Human-Centered Design for Health in Wyoming County

Discovery Phase Report

William F. Thiel Fund & Community Foundation for Greater Buffalo
October 2017
Executive Summary

The William F. Thiel Fund supports health-related projects and programs in Wyoming County, New York. It allocates more than $250,000 every year through grants to organizations working in Wyoming County. Hospital equipment, recruitment of health care professionals, and supportive services regularly receive support.

The Thiel Fund uses a health needs assessment to guide its grantmaking activities. The last assessment was completed in 2012 and is currently being updated with support from the Community Foundation for Greater Buffalo. Thiel Fund leadership (i.e. the Thiel Roundtable) are using human-centered design as part of this updated assessment to identify opportunities for improved program design and service delivery across the health sector in Wyoming County.

The typical human-centered design process roughly follows three phases: Discovery, Design, and Delivery. This report summarizes the findings of a Discovery Phase that collected client, patient, and resident perspectives in mid-2017. Findings are presented in the form of personas, which are used as a tool to bridge client voice and the findings of recent health assessments.

The report concludes with a summary of the Discovery Phase and a broad overview of how the work of the Discovery Phase leads to and informs the remainder of the human-centered design process.

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The William F. Thiel Fund

Administered by the Community Foundation for Greater Buffalo, the William F. Thiel Fund is a philanthropic fund that makes grants available “for the use and benefit of the health requirements of the residents of Wyoming County, New York.”

Since 2012, the Thiel Fund has awarded almost $1.6 million through more than 30 grants to organizations and healthcare providers working to improve the health of Wyoming County residents.

With more than $261,000 awarded each year in a county that is home to approximately 41,000 residents, the combined impact of the Thiel Fund across the years is substantial. One-third of all residents have benefitted from Thiel-funded programs and services.

The Thiel Fund regularly provides grants to the Wyoming Community Hospital Foundation so that critical life-saving equipment and technology is available at the Wyoming County Community Hospital in Warsaw, NY.

Personnel is also a challenge - more than half of Wyoming County is designated as a Medically Underserved Area by the US Health Resources and Services Administration. Thiel grants have regularly supported the WNY Rural Area Health Education Center to recruit healthcare professionals and specialists to live and work in Wyoming County.

The fund has also helped to expand access to supportive services through Wyoming County Community Action's 'Angel Action' program and to healthcare services through the work of the Geneseo Migrant Center. Underserved and low-income populations are commonly assisted by these programs.

Based in Wyoming County, the Thiel Fund regularly supports the acquisition of medical equipment and a variety of supportive and health services.
Human-centered design is an approach to service, product, and program design that prioritizes client and customer insights in a continuous cycle of client-informed changes. Program and service design modifications can often lead to quality improvement and better client outcomes.

Human-centered design is action-oriented. It aims to first build a nuanced understanding of how clients interact with a product, program, or service; and then to modify those interactions to improve experiences and outcomes.

As a systematic process of creating solutions with people, rather than for them, human-centered design can be roughly divided into three phases: discovery, design, and delivery.

There are three phases of a human-centered design process: discovery, design, and delivery.

This report summarizes the activities and findings of the first phase of the human-centered design process.

**Discovery Phase Activities**
- Interviews
- Focus Groups
- Conversation Starters
- Immersion
- Analogous Inspiration

**Design Phase Activities**
- Storyboarding
- Card Sort
- Extremes & Mainstreams
- Expert Interviews
- Role Playing

**Delivery Phase Activities**
- Roadmapping
- Client Feedback
- Building Partnerships
- Live Prototyping
- Pilot Projects

For more than a decade, the Thiel Fund has supported organizations putting William Thiel's philanthropic vision into action. These partnerships provide a strong foundation for integrating a program design process into the work of Thiel Fund grantees.

Human-centered design is an approach to service, product, and program design that prioritizes client and customer insights in a continuous cycle of client-informed changes. Program and service design modifications can often lead to quality improvement and better client outcomes.

The first phase - Discovery - broadens engagement between service providers and clients, and obtains a variety of client perspectives on daily life.

The purpose of the Discovery Phase is not to identify overarching population-level issues, but to invite clients and program staff to interact in ways that differ from ‘normal,’ tone, content, and formality. These interactions expand communication in ways that are critical for subsequent phases.

Content generated by Discovery Phase activities can also be used to contextualize existing health assessments, especially when local health leaders review health statistics and ask "What do we do?" from outside the town, village, or county in question.

The following two phases - Design and Delivery - create opportunities for clients and to take a central role in the design (or redesign) of the programs, practices, and products that shape their service experiences.
Discovery Phase Activities

Since 2006, grants awarded by the Thiel Fund have been guided by the Wyoming County Health Needs Assessment (WCHNA). An updated WCHNA was prepared in 2012 to support grantmaking decisions from 2013-2017. These assessments identify specific health-related challenges in Wyoming County and highlight the populations most likely to face them.

The Thiel Fund is currently preparing an updated WCHNA to structure future grantmaking. The Fund has also initiated the Discovery Phase of a human-centered design process to help further link information to action through future recommendations, action plans, and program design activities.

Four Thiel-funded organizations in Wyoming County agreed to participate in the Discovery Phase. These organizations included the Wyoming County Community Hospital, Wyoming County Community Action, Oak Orchard Health, and the WNY Rural Area Health Education Center.

The Discovery Phase included a two-month ‘conversation starters’ activity structured around a five-question survey. The survey was graphically designed in the form of a postcard, which front-line program and healthcare staff used to collect general perspectives on daily life.

Each organization collected approximately 40-50 postcards from their clients, patients, participants. Postcards were also collected at community-based events to generate perspectives from outside the medical or service environment. These events included the Perry Farmer’s Market, Agri-Palooza, the Strykersville Town Wide Yard Sale, and Attica Founder’s Day.

The perspectives collected through Spring and Summer 2017 were analyzed and aggregated into this report. The findings of the Discovery Phase can also be used by organizations working to improve, expand, or adapt their programs and services.

Timeline and overview of conversation starters activity, which collected postcard-based surveys.

Postcards from your Day

375 clients, patients, students, and community members were invited to participate by providers or the project team. Questions included:

1) Conversation Starter
   If you really knew me...
   I have my best days when...
   I know I've had a great day when...

2) My biggest challenge is...

3) Age

4) Gender

5) Zip Code

Conversation Starters

The Thiel Fund approach to the Discovery Phase used ‘conversation starters’ in the form of postcards. Information on age, gender, and zip code were also collected.
Discovery Phase - Participant Characteristics

From May to August 2017, a total of 375 postcards were collected from participating organizations and from community events. Nearly 45% of respondents came from the areas surrounding Warsaw, Perry, and Attica. These also happen to be three of the four most populated areas in Wyoming County.

The remaining 55% of postcards came from across the rest of Wyoming County, as well as from other parts of Western New York and counties in the Finger Lakes region.

A disproportionate number of participants in the postcard activity were female. While only 46% of Wyoming County's population is female, they represented more than 7 out of every 10 respondents. Conversations with program staff about these results suggest that women of all ages are more likely to seek care. Even more, feedback also suggests that women are more likely to coordinate healthcare for their spouse and families.

The age distribution of respondents was relatively consistent with the age distribution of the overall Wyoming County population. The most noticeable difference is a smaller proportion of 0-17 year olds, which is a result of limited participation from those under the age of 12.

Qualitative responses to the survey were coded for references to medical, physical, social, and psychological challenges. Nearly two-thirds of respondents indicated some form of psychological challenge most commonly related to productivity, time management, stress, financial challenges, family, and self-confidence.

Approximately one-quarter of respondents mentioned a social or physical challenge, while one-fifth of respondents highlighted a medical challenge.

**A) Map of Thiel Fund Responses**

**B) Gender of Respondents**

![Gender Distribution Chart]

**C) Age Categories**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Thiel Fund Responses</th>
<th>Wyoming County*</th>
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</thead>
<tbody>
<tr>
<td>0-17</td>
<td>11%</td>
<td>20%</td>
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<td>18-24</td>
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<td>25-44</td>
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<tr>
<td>65+</td>
<td>16%</td>
<td>15%</td>
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*Source: American Community Survey 2015 5-Yr Estimates, US Census Bureau
Over 700 qualitative responses were collected from residents and some visitors in Wyoming County. Each response represents a perspective on life, shared in the words of those living it. Taken together, these perspectives create a picture of clients, patients, and residents that may not be part of conversations taking place in more clinical settings.

The perspectives captured through the postcard activity were varied - responses were brief, direct, thoughtful, humorous, candid, and emotional. When invited to share positive parts of daily life, many referenced the outdoors, farming, interacting with animals, sports, and family.

Challenging themes also emerged - depression, difficulty finding and paying for care, drug addiction, making ends meet, findings and keeping a job, being overwhelmed, and not having enough sleep to get through the day.

These themes give a sense of the many variables that can improve or complicate health. Because daily life is happening around us, we often find it to be unremarkable. However, it is day-to-day behaviors, options, and choices that have a significant impact on our ability to stay healthy, prevent illness, and manage care for chronic conditions.

For those aiming to improve the way health-related services are provided, the qualitative perspectives collected through the Discovery Phase can build a more comprehensive appreciation of the needs, challenges, and opportunities that help and hinder clients in their own journeys to become or stay healthy.

Building Personas
Qualitative responses gathered through the postcard activity are presented here in the form of personas. Personas are representations of

**Personas: Chronic Diseases**

**Mary**

84 Years Old  
Perry, NY  
Widowed

Mary is a widowed grandmother of seven living in Perry. She tries to get out of the house whenever the weather is nice, but ever since her husband died three years ago it's been a bit tougher. Mary has known she has cancer for 12 months, but she knows what to do because she took care of her late husband's cancer care. Although her daughter takes her to the doctor's office in Warsaw every other week, she's been getting in trouble at work taking so much time off to make the longer trips to Roswell Park in Buffalo. Mary would ask her son to drive, but he has struggled with sobriety since retiring from a nearby high school last year.

**Robert**

32 Years Old  
Bennington, NY  
Married

Robert is the proud dad of three great kids, and is on his way to taking over the dairy farm his father built. He helps run the local Future Farmers of America (FFA) chapter and is always trying to get more students interested in a career in agriculture. His dad is set to retire after getting told he has prediabetes. Robert doesn't really know what that means, but he's reading up online and taking a closer look at his family's health insurance policy to see what's covered.
the complexities of patient, client, and community members’ lives. They are constructed from the overarching themes and actual words shared by participants.

Personas were also informed by the findings of existing needs assessments currently being used in Wyoming County. More information on analytical priorities is found in the sidebar on Page 7.

In particular, the following assessments were consulted:

1) Thiel Fund 2013-2017 Wyoming County Health Needs Assessment
3) 2016-2018 Joint Community Health Assessment, Improvement Plan, and Services Plan

The eight personas contained in this section combine the priorities identified by local community health assessments with the voices of participants and residents in an effort to:

- Highlight that there many competing and conflicting priorities in individual decision-making
- Emphasize that health issues are always present, but may not always be a priority
- Demonstrate the need for health-related services to more directly align with patient and resident priorities
- Illustrate that there is value in enabling clients to codesign programs, services, and systems of care alongside their providers
- Help program staff identify clients that can provide more in-depth perspectives on improving programs and services

### Personas: Youth Development

<table>
<thead>
<tr>
<th>Tiffany</th>
<th>15 Years Old</th>
<th>Castile, NY</th>
<th>Single</th>
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</table>

Tiffany is one of seven kids living just outside of Castile. She has five brothers and an older sister she doesn't see very much. One of her favorite things is to go dirt biking or four-wheeling with the family, but it's been a while since they've gone out. Tiffany doesn't really like school and she hasn't been sleeping much the past few days. One of her friends just told her that he hates living, and now she lies awake at night thinking about whether or not she could fall into a crippling depression. Tiffany's mom has recently noticed the change.

<table>
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<tr>
<th>Jimmy</th>
<th>3 Years Old</th>
<th>Arcade, NY</th>
<th>Single</th>
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Jimmy is an adventurous kid living with his mom, dad, and three siblings in Arcade. His parents moved to Wyoming County in 2012, a few years after coming to the City of Buffalo as refugees from Burma. Jimmy's dad works on one of the local farms and his mom works for a nearby hotel. One time last year he had to go to the hospital for a fever, but there was a problem with paperwork when he and his mom arrived.
The 2013-2017 Community Health Assessment for Genesee, Orleans, and Wyoming Counties (Tri-County) highlights chronic diseases as particularly challenging for adult populations in Wyoming County. Heart disease, cancer, and diabetes are common chronic conditions that require regular management. Maintaining access to care and support can be challenging for participants that shared that they have these conditions. Some mentioned the difficulty of trying to survive on social security while still keeping up with medical expenses. Others were more focused on their disease itself (e.g. managing sugar levels, fighting cancer, taking care after a heart surgery).

Multiple responses mentioned the challenges of caregiving, the need for which can often result from a friend or family member having a chronic disease.

The health assessment also reports that mental health and stress-related issues are increasingly prevalent across the county. Overdose deaths, illicit opioid use, and illicit prescription drug use have become major concerns.

Participants overwhelmingly shared issues related to their daily mental health more frequently than any other type of challenge. Although many of these responses focused on daily ups and downs due to weather or work, some respondents provided extremely candid thoughts related to their depression, anxiety, and thoughts of suicide. Multiple respondents also mentioned drug addiction, but usually the case of a family member or friend.

According to all three health assessments consulted, obesity is a challenge across Wyoming County for all age groups. A large
number of participants shared concerns about their ability to eat healthy foods and keep up an exercise regimen. Younger people tended to have a stronger focus on sports, while adults were more likely to think about alternative options like yoga and gardening.

Patients and clients also face barriers that extend beyond their own individual health and healthcare providers. External factors like a lack of housing or changes in healthcare policies can complicate an individual's ability to access a program or service, even when it is available. In particular, the Tri-County Community Health Assessment describes transportation as the top challenge faced by residents in accessing health services. This is a result of the county's wide-ranging geography and a large number of limited-income households. Transportation to and from medical appointments is an ongoing battle for many residents. Even when transportation is available, many participants suggested that business hours made it difficult to schedule an appointment in the first place.

Challenges with money, a lack of child care, and office opening hours can also limit access to health care for many residents. Responses illustrated a struggle with a variety of financial challenges including student loans, medical bills, utility bills, debt, taxes, and broader economic issues like the price of milk.

Communication styles also differ across individuals and agencies, particularly in light of both seasonal and resident populations that may not have grown up with English as a first language.

### Personas: Community Health System Infrastructure

#### George

**74 Years Old**  
Pike, NY  
Married

George is 74 years old and has been retired since 70. The price of milk fluctuated a bit too much over the past few decades, leaving George with less money set aside for retirement than he would have liked. He barely has enough extra money for the medical equipment his wife needs for her COPD. There's also a lot of uncertainty coming from Washington, DC making it tougher to plan for the next few years of health-related expenses.

#### Diana

**45 Years Old**  
Warsaw, NY  
Married

Diana tries to keep her appointment times, but sometimes they won't let her leave when she already had approval to take off. She found a good doctor in Warsaw, but works in Batavia and can't make appointments before the office closes. Diana uses doesn't have a lot of vacation or sick days, and she can't give up what she does have because things always come up with her kids. Missing the doctor for so long has lead her to take up yoga and eat healthier foods. She's been feeling great but knows she needs to get in for a checkup soon.
Summary and Next Steps

Summary of Discovery Phase

Since 2012, the Thiel Fund has allocated more than $1.5 million for health-related projects in Wyoming County. Grants usually support the purchase of hospital equipment, residential support for visiting health professionals, and expanding supportive services. As part of an ongoing process to assess health-related needs across Wyoming County, the Thiel Fund is working to introduce human-centered design to providers and agencies that receive grants.

Organizations participating in the Thiel Fund Discovery Phase include the Wyoming County Community Hospital, Wyoming County Community Action, Oak Orchard Health, the WNY Rural Area Health Education Center, and the P2 Collaborative of WNY.

Each organization worked with clients and residents of Wyoming County to collect brief five-question postcard-style surveys about their life in Wyoming County. 375 responses were collected during mid-2017.

The content gathered through the Discovery Phase was used to create a series of personas that combine the findings of existing health needs assessments and the perspectives gathered from patients, clients, and Wyoming County residents.

Personas are generated from the actual words, needs, and ideas of participants. They each attempt to demonstrate, in various ways, the complexities of life faced by clients and patients every day.

Personas are typically used in the transition between the Discovery and Design Phases of a human-centered design process. When thinking about how to prioritize issues and develop solutions, clients typically take the lead in discussions, using personas to help identify priorities for action.

When clients themselves are not available, personas can be used as a tool to ask "What would Mary and Brandon say if they were sitting here with us?" Different combinations of personas may be useful in expanding the range of perspectives available in conversations related to program design and strategic decision-making.

Next Steps: Design and Delivery

Transitioning into Design Phase activities begins with a focus on how we might improve situations for the personas that are most similar to the clients and program staff sitting around a common table. Groups of staff and clients work together to review and edit personas, create new ones, and record ideas for addressing common challenges.

Ideas are then categorized, evaluated, and narrowed down to possible solutions. The Design Phase culminates in the development of prototypes of potential programs and services that are tested with clients.

Identifying a prototype or prototypes to continue building on signals a transition into the final phase: Delivery. This phase continues to improve a program or service through experimentation and iterative improvements.

At the conclusion of the human-centered design process, program staff and clients demonstrate their ability to collect service-level perspectives, collaboratively develop prototypes, and integrate feedback for improvement.

Persons and select qualitative responses form the foundation for activities in the Design Phase

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<td>Pilot Projects</td>
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Grantee Appendix: Angel Action

In May - June 2017, a total of 37 postcards were collected from clients of Angel Action, a program of Wyoming County Community Action.

Demographic and geographic characteristics collected from respondents gives an indication of 1) who is accessing the organization's services, and 2) who staff can productively engage.

Nearly 30% of respondents came from the areas surrounding Perry, where the primary Angel Action office is located. Another 40% of respondents came from Warsaw, Attica, and Castile.

The remaining 30% of respondents came from areas stretching along Route 20A in the northern half of Wyoming County and from Arcade in the southwest corner of the county.

A disproportionate number of participants in the postcard activity were female. While only 46% of Wyoming County's population is female, they represented almost 85% of respondents from Angel Action.

Clients of Angel Action tended to be of working age, concentrated between the ages of 25 and 64.

Respondents were also asked to share brief qualitative perspectives on their daily life, answering the prompts of "I have my best days when..." and "My biggest challenge is..." Selected responses to

Voices from clients of Angel Action

I have my best days when...

"...I get enough rest and take my medication first thing in the morning." 25, Female

"...my children are happy and there is food on the table." 28, Female

"...money is coming into the house on a regular basis." 43, Female

"...I get a healthy paycheck." 47, Male

"...I am well-rested, living my life closest to my authentic self." 50, Female

"...I feel energized and hopeful with what I am doing in all aspects of my life." 56, Female

"...I have the opportunity to hold and have my granddaughter with me." 61, Male

"...I feel secure and can walk and move about a daily routine." 69, Female

A) Map of Client Respondents

B) Gender of Respondents

C) Age Categories

*Source: American Community Survey 2015 5-Yr Estimates, US Census Bureau
Voices from clients of Angel Action

My biggest challenge is...

"...having money to pay for the medications I need."
25, Female

"...finding and paying for day care."
28, Female

"...Watching my sister with her drug issue and the effect it has on the family and her daughter."
30, Female

"...fighting cancer."
45, Female

"...my expectations toward and of others. I need to practice acceptance."
50, Female

"...being a caregiver to my elderly parents."
56, Female

"...trying to make ends meet with the rising cost of food and utilities."
58, Female

"...people who are drug-addicted, and my ability to deal with the end of things."
65, Female

These prompts are included in the sidebars of this appendix.

Qualitative responses to the survey were broadly coded for references to medical, physical, social, and psychological references. Nearly one-half of respondents from Angel Action referenced some form of psychological issue that impacts their daily life. Most commonly, these relate to family, money, friends, and finding a job.

One additional persona was developed using the qualitative responses collected from clients at Angel Action. In particular, the persona embodies a set of key day-to-day needs and challenges as articulated by respondents.

Voices from clients of Angel Action

My biggest challenge is...

"...having money to pay for the medications I need."
25, Female

"...finding and paying for day care."
28, Female

"...Watching my sister with her drug issue and the effect it has on the family and her daughter."
30, Female

"...fighting cancer."
45, Female

"...my expectations toward and of others. I need to practice acceptance."
50, Female

"...being a caregiver to my elderly parents."
56, Female

"...trying to make ends meet with the rising cost of food and utilities."
58, Female

"...people who are drug-addicted, and my ability to deal with the end of things."
65, Female

Kathleen
62 Years Old
Arcade, NY
Married

Kathleen is a mom, a grandma, and a daughter. She struggles with her weight, but always tells her doctor the same thing: that dieting and exercising take too much time. It’s easier to skip the thinking and go for what’s convenient or on the way. Kathleen’s daughter has had a problem with methamphetamines since a miscarriage two years ago, so she picks up a lot of the slack when her grandkids have to stay after school or need to go to the doctor. The three of them usually spend weekends visiting her 84-yr old father, who has cancer. She’s definitely not retiring soon, and knows for sure that she’s the glue keeping it all together.
Grantee Appendix: Oak Orchard Health

In May 2017, a total of 44 postcards were collected from patients at Oak Orchard Health's location in Warsaw, NY.

Demographic and geographic characteristics collected from respondents gives an indication of 1) who is accessing the agency's services, and 2) who staff can productively engage.

Nearly 50% of respondents came from the areas surrounding Warsaw and Perry, with the rest of respondents coming from across Wyoming County. It is notable that no respondents came from Attica or Arcade, two of the primary population centers in the county.

A disproportionate number of participants in the postcard activity were female. While only 46% of Wyoming County's population is female, they represented more than 8 out of every 10 respondents from Oak Orchard.

Respondents from Oak Orchard also tended to be younger than the general Wyoming County population. In particular, almost one-third of respondents fell between the ages of 18-24.

Respondents were also asked to share brief qualitative perspectives on their daily life, answering the prompts of "I know I've had a great day when..." "If you really knew me..." and "My biggest challenge is..." Selected responses to these prompts are included in the sidebars of this appendix.

Voices from clients at Oak Orchard Health

I know I've had a great day when...
"...I've taken my meds, eaten all 3 meals, and exercised." 21, Female

"...I accomplish what I set out to do." 24, Male

"...my house is clean and the kids help it stay that way." 34, Female

"...I accomplish something big or small." 40, Female

"...I have a good visit with a doctor that cares. No pain is a good day!" 70, Female

If you really knew me, you'd know that...
"...my family dental history is terrible." 18, Male

"...I want lots of children but won't have them all because of age." 37, Female

"...I use a lot of homeopathic methods and energy work." 66, Male

*Source: American Community Survey 2015 5-Yr Estimates, US Census Bureau
Qualitative responses to the survey were broadly coded for references to medical, physical, social, and psychological references. More than one-half of respondents from Oak Orchard referenced some form of medical or physical issue that impacts their daily life.

In particular, Oak Orchard patients were more likely than other respondents to reference specific medical conditions (diabetes, anemia, dental care, and making medical appointments). Respondents from Oak Orchard were also more likely focus on their weight, diet, and exercise than other respondents.

One additional persona was developed using the qualitative responses collected from patients at Oak Orchard. In particular, the persona embodies a set of key day-to-day needs and challenges as articulated by respondents.

Voices from clients at Oak Orchard Health:

My biggest challenge is...
"...finding places that are comforting and accepting locations." 19, Female

"...trying to lose weight while struggling with mental illness." 21, Female

"...keeping up with the bills." 24, Male

"...going to all my appointments." 36, Male

"...finding a good time to be seen by the doctor. I need later appointments." 55, Male

"...keeping my balance." 59, Female

"...keeping my sugar numbers down." 64, Female

"...having a doctor that is close for shots, for my back. Someone who can do acupuncture." 70, Female

Pamela
23 Years Old
Sheldon, NY
Single

Pamela is the second-oldest of four kids. She has a history of mental health issues going back a few years; managing takes effort and she needs to take medication every day for anxiety and depression. The meds have side effects that make it difficult for her to stay at a healthy weight. Her brother is a source of comfort and a good sounding board. Pamela also has a boyfriend in Batavia that she sees by taking the RTS 222. He takes the same bus to see her, but borrows his brother’s car when he can. He likes to take Pam out every now and then to her favorite place: the bookstore in Perry.
Grantee Appendix: WNY Rural Area Health Education Center

In May and June of 2017, a total of 41 postcards were collected from participants in programs offered by the WNY Rural Area Health Education Center (WNY Rural AHEC). Many of these postcards came from the Pulse program, offered to high school students.

Demographic and geographic characteristics collected from respondents gives an indication of 1) who is accessing the agency’s services, and 2) who staff could potentially engage productively.

Nearly 70% of respondents came from the areas surrounding Warsaw, the largest population center in Wyoming County. No respondents came from Arcade or Attica, two areas with relatively large populations in the county.

The remaining 30% of postcards came from the zip codes immediately surrounding Warsaw.

A disproportionate number of participants in the postcard activity were female. While only 46% of Wyoming County’s population is female, they represented more than 7 out of every 10 respondents from the WNY Rural AHEC. Compared with other participating agencies, AHEC had the greatest access to male respondents.

Respondents from the WNY Rural AHEC were much younger than the general Wyoming County population. Nearly 50% of respondents were under the age of 25.

A) Map of WNY Rural AHEC Respondents

B) Gender of Respondents

C) Age Categories

*Source: American Community Survey 2015 5-Yr Estimates, US Census Bureau
Respondents were also asked to share brief qualitative perspectives on their daily life, answering the prompts of "I have my best days when..." and "My biggest challenge is..." Selected responses to these prompts are included in the sidebars of this appendix.

Qualitative responses to the survey were broadly coded for references to medical, physical, social, and psychological references. Nearly 60% of respondents from the WNY Rural AHEC referenced some form of psychological issue that impacts their daily life. Most commonly, these relate to productivity, time management, family, and learning/education.

One additional persona was developed using the qualitative responses collected from WNY Rural AHEC. In particular, the persona embodies a set of key day-to-day needs and challenges as articulated by program participants.

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**Voices from the WNY Rural AHEC**

*My biggest challenge is...*

"...competing with myself and having self-confidence."  
15, Female

"...probably chemistry class."  
16, Female

"...Having enough time to do what I want with volleyball, job, homework, SATs, and college. It's all thrown at me at once."  
17, Female

"...getting out of bed in the morning."  
26, Male

"...feeling safe in my community and making friends."  
31, Female

"...To stay out of debt and to be able to pay off the debt I have now. At the same time provide enough for my family and not be bored with life."  
37, Male

"...Finding enough time in a day to get everything done and managing our finances"  
51, Female

"...depression and a lack of sunshine."  
53, Female

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**Wyoming County Community Respondents**

<table>
<thead>
<tr>
<th>Health Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>9%</td>
</tr>
<tr>
<td>Physical</td>
<td>11%</td>
</tr>
<tr>
<td>Psychological</td>
<td>55%</td>
</tr>
<tr>
<td>Social</td>
<td>25%</td>
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</tbody>
</table>

**WNY Rural AHEC Respondents**

<table>
<thead>
<tr>
<th>Health Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>3%</td>
</tr>
<tr>
<td>Physical</td>
<td>17%</td>
</tr>
<tr>
<td>Psychological</td>
<td>58%</td>
</tr>
<tr>
<td>Social</td>
<td>22%</td>
</tr>
</tbody>
</table>

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**Chris**

19 Years Old  
Warsaw, NY  
Single

Chris just graduated from high school a year ago, and he's been figuring it out as he goes along. Mom says he can stay at home and work on his grandfather's dairy farm, but Chris knows that he likes coming into town every day. So much so that he's been thinking about getting his own apartment. There's a little bit saved up from the past year, but Chris isn't sure about keeping up with the bills - things get expensive when you're living on your own. If he lives in Warsaw, he can take on a few more hours at the repair shop, but he's looking to do something else in the long run. Chris got decent grades in school, but he's never really thought about leaving Wyoming County.
Grantee Appendix: Wyoming Community Hospital Foundation

In August 2017, a total of 41 postcards were collected from patients at the Wyoming County Community Hospital.

Demographic and geographic characteristics collected from respondents gives an indication of 1) who is accessing the hospital's services, and 2) who staff can productively engage.

Nearly 50% of respondents came from the areas surrounding Warsaw, Perry, and Varysburg. No respondents came from Arcade or Attica, two areas with relatively large populations in the county.

The remaining postcards came from areas in the eastern half of Wyoming County, as well as from parts of Livingston County and other areas to the east.

A disproportionate number of participants in the postcard activity were female. While only 46% of Wyoming County's population is female, nearly 8 out of every 10 respondents from the hospital.

Respondents from the Wyoming County Community Hospital were older than the general Wyoming County population.

Respondents were also asked to share brief qualitative perspectives on their daily life, answering the prompts of "I have my best days when..."

"...my concerns are heard and addressed." 24, Female

"...the weather is nice and the sun is shining and I can walk with no pain." 38, Male

"...Game of Thrones comes on." 39, Male

"...I am with my sons and my cows." 46, Female

"...I accomplish a minimum of 2 or 3 things on my to do list." 53, Female

"...the sun is shining and I am in the middle of a project I love to do." 59, Female

"...I am playing in a band, orchestra, or some other ensemble." 71, Female

"...I write something extra special." 83, Male

Proportion of Responses

*Source: American Community Survey 2015 5-Yr Estimates, US Census Bureau
Voices from the Wyoming County Community Hospital

My biggest challenge is...

"...when I'm not sure if I should be having services done because I am not sure about the coverage."  
24, Female

"...balancing life with children, husband, clean house, and all the other things."  
27, Female

"...getting to bed at a decent time."  
28, Male

"...finding enough time in the day to complete all the things I need to get done."  
38, Female

"...feeding myself healthy food."  
39, Male

"...getting motivated to lose weight."  
59, Female

"...not giving advice concerning my grandchildren."  
71, Female

"...bending my knees."  
80, Female

"...mobility and hearing impairment."  
93, Female

Qualitative responses to the survey were broadly coded for references to medical, physical, social, and psychological references. Nearly 50% of respondents from the hospital referenced some form of physical issue that impacts their daily life. Most commonly these relate to sleep, pain, walking, and 'bad knees.'

One additional persona was developed using the qualitative responses collected from patients at the hospital. In particular, the persona embodies a set of key day-to-day needs and challenges as articulated by respondents.

Gary
78 Years Old
Varysburg, NY
Married

Gary is a grandpa of thirteen beautiful grandchildren who all live within an hour or two. He has trouble walking and his wife Gretchen has been telling him to talk to the doctor about a knee replacement. Even though its painful to get up in the morning, to climb stairs, and sometimes just walking from the parking lot to church, Gary isn't bothering right now. He has diabetes and doesn't want to think about anything else to manage. He knows dialysis is coming sooner or later, along with all the expenses and payments that come with it.