt Lake County Local Health District's trigger PowerPoint into visit 2*.
- Incorporate an in-depth review of medications into visit 3*.
- Each household should receive a medication chart listing the different types and kinds of medications. A free one can be found at http://www.health.state.mn.us/asthma/documents/MedsLetterSized.pdf *.

Data Collection Processes

- Combine the information that needs to be answered by the participant into one section on each form. Make the distinction more obvious between information that the APC needs to fill out and what needs to be collected from the participant.
- Create a spiral bound "trainer" book with color-coded forms in order of visit with instructions on how to fill out the form and what to say about it (see Figure 3 for an example)*.
- Combine data collection forms into one PDF in order of visit*.
- Number program documents in order of visit so it is easy to distinguish if one is missing and ensure that all forms are labeled clearly and concisely*.
- Put a title on the asthma knowledge test document.
- Create a checklist that ensures all important data is collected. Have it reference where/when the data should be collected*.
- Record a process that helps APCs work together to incorporate forms quickly and easily in to the home visit*.

Participant Tracking

- The APCs and the UAHVP HSP should create and standardize a process for tracking participants*. See Figure 4 for an example.

Data Collection Tools

- The UAP and LHDs should assess data collection processes to ensure that data collection is easy and efficient.
- Work with LHDs to create and streamline a process that makes data collection more efficient*.
- Put each of the five different SAAMs on a separate sheet of paper.
- For participants that cannot read well it can be time consuming for APCs to read the knowledge quiz to them. The UAHVP HPS and funded LHDs should work together to address this issue.
- Cut out/down the instructions at the top of the asthma control test (ACT) and add name, participant ID, and date.
- Add a place on visit 1 to record if a participant has an asthma action plan and/or an inhaler.
- Consider changing the medication questions (7 and 8) on the asthma knowledge quiz. See Figure 5 for examples.

Data Reporting

- Create a process for communication between UAHVP partners and UAP about data timelines in relation to CDC PM reporting*.
- Work with LHDs and partners to create a process that makes the data reporting process more efficient*.

Program Implementation

- Work with LHDs and use the UAP School System Scan Evaluation to create a referral plan for schools.
- Ensure that visit 2 is completed even if the participant is referred to an outside partner for home remediation.
- Give more structure to visit 3 while leaving room for individualized adjustments. Visit 3 should include a review of asthma medications and any new asthma action plans.
- Work with APCs to ensure that they have access to Google Voice or text messaging services.
- Create a protocol for collecting and updating participant information on a regular basis*.
- Set up a reminder protocol that includes a timeline for emails, texts, phone calls, and a reminder card*.
- Work with APCs to develop a plan to address social issues*.
- Work with APCs to develop a plan for entertaining distracting children, (e.g. bring an IPad, games, or asthma goldfish coloring book to distract kids)*.
- At visit 1, have participants fill out the forms or have them verify that all the information is correct, like name spelling and email address.
- Set up a process for contacting participants through social media like Facebook messaging*.
- Create a QR code to scan on the home visiting advertisement flier.
- Create criteria for when ACT should be collected (i.e. if Visit 1 is more than 2 weeks after intake then ACT needs to be repeated)*.

Remediation Partners

- When possible, work with remediation partners who can provide both home remediation expertise and complete home remediation projects.
- Ensure that home remediation partners can work within the UAHVP timeline.

Referral Partners

- Ensure that partners work with the highest administrative level but get buy-in from individual physicians*.
- Continue to work through UPIQ to set up referral processes.
- Have the physician get verbal consent from their patient before referral and then have the participant sign the consent forms at the first visit.
- Work with asthma specialists to access a larger referral pool.
- Add the change in ACT score to the referral form back to partners so they can see the improvement in their patient's asthma.

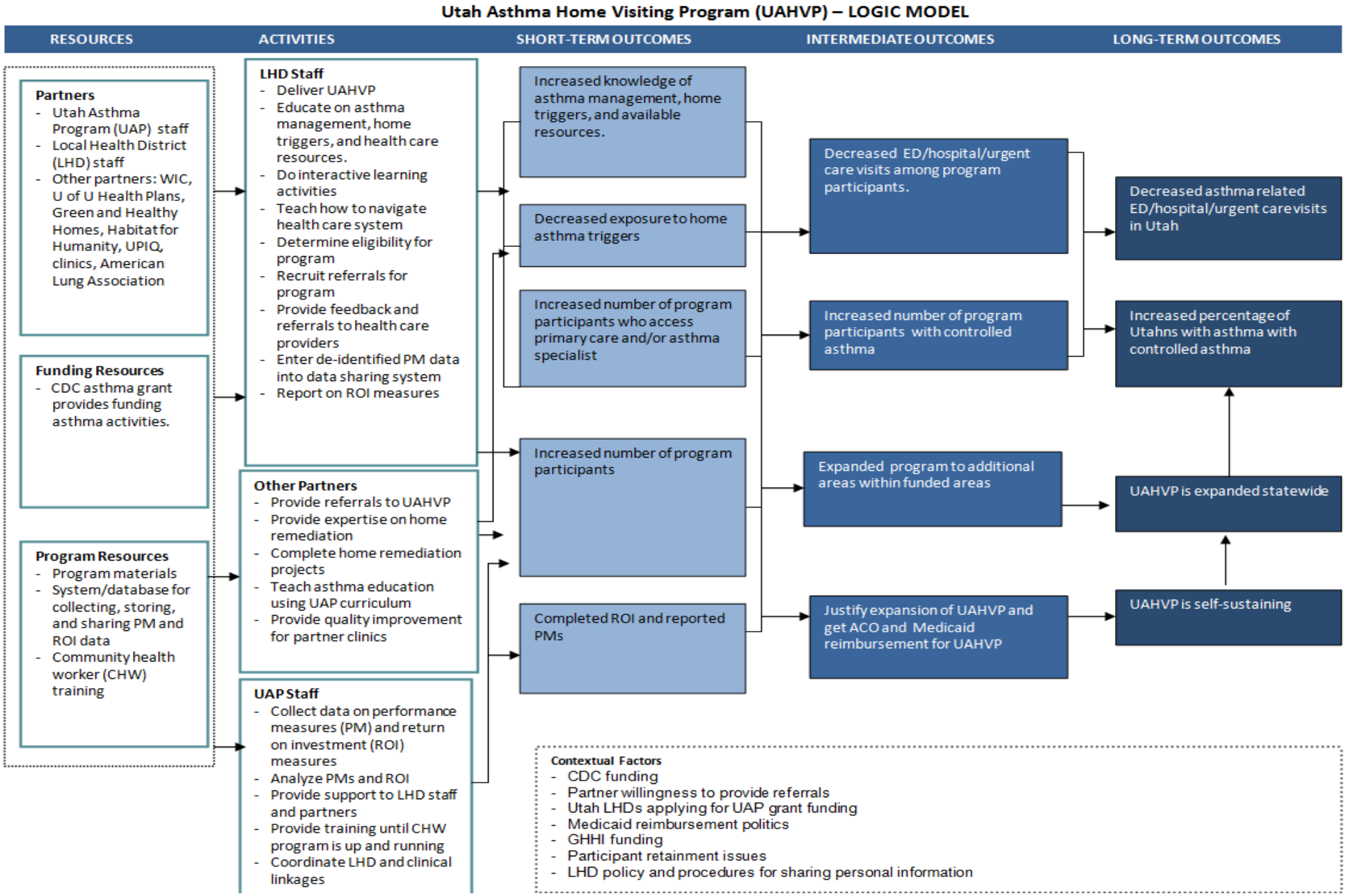
Methods and Processes Used to Identify and Refer Potential Participants

- Meet with APCs to create new and innovative ways to get referrals using active referral systems (e.g. chart reviews of UPIQ, claims data, etc.).
- Share each APCs innovative ways of getting referrals*.
- Set up referral systems with partners who have an asthma champion and IT capacity.

Incentives/Customer Satisfaction

- APCs should continue to provide incentives including mattress/pillow covers.
- Education materials for visit 2 should be evaluated with the purpose of making them easier to understand.

Appendix 1.


Utah Asthma Home Visiting Program (UAHVP) – LOGIC MODEL
RESOURCES
ACTIVITIES
SHORT-TERM OUTCOMES
INTERMEDIATE OUTCOMES
LONG-TERM OUTCOMES
Partners
- Utah Asthma Program (UAP) staff
- Local Health District (LHD) staff
- Other partners: WIC, U of U Health Plans, Green and Healthy Homes, Habitat for Humanity, UPIQ, clinics, American Lung Association
Funding Resources
- CDC asthma grant provides funding asthma activities.
Program Resources
- Program materials
- System/database for collecting, storing, and sharing PM and ROI data
- Community health worker (CHW) training
LHD Staff
- Deliver UAHVP
- Educate on asthma management, home triggers, and health care resources.
- Do interactive learning activities
- Teach how to navigate health care system
- Determine eligibility for program
- Recruit referrals for program
- Provide feedback and referrals to health care providers
- Enter de-identified PM data into data sharing system
- Report on ROI measures
Other Partners
- Provide referrals to UAHVP
- Provide expertise on home remediation
- Complete home remediation projects
- Teach asthma education using UAP curriculum
- Provide quality improvement for partner clinics
UAP Staff
- Collect data on performance measures (PM) and return on investment (ROI) measures
- Analyze PMs and ROI
- Provide support to LHD staff and partners
- Provide training until CHW program is up and running
- Coordinate LHD and clinical linkages
Increased knowledge of asthma management, home triggers, and available resources.
Decreased exposure to home asthma triggers
Increased number of program participants who access primary care and/or asthma specialist
Increased number of program participants
Completed ROI and reported PMs
Decreased ED/hospital/urgent care visits among program participants.
Increased number of program participants with controlled asthma
Expanded program to additional areas within funded areas
Justify expansion of UAHVP and get ACO and Medicaid reimbursement for UAHVP
Decreased asthma related ED/hospital/urgent care visits in Utah
Increased percentage of Utahns with asthma with controlled asthma
UAHVP is expanded statewide
UAHVP is self-sustaining
Contextual Factors
- CDC funding
- Partner willingness to provide referrals
- Utah LHDs applying for UAP grant funding
- Medicaid reimbursement politics
- GHHI funding
- Participant retainment issues
- LHD policy and procedures for sharing personal information

Appendix 2

Key Informant Questionnaire

Program Implementation and data collection

The first set of questions are about program implementation and data collection.

1. Knowing the outcomes we are trying to achieve as listed in our performance measures (improved asthma management and control, reduced ED visits,) do you feel like the program has the appropriate processes and tools to achieve these outcomes, why or why not?

2. Is it easy to keep track of participants
    a. How do you track and follow-up with participants to make sure all their data is collected?
    b. What makes this process easy? What makes it difficult?

3. More specifically, does the amount of time it takes you to submit data (i.e. survey monkey, satisfaction surveys) seem reasonable? Why or why not?
    a. What makes data submission easy? What makes it difficult?
4. In thinking about each of the following: ACT, SAAM, intake form, PM sheets for all visits and follow-ups, do you think that the data collection tools are easy to use?
    a. Are the instruction and format clear and easy to understand? Why or why not?
        i. Are there any that stand out as especially easy or difficult?
    b. Are the forms easy to fill out? Why or why not?
        i. Are there any that stand out as especially quick or too time consuming?
    c. Do you use your own materials/tests (i.e. ACT) or do you use the materials/tests provided to you by the UAP?
5. In thinking about the overall process of data collection (tools, data submission, etc.) from the 1st to 3rd visit, are there any additional aspects of the data collection process that stand out as easy or difficult?
    a. Do you have any additional comments on data collection?

Barriers to implementation

6. In your experience, from visits 1-3 is there anything that stands out as easy and/or difficult?
    a. Although you haven't done any 6 or 12 month follow-ups, do you anticipate any challenges?
7. Are you getting participants from your targeted geographic areas? If yes, how are you doing this? If no, what are the barriers? Successes?
8. Describe your experience working with home remediation partners. What are some successes and barriers?

9. What methods-aside from referral partners- have been successful in identifying qualified participants for the program?

Processes and referrals

10. In relation to the home visiting program describe your experience working with first school and then clinic partners. What are some successes and barriers?
    a. What is the process for getting school and clinic referrals?
        i. What do you think of these processes? Easy or difficult?
        ii. What is the process for giving clinics reports? What is your experience with these reports? (Do clinics like them? Use them?)

11. Describe your process for contacting a referral to schedule an intake call. Successes? Barriers?

12. Explain the process for how you refer to partners (i.e. GHHI). Barriers? Successes? Describe your experience
    a. Are there any other partners you refer to? Who? How?
13. In general, explain the process for working with partners who refer to you (i.e. process of getting faxes, follow-up with provider, etc.). Barriers? Successes?
    a. Describe your experience

The next set of questions will ask you to describe your experience ***recruiting*** referral partners.

b. What methods (hand-outs, meetings, etc.) have been successful in getting referral partners?
c. Where have the most referrals come from (a specific clinic or group)? What made it successful?
d. What types of organizations (clinics, NGO, government) give the most referrals?
    i. What do you think has made these referral channels successful?
    ii. Who is easiest to work with?
    iii. What types of organizations are likely to say no? Why?
e. Overall, what are some success and barriers in working with referral partners?

Final Thoughts

14. What would you like to learn/gain from this evaluation?
15. Do you have any additional thoughts, comments, concerns?

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