Innovating Improvements to Elderly Services in the Town of Easton, MA

METROBRIDGE

About this Report

This report is a product of student work in Boston University's Ideas to Impact course taught by Prof. Stine Grodal in Fall 2019.

Acknowledgments

The MetroBridge program at Boston University's Initiative on Cities wishes to thank our partners in the Town of Easton (especially Kristin Kennedy, Director of Health and Community Services) for their collaboration and support on this project.

About BU MetroBridge

MetroBridge empowers students across Boston University to tackle urban issues, and at the same time, helps city leaders confront key challenges. MetroBridge connects with local governments to understand their priorities, and then collaborates with Boston University faculty to translate each city's unique needs into course projects. Students in undergraduate and graduate classes engage in city projects as class assignments while working directly with local government leaders during the semester. The goal of MetroBridge is to mutually benefit both the Boston University community and local governments by expanding access to experiential learning and by providing tailored support to under-resourced cities. MetroBridge is funded by the College of Arts and Sciences and housed at Boston University's Initiative on Cities.

Table of Contents

Executive Summary

The Town of Easton has a growing elderly population with nearly a third of its residents at or near retirement age. Town leaders are committed to outlining a plan for how Easton can better meet the demands of their aging population, and a key part of that effort is to earn the Age-Friendly City designation from AARP.

Students in Prof. Stine Grodal's Ideas to Impact course were challenged with collecting information from residents' preferences and using design-thinking approaches to innovate and propose potential solutions for improving the quality of life for elderly residents in the Town of Easton. Over the course of the Fall 2019 semester students visited and toured the town twice in order to learn more about the community and gather perspectives from senior residents, service providers, and other stakeholders.

The Town of Easton asked students to focus on six areas: 1) outdoor spaces and buildings 2) transportation 3) housing 4) social participation, inclusion and employment, and 5) community and health services. These topics were chosen because they align with the priorities of AARP's Age-Friendly Community program. Students were divided into six teams with each focusing on one key area for their research, data collection, and user design processes.

Each team prepared a set of key findings and recommendations for consideration by the Town of Easton's Director of Health and Community Services. These proposals range in scope from modest programmatic adjustments to larger-scale infrastructure improvements. An snapshot of the student suggestions includes: creating an indoor pickleball center for senior residents; implementing a car-to-door escort service in the library's parking lot; developing an age-inclusive community center to alleviate social isolation among the elderly; volunteer programming with nearby college students to provide computer literacy courses to elderly residents; delivering off-site programming and a mobile social van to encourage more residents to participate in Council on Aging activities; sending *The Coordinator* by email; and assisting residents with selecting Medicare plans.

The students' research, findings, and recommendations are discussed in more detail in the following report prepared for the Town of Easton.

Team One: Outdoor Spaces and Buildings

Introduction

The Town of Easton, Massachusetts is a residential town about an hour south of Boston. It has undergone drastic transformation from its original founding purpose as an industrious settlement dating back to the 18th century. Nonetheless, the community is proud of its heritage, preserving many of its historical sites established by the early Ames family. Easton has a rich history and a growing elderly population, and we were tasked with understanding the inner workings of Easton's outdoor spaces and buildings, as well as how improvements could be made to better living conditions for elderly residents. Our team sought to determine the root causes of problems that afflict residents' experiences. With nearly a third of the population being or nearing their elderly years, it was paramount to cater to their specific needs and lifestyles. After careful consideration, we agreed that conducting a series of interviews with community members at the Council of Aging, the pickle ball courts, and the Easton Housing Authority was the first step to deciphering the problems that pose a challenge to the elderly's day to day lives.

Our team gained a lot of valuable insight through speaking with the elderly residents of Easton. The interviews conducted in the Council of Aging yielded evidence regarding the variety of pain points residents had depending on individual circumstances. The experiences of elders who are too old to drive or have mobility problems were different from those whose motor skills and driving skills remain. The interviews conducted at the pickleball court found that the popularity of the game among the community stemmed from the elderly's need to maintain moderate forms of physical exercise in their old age. While they may have an activity to build strong community within a public space, they don't necessarily have a dedicated space for said activities. The interviews conducted in the Easton Housing Authority gave more personal insight as to how the elderly interacted within their living surroundings. As opposed to the elderly at the Council of Aging, those in the Easton Housing Authority were more forthcoming with their renditions of the conditions they face pertaining to outdoor activities within their community. Resident interviewees expressed frustration with the current housing administration due to the latter's negligence in providing substantial and immediate service. They feel disregarded in the way their feedback goes unheard.

Each interview case, while conducted in different settings, depicted two overarching pain points across the board. Regardless of mobility, the ability to drive, or the environment, the lack of recreational activities to physically engage the elderly as well as the disconnect between the administration and the community is the pervasive problem in Easton. These

pain points being mentioned by multiple interviewees in various settings was indicative of a problem that aggravated all seniors.

In this paper, we will portray the problems with a multitude of outdoor spaces and buildings that the elderly face as well as propose solutions and schemas that can be implemented to ensure a long-lasting bridge between these public commodities and the elderly community of Easton.

Lack of Effective Communication Between Community and Administration

We conducted a series of interviews with residents in Elise Circle, a property mostly inhabited by elderly members of the community. We recorded many consistent observations in interviewee responses regarding the housing administration. All of the people we interviewed expressed displeasure at the housing administration's lack of initiative to address residents' concerns.

The first resident we interviewed at Elise Circle was Jim, who reported that he and his fellow residents had been asking the housing administration to put umbrellas over the picnic tables in the courtyard for over a year. Jim expressed his rational reasoning, saying that it is too hot and uncomfortable when the sun is out. Without shade, many of the elderly residents, who are trying to enjoy some time outdoors, are prone to heat strokes or harsh exposure in the sun. He also stated it was a hassle for the members to retrieve an umbrella for themselves every time they sat outside and requested that the board implement tabletop umbrellas for more comfort. Jim's request was drawn out for over a year and he went back and forth with the board simply to provide additions for comfort before finally being granted them. Jim expressed frustration that such a beneficial communal request, which did not require many funds or time to implement, took such a long time to take effect. Jim also requested more indoor recreational activities instead of the standard bingo, recommending a pool table. He and his fellow residents proposed adding a pool table to the senior center for more indoor entertainment during harsh weather, but the board ignored their request for a long time before denying it altogether, citing no particular reason for not granting it.

The second Elise Circle resident we interviewed was George, who also had trouble with the board resolving issues and making repairs in a timely manner. There was a wooden bench outside of George's unit that he liked to sit on to enjoy the outdoors, and there were a few splintered and warped boards that needed to be replaced. It took countless acts of persistence, making calls, attending meetings with the board to discuss his repair request numerous times, and three entire years to merely repair a few broken bench boards.

Jim and George have also reported a lack of effective communication with the board of directors, saying that the administrators often respond with a generic "there's nothing we can do about that" without considering the cost or discussing the benefits of new community additions. Jim said that his concerns and input are often dismissed at monthly meetings and that he is always told to save his feedback for next time, never having an opportunity to voice his opinions. George said he and the residents do not have any say on decision-making in the community, that all decisions that are designed to improve the lives of the residents are solely at the discretion of the housing administration without any residential input. A third interviewee, Christine, told us that most residents don't even bother going to the meetings because anything the residents have to say "goes in one ear of the administration and out the other." The residents are left hanging with unanswered questions and unconsidered input.

Through these interviews, we have concluded that the housing administration is ineffective in listening to resident recommendations and enacting change to improve the quality of life for community members. After converging on the root problem of communication issues between community and authority, we brainstormed solutions that satisfied the residents' need to be listened to. Though many of our initial solutions came from direct suggestions from residents themselves, such as getting a pool table or a mechanical treadmill, we realized our solution needed to also satisfy the board in terms of feasibility, and provide a long-term resolution of communication issues. Keeping these factors in mind, we converged on a long-term solution to current communication issues. We propose to implement a suggestion box at meetings and all residents must put in one piece of feedback regarding requests for activities, wishes for equipment, or any desired changes to the community. All suggestions must be within a set of guidelines established by the housing administration, such as a maximum time frame for feasibility as well as a maximum budget for cost. Each month, the administration must read all of the suggestions and select at least one to implement into community life. This solution will bridge the communication gap between the administration and the residents, since written suggestions will be less time consuming to go through rather than having residents voice their opinions one by one at each meeting. This is also an effective method because the housing administration must make a monthly change that will appease residents, since not only are their suggestions heard, but they are fulfilled as well, while also staying within the administration's own time and funding constraints. The administration can also gauge the level of demand for a suggestion with a physical count of suggestion slips, emphasizing the importance of common suggestions; a popular opinion might only be announced once at a meeting so it's not repeated, so having an actual count can show what issues are most prevalent to residents. With this solution, both parties are accounted for and the lack of proactive communication will no longer be a pivotal pain point in the elderly's lives. Furthermore, the creation of the suggestion box will promote community within the elders, as they'd have to plan prior to meetings what exactly ails them in the community and bring it forth, as a united front, to the administration.

Implementing an Indoor Pickleball Center

We found that the primary form of recreational activity among elders in Easton is pickleball, as it is an active sport that is not too strenuous. One way to increase physical exercise and recreational fun would be to expand the number of pickleball courts. Pickleball to the elders is not simply a time-passing sport, but more so a community activity to keep them mentally and physically engaged. As the town had informed us, there are current plans to build six additional pickleball courts near the tennis courts. This is a huge step in the right direction but must overcome a major obstacle: weather conditions. Residents should be able to play pickleball at any time of the year regardless of harsh weather. It would be beneficial to build a complete indoor structure, or even implementing a dome shelter over these six new courts in the winter would suffice, as they could set it up in the same way they do tennis courts during the colder seasons. Both of these solutions would provide the elderly of Easton with a way to enjoy their favorite sport not just at any time of the day, but at any time of the year.

There are many physical and psychological benefits of implementing an indoor pickleball facility for the elderly citizens of Easton, so it is important that the town provides a well-equipped and well-maintained pickleball center for the community. From a physical perspective, Pickleball is perhaps the most effective and fun form of exercise that these senior citizens can participate in. Because it is similar to tennis, it provides an all-inclusive workout that engages different parts of the body while still being less strenuous on the joints, lower back, and feet. It is also by far the most popular elderly sport both nationally as well as internationally. It is very inexpensive to play and all it requires is a racket, proper shoes, a court, and a pickleball.

Having an indoor pickleball center also provides positive psychological effects on seniors. In our research, we found a consistent theme that senior citizens feared social isolation and loneliness. By providing a center that is open year-long, the elderly people of Easton have the opportunity to not only come out and be active with a quick game of pickleball, but also a very frequent socializing opportunity. Even non-participants of the sport can always come to this center and find all their friends there to socialize. This center would help build a sense of community in letting elders know that they are not alone.

Furthermore, there could be weekly organized family events or tournaments. With little planning and resources, these events can have very beneficial social impacts. In some of our previous research, we found that competition (in small doses) has very positive effects on the elderly. It triggers parts of the brain that have oftentimes been dormant for so long and can spark memories from the past, which is positive for the elderly. It also gives them something to look forward to, which ultimately is the biggest issue we're covering here. In

our interviews, a common theme that came up is that there are many levels of aging, as well as many different phases. Many of the citizens in Easton felt it was important to differentiate the differences between someone who is 55 and someone who is 80. The goal here is to create a town and environment where people of ages 55, 65, 75, or 85, can still have a happy and enjoyable life to look forward to.

Hazardous Conditions at the Library

The Ames Free Library in Easton is an outstanding resource for all ages, especially seniors, fully equipped with elevators, and stair lifts to be accessible for all. However, darkness, snow, ice, or even rain can be a danger once outside, when seniors need to travel to and from their cars. Marion Wingfield, the manager of development at the library, informed us that there is a very active group of library patrons who are mostly older in age. Though the library staff tries to mark any hazards as clearly and as thoroughly possible, there are still incidents of tripping in the lot. We know safety is a huge concern for senior residents, and some of our previous interviewees had avoided the library for years on account of safe parking concerns, resulting in them being unaware of the work done on the property to make parking safer. The seniors who do regularly visit prefer to do so during day events or on quiet evenings, as the library lot fills beyond the amount of cars it can accommodate, potentially forcing them to park far and walk far, which is especially unfavorable for those with mobility issues. This diverse array of problems highlights the key pain points of hazardous conditions and insufficient parking for seniors.

After discussing these problems with Marion, our group brainstormed different possible solutions with her, and received her feedback. Uniting our fresh perspective on these issues at the library, and feedback regarding the library from seniors who didn't frequent it, along with Marion's expertise of what goes on and what initiatives have already been taken, gave us a diverse set of minds to brainstorm and allowed for potentially more innovative ideas. Though our solutions diverged to try to increase senior participation at the library through expanded programming and transportation, we converged on ideas that addressed the primary safety concerns that would not interfere with the library's older structure. We agreed that having marked senior priority parking spaces and volunteer escorts would serve to alleviate these safety issues.

Having reserved senior parking would ensure that those who may not need handicapped parking, but still may have difficulty walking far, can easily and safely reach the library. These priority spaces would be especially helpful on the library's busiest days, so that seniors can be guaranteed a spot within the lot rather than have to park off the property and face a long car-to-door walk. Regarding safety, having a volunteer escort could help seniors safely go from their car to the library and back, especially in the winter. The library could

recruit high schoolers (ideally stronger athletes), equip them with traction cleats in the winter, and have extra protection against falls on icy patches or small steps commonly missed. This program has the added benefit of giving local high schoolers volunteer opportunities, and works to unite a wide age gap. In conjunction with the safety initiatives already taken by the library, reserved senior parking and an escort would make the library extremely senior-friendly and safe.

Conclusion

Our team had the opportunity to meet a very diverse group of seniors in Easton, and we learned that with their diversity came a wide array of pain points in their lives. Though attempting to alleviate all these issues was initially daunting, through analyzing these issues we found common root problems in the lack of recreation, safety concerns for going about such, and a need for better communication between community and authority. Creating a suggestion box that must be listened to, constructing a safe space to play pickleball, making parking changes to reflect senior priority and adding an escort program would all serve to increase seniors' access to recreation through better communication and increased safety measures. With these new draws of safety and recreation, various outdoor spaces and buildings in Easton can become more suited for senior use and help the elderly live healthier and more active lifestyles.

Team 2: Transportation

Introduction

In the fall of 2019, Boston University unveiled a new innovation course: Ideas to Impact. Students worked with the Town of Easton, a suburb outside of Boston, in efforts to create a senior-friendly living. Divided into teams, each tasked with one area of community living, students sought to understand and create solutions through collaborative thinking and innovative theories. Our group was assigned transportation. Easton's Council of Aging operates under strict regulations and tight funding, so in order to solve their issues of an underused and under-functioning, transportation system, we followed the double diamond model of problem-solving. Through continuous ethnographic fieldwork, we widened our understanding of the Easton community, exploring pain points, and practicing radical brainstorming; then, we focused the information through rapid prototyping and worked within the town's limits. This paper examines the innovative process from discovery to delivery and presents our final solutions for short term and long-term implementation.

Initial Insights

The first part of the double diamond process, arguably the most important, is discovering and understanding the users' interactions with the transportation system. Before visiting Easton, each team member individually contacted elderly relatives to gain a better understanding of senior living in America, undoing preconceived notions of the elderly experience. After the first individual assignment, we met to share the diverse insights gained from these initial ethnographic interviews.

First Easton Trip: Ethnographic Interviews and Observations

We consolidated our understandings from the initial insights into a comprehensive questionnaire to ask the citizens of Easton. We found that effective ethnographic interviews began with easier, friendly questions like "Favorite place in town to get a bite? How often do you use transportation services? Is everything only accessible by car?" Once we established the flow of conversation we would really be able to dig into the pain points and ask harder questions like "How would an accessible transportation system to improve your quality of life?" Using this ethnographic interview system, we were able to generate meaningful insights that spoke to who are population was and how they interact with the transportation system in Easton. One interesting and unexpected tidbit of information we learned was that the elderly population of Easton loves gambling. Another

important method we used for collecting data was through observation. Through observation, we were able to focus on the experiences and promote understanding of the transportation system in its natural context. For example, we were able to take a ride along with part-time driver John and see how the transportation system really operated. Just by sitting back, listening, and taking notes, we were able to develop many important insights like who were the common users of the service, how comfortable the ride was, and how it was very much a personal driver system.

Overview of Transportation System

From the information we gathered, Easton's Council on Aging (COA) runs a transportation program for elders consisting of 4 shuttle buses that operate weekdays from 8:30 AM to 4:00 pm. There is only one full-time driver and the rest of the buses are driven by part-time drivers, called on an as-needed basis. In the exhibit section, there is a page from the COA's monthly bulletin, The Coordinator, that explains how the shuttle service operates and how to make appointments (Exhibit 1). Important things to note are that all scheduling is done over the phone at least two days before the date of service, limiting the service to pre-set destinations or appointments like the supermarket, food pantry, and doctor check-ups.

Identifying and Defining Pain Points

After reviewing our interviews, we consolidate our issues into three main pain points. The first being availability; shuttles do not run past 4 pm and do not have service on the weekends. This leaves those that may need last-minute on-demand service for things such as medical appointments unable to use the shuttles. For example, we learned from one of our interviews that once her family was unable to give her a ride to the hospital but since she didn't find out until the exact day, making her unqualified to book a shuttle appointment because all appointments must be done at least two days in advance.

The second pain point falls under accessibility; although the shuttle buses are American with Disabilities Act (ADA) compliant, one of our interviewees mentioned that shuttle drivers are not responsible for helping riders get on and off the bus as well as help with carrying any additional items passengers may bring with them such as groceries. This warrants the shuttles inaccessible to those that may need extra assistance, including traveling with a family, bringing large items (washing machines), etc. Lastly, our third major pain point is that the shuttles do not serve a wide enough area, making travel to cities like Boston impossible for some, leaving those that would like to attend recreational activities outside of Easton unable to do so.

We focus on these pain points because of many of the issues arising from the current scheduling system. During one of our interviews with a part-time shuttle driver, Ted, we learned that part-time drivers work on an as-need basis. When people make appointments that require more than one bus, part-time drivers are employed to service these people. For example, Ted mentioned that his schedule can be anywhere from 2 1⁄2 to 17 hours weekly depending on the number of people scheduled to be Page 4 out of 13 driven. However, since there may be days where demand requires only one or two shuttles to be out on the road, there is a possibility that there is a shuttle that is not being used for appointments. Although there were many opportunities for improvement, we also found new constraints we have to work around. Firstly, our solution must maintain the safety of all users and we must make sure that we steer clear of liability issues. Another constraint is working on a limited budget, so our ideal solutions must work with much of the existing infrastructure to maintain efficiency and be affordable.

Brainstorming Radical and Realistic Solutions

After discovering and defining the main issues and pain points for the elderly population in Easton, our group brainstormed potential ideas to develop a fit solution. We first brainstormed individually to fully diverge and broaden the scope of our ideas. The radical solutions we came up with were then presented to our relatives and friends. After receiving feedback from our target demographic, we continued our brainstorm in a group setting to expand the current ideas while developing new ideas. We used physical models, such as sketches and idea maps, to state our ideas and then we took turns giving feedback. These tools allowed us to trace our brainstorming process and by discussing the aspects of the different solutions, we were able to modify our individual approaches to fit a collective vision.

Brainstorming individually allowed for radical solutions. Without restricting ourselves, we came up with ideas such as creating a public transportation system by extending the current bus routes from Brockton to Easton, buying a gambling party bus, or forming a partnership with ride-share services such as Uber or Lyft. We each had different perceptions of the problems, some focused on recreational pain points, and others the accessibility. Every time a group member presented an idea someone else would jump in and build on the idea, or they would politely point out its limitations.

An example of this: one group member suggested creating a transportation system based on community: seniors could volunteer for specific requested rides. Another team member then pointed out how this could be utilized on an everyday basis by allowing the elderly to tag along for each other's' errands. The conversation turned towards the social aspect of volunteer ride-sharing and how 'community' could be utilized in terms of engaging seniors. Our group brainstorming would often spiral out of control and our ideas would be so radical that it was almost humorous. In general, we maintained the idea of "community ownership," as explained by Bill Moggridge in

Designing Interactions, as all ideas were open for use and expansion by the group and were not owned by an individual. The c*ollective* processing overtook the *individual* processing that began the brainstorm.

The Process of Service Design

With our various ideas brought to the table, we initiated a process of converging on a solution, filtering the elements of radical ideas that may in their pure form serve as a refined and realistic solution. To begin our process of "sifting" or prototyping, we considered the duality of service design (user and provider), as opposed to product design where only a user's needs are considered and emotional touchpoints aren't considered. To prototype our service design and understand how it would operate in greater detail, our group came together to collaborate and use the tools that were available to us on servicedesigntools.org.

First Phase: Journey Mapping
For our first phase of designing a service, we looked to understand our customer journey using the Journey Map tool. Our three touchpoints were the website, phone, and vehicle pickup and our three phases of the customer journey itself were pre-service, service and post service. This tool helped get us out of the mindset of the designer and instead view our product through the eyes of the user (Exhibit 2). We considered transportation itself as a service, and how its intricacies concerning liabilities or accessibility may differ from a product-based service, such as buying wood glue at Home Depot. Our service deals with a particularly dangerous aspect of living. We often don't think twice about the automobiles, or infrastructures that support our transport but if we regard this service haphazardly, it could create serious injurious harm. Through the first phase of the user journey, we were able to start asking and answering critical questions like: Where would customers look for information?

When/how would the customers be interacting with the service? Our one key takeaway from this stage of the design was that we realized that we needed to make a website page as a supplement to inform people, but the booking and the majority of the interaction with the service would still be based over the phone.

Second Phase: Service Blueprint
We then moved onto the second phase which was making a service blueprint. In the service blueprint, we considered not only customer interaction but also what the employees and systems we would need to support the operation (Exhibit 3). This part gave us a lot of insight into the effort required to operate this service including manpower and support systems needed. As an example, a key takeaway we found was that to support the pre-service interaction, there would need to be additional people helping consolidate information, using paper bookkeeping systems. Although it

may require some additional manpower, we concluded that this program's impact, as well as its potential to make some return with charging higher prices, outweighs the cons.

Final Phase: Imagining the Short-Term Solution

The last phase of the service design is to imagine the solution. To do this we created dialogue for two characters, an Easton citizen and a service representative of the town of Easton. We imagined the dialogue on all three phases of the interaction (Exhibit 4). This tool helped us with the true complexity of this service in action. One thing we uncovered was that we need to ask for a current address and that we would have to think about was if we were to charge a price based on how far we have to drive. We decided to mimic a taxi driver fee system and have a flat fee as well as an additional charge based on how far the drive is. Overall, this tool helped us think about what our service would look like in real-time and what design flaws it has. Through this extensive design process, we were able to create a short-term service product that wasn't overly complex, feasible in terms of time and cost, and impactful. The on-demand service will run by setting aside the extra minivan that the town of Easton owns. A large problem with the on-demand service, however, is booking. So we plan to start the on-demand booking the day off and cut it off when all the slots in the day are filled. The elderly will call in and give us their address as well as where exactly they want to go. For now, we propose a price model similar to cabs, with a flat fee and an additional charged based on how far the drive.

A Radical Solution: The Long-Term Plan

Easton Reimagined

A long-term radical solution to the issue of transportation would be to reinvent the mission statement of the Town of Easton. In redefining transportation, transportation is the byproduct of bringing people where they need to go. In the case of the elderly population in Easton, the root problem stems from the need to socialize and receive basic needs. Reinventing the town's goals from a "town for the elderly" to a "town for the family" would help accomplish this goal. Those that we interviewed stated that they enjoy talking to younger people because it makes them included in "normal society." In addition, several individuals have stated they live independently but often travel outside the town to meet with family members. Having the town center their focus towards the "family" and bringing family to the elderly instead of elderly to the family, would help accomplish this goal, enlarging the scope of the elderly's social life, at home and out of the home.

Centralizing the Family

One way to centralize the family in Easton would be to create a town community center and incorporate the council of aging services in that community center. The idea stems from an Easton resident complaining about parking space at the council of the aging center and suggested moving to a larger space at a local school that is going to be abandoned. The larger space could allow for

a community center with programming for all residents (general trip programing and low-income services), along with the council of aging as a part of the community center. This could also allow for more funding for elderly services and other programs because the younger population could afford more, and therefore more would be charged for these trip programs for those other 65. Elderly-centered programming, such as aerobic programming, could still be implemented as well in a separate catalog for the elderly. Having the town incorporate a family-centered mission does deviate from its original elderly focus, rather it continues to be age-friendly for the American Association of Retired Persons (AARP) certification.

Funding for the Elderly
Having the town focus attention on the family would also allow for greater funding for transportation services. Age population structures suggest that populations with a greater elderly percentage have a harder time supporting this age group. Recent events in China, for example, demonstrate a struggle to support its large older population, an imbalance created by its one-child policy. As population size increases in Easton as a town for the family, Easton could financially support the growing older population. With enough funding from taxes and family-centered programming, round trip scheduled buses could be implemented for a younger demographic and for elderly who are more mobile (perhaps with a price reduction or free service for the elderly like in Scotland), charging a fee for the younger population that could support elderly-dedicated disability-centered transportation services. Changing the mission statement towards a more "family-friendly" environment would encourage overall support for the elderly population.

Conclusion

As a group, we found that failing frequently, and often, throughout the semester was the key to fine-tuning our innovative instincts and sharpening our radical solution-making abilities. Through practiced failures as well as the service tools we used for the length of this project, both in and outside of class, we were able to deconstruct Easton's transportation problem and rebuild into our team's collective vision for the future. We learned that effective ethnography requires more than an objective reasoning, but also a subjective connection to the users, the providers, and our own teammates. By creating a culture of openness, we could experiment with our ideas quicker, embracing failures and adapting to critical feedback. Our final solutions, one utilizing the council's extra vehicle and the other changing Easton's community goals, may neatly end this Ideas to Impact project. However, the tools of the innovative process by which we present our final findings ebbs forward, finding itself diverging and converging in our daily lives.

Exhibit 1 – Shuttle Service Information in The Coordinator

Exhibit 2 – Journey Mapping

Exhibit 3 – Service Blueprint

Exhibit 4 – Dialogue of Interaction

Team 3: Housing

Introduction

In a collective effort to improve the housing conditions within the elderly residences of the Town of Easton, our innovation team effectively collaborated with senior citizens, implementing the theories and practices of innovation and design thinking to discover and define the problem as well as develop and deliver a solution, otherwise known as the Double-Diamond approach [Exhibit A]. Using this specific design strategy to tackle the problem of housing in Easton, not only was our team able to develop our creative thinking around socio-economic issues, but more importantly, we were able to translate our insights into concrete, practical solutions.

To start, we began with the discovery phase, investigating the problem using divergent thinking, maintaining an open mind, and considering anything and everything regarding the experiences of the residents. In other words, we thought radically. By not allowing for any conceptual constraints in this phase of exploring housing issues, our team was able to uncover specific aspects of the problem that we would not have found otherwise. Moreover, holding interviews with various senior community members largely contributed to our success in discovering the problem, as we were able to listen and learn about the residents' honest impressions of their housing situations. As a result, we were able to move on to the next step: converging on the problem, or explicitly clarifying and defining the issues. During this stage, each team member began to hone in on the patterns we had observed from our initial discoveries on our first trip to Easton. Our rationale began to shift from less radical to more feasible as we converged on the customer journey or resident experience. We contemplated the delight in their experiences as well as the pain-points that ultimately allowed us to vote and agree on the central areas that needed a solution.

Continuing along the pathway of the Double-Diamond approach, the time came for us to utilize our creative thinking yet again, as we put into practice the concept of diverging on the solution or developing potential solutions for the housing problem. We began ideating or generating a list of innovative, progressive, and revolutionary solutions. An essential part of this process was understanding that no idea was a bad idea and that during this phase quantity trumped quality. Our team fulfilled the first three steps of the Double-Diamond approach; all that was left was to deliver our solution through the re-visitation of convergent thinking. Of our multiple, diverse solutions, we focused in on what could be achieved and implemented in the Easton community to maximize the welfare of the elderly residents.

Diverging on the Problem

When we arrived at Easton for our first trip, we anticipated a rather long list of problems from the residents of the housing community (Parker Terrace and Elise Circle). We set out to find solutions to improve the quality of life for the elderly community in Easton. However, to our surprise, many of the residents are self-reliant and had no significant complaints. They were generally content with their living conditions and housing amenities. As a result, we had to pick their brains to find even the slightest of complaints. We conducted interviews with many of the residents who were socializing in the Parker Terrace lunchroom, which they utilize as a community space. We inquired about potential problems, such as transportation between buildings, icy sidewalks, stairs in residencies, as well as the overall standard of living questions, which we believed could present future or ongoing issues that are often overlooked. We then spoke to Kathy Stager, the Executive Director of the Housing Authority. The information she shared with us provided us with more insight into the waitlist system, why it is a prevalent issue, and other pending issues that the housing authority is currently trying to find solutions to. Kathy enlightened us on a significant factor of the waitlist and time spent on the waitlist: the growing demand for a handicap-accessible unit and the limited number of units available to meet this demand.

Additionally, we were given a tour of both private and public residences, and had the chance to talk to Joe, a maintenance crew member. Joe elaborated on his work at the residence buildings, describing both the problems he faced daily and his observations from working alongside the community. We were able to see the interior of an Elise Circle housing unit, which was in the process of being renovated. The photos, as well as notes based on our observations, gave us perspective and helped us take into consideration the issues that the interviewees presented to us.

Once our team arrived back to the Council on Aging building, we conducted additional interviews where we encountered specific problems various other residents face, such as the waiting list for housing, maintenance (cleaning between the units), and shared deck space. Many of them were eager to hear these issues being articulated and saw our acknowledgement as a potential fix to improve their quality of life [Exhibit B].

Converging on the Problem

We conducted two sets of conversational interviews with the elderly in Easton. Significant problems we identified among the elderly during our first set of interviews included trouble with cutting their toenails, slipping on ice on the sidewalks, cleaning the windows, sharing deck

space with their neighbors, and cleaning the staircases. From our first set of interviews, we gathered significant issues and then pinpointed them during our second set of interviews. Our second set of interviews was centered around Easton's maintenance crew, the waiting list for housing, and funding.

After our second set of interviews, we noted that the Easton elderly community in comparison to The Residence at Five Corners elderly community is a lot more isolated and lacks a community feel with close relationships between residents. Since the apartment style homes are separated and not everyone is in one building, residents can feel slightly lonely. As a result, some residents such as Bob of Elise Circle felt disconnected from other residents. The activities were repetitive (Bingo every Thursday night), and the residence home does not really offer a variety of activities. In comparison, The Residence at Five Corners closely resembles a dormitory building, in which units are in proximity and residents enjoy high quality activities and socialize often [Exhibit C].

Overall, the residents of Easton were happy with their living conditions. However, a problem we pinpointed was the maintenance team. Currently, the official maintenance team consists of three members. After our first set of interviews, it seemed as if a three-member crew was not enough to cover such a large amount of space. We thought that the residence homes were not being cleaned well enough and the grass could not all possibly be cut with just three crew members. However, it turns out that the crew members were able to execute their tasks as they also got help from inmates from a local prison.

Upon learning that inmates are often involved with maintenance activities, we became concerned with the safety of the residents. In our minds, having inmates close to the homes and in interaction with the elderly did not seem safe. We empathized with the residents, reasoning that they might feel uncomfortable, or perhaps even scared, in their own living spaces knowing (or not knowing) that inmates are right outside their doors. However, rather than suppose the worst, we decided to test our assumptions and find out from the elderly community themselves what their thoughts on the situation were. To our surprise, the two elderly residents we spoke with, Bob and Ines, said they did not mind the inmates working on the residence home grounds, nor did they ever have an unpleasant experience with the inmates. In fact, Ines described a positive exchange with an inmate who was painting outside her door while being watched by a guard. Although she did not take issue with the situation, surely not all residents will share the same view as Ines.

Diverging on the Solution

After our first trip to Easton, we identified the main problems faced by the residents: long waitlist, lack of maintenance workers, and lack of funding. We first tackled these issues as a team, and subsequently, generated both radical and feasible solutions as articulated in our

individual assignments. In preparing to embark on our second trip to Easton, we recombined our solutions so that they were presentable to the residents.

In terms of the waitlist, we contemplated providing benefits to those waiting, in an effort to make the wait worthwhile. Examples include offering breakfast twice a month, getting prioritized transportation, and other complementary services. After discussing our individual solutions, we found it to be both more advantageous and fairer to provide such benefits to all residents. In this way, the lives of the entire elderly population would be enhanced, and they would ultimately feel more satisfied and content with their living situations.

Next, we agreed to combat the maintenance problem via volunteers. We thought of providing college credit courses in order to incentivize students to go to Easton and aid the elderly community. Collaborating with nearby high schools and universities as well as awarding service hours would serve as another potential option. Another solution we generated within our group was to partner with local companies and gain the support of the employees that work there. Ideally, this would create awareness around the Easton community and the work that needs to be tended to. Nonetheless, we still believe that reeling in university students would be the optimal solution in order to combat the issue of maintenance, as they would most effectively contribute to a positive and lively environment.

Regarding the funding issue, we devised a plan to initiate a GoFundMe account for the elderly Easton community, in hopes of the popular online donation platform bringing in an increase in housing funds. Our goal was to create awareness of the Easton elderly community and we anticipated that this call for action would be one method of doing so. Another solution we developed was to host an annual gala to raise large amounts of funds. Of course, while we knew we could not depend on something like an annual gala to raise a fixed or expected amount of money, we still believed there was potential for individuals moved by the Easton housing crisis to donate in large amounts. Thus, applying the concept we learned in class of quantity over quality, we did not rule this solution out. Lastly, we considered reaching out to the greater Easton community — firehouses, the mayor, and community members that regularly contribute to the town itself — to garner support. Since we can only raise so much money through these small-scale fundraising efforts that are more or less temporary fixes to long-term problems, the funds can be applied to less expensive solutions, such as our proposed waitlist benefits. Long-term goals, such as building an additional housing wing, would require a large sum of money, so it is fundamentally not as applicable. Even still, if large amounts of funds were raised, the money could possibly be put toward creating a new wing in the public housing facilities of Easton in order to provide more housing units as well as improve the variety of activities offered to the residents.

Converging on the Solution

After diverging on the solution and devising as many radical and feasible solutions as possible, we began to converge on the solution. As part of this process, we sought feedback from residents during our second trip to Easton. Our objective was to propose our ideas to residents and adjust our solutions accordingly. After interviewing Elise Circle residents, Ines and Bob, we received both feedback that confirmed our original thoughts and new insights that prompted us to revise our ideas.

However, through the process of converging on the solution and based on feedback, we zeroed in on the solution and decided on two facets: creating a college course and building a new housing wing. We arrived at this decision by comparing and contrasting our proposed solutions to determine which ones would be most beneficial for Easton's elderly community [Exhibit D]. We prepared pro and con tables to evaluate the strengths and weaknesses of our ideas, in addition to their feasible or radical nature [Exhibit E]. The residents of Elise Circle and Parker Terrace did not have any major complaints, so we compared their housing to The Residence at Five Corners to highlight areas that need improvement.

During our interview with Ines from our second trip to Easton, she expressed excitement in our idea of bringing college students to volunteer at Elise Circle and Parker Terrace. We explained our plan as being a partial solution to the shortage of maintenance men. To structure this solution, the housing authority can partner with community colleges and vocational schools in or near Easton to create a college course (much like Ideas to Impact) that students will receive credit for. At the same time, this would allow the Easton Housing Authority to get the extra assistance they need. For example, students can come in to help with maintenance tasks such as painting. However, Ines suggested that instead of young volunteers coming in to work on tasks, their presence would be much more impactful if they were more embedded in the elderly community at Elise Circle and Parker Terrace. She suggested that students can come regularly to lead nature walks in the woods, one of her own favorite pastimes. This would keep the elderly active and socializing with one another, and more importantly, foster a positive, young atmosphere.

Ines also provided insight into how the residents seem to keep to themselves and live private lives at Elise Circle and Parker Terrace. We were able to interview Bob, who shared this same view. Bob expressed that he sometimes feels isolated and even depressed due to the lacking sense of community among the residences. Ines also remarked that there is a collective feeling of fear among the residents. She personally takes no issue with taking a walk in the woods alone or having inmates paint outside her door, but she certainly believes that other residents do. These are feelings that we did not observe at The Residence at Five Corners. The Five

Corners residents appear to enjoy a higher quality of life that we believe residents at Elise Circle and Parker Terrace deserve to enjoy as well. Although many residents seem content with their living conditions and the limited amenities of their Easton housing, improvements can and should be made to enhance their quality of life.

While it will undoubtedly be difficult to mirror the quality of the Five Corners housing and the abundance of amenities provided, strides must be made to work toward that direction. At The Residence at Five Corners, there are ample areas for residents to socialize, such as tables to work on puzzles. Additionally, the close proximity and the arrangement of the units resemble the feeling of living in a dorm building and knowing everyone you see. These aspects are severely lacking at Elise Circle and Parker Terrace, where there is not much socializing beyond bingo nights and residents congregating at the Parker Terrace lunch room to chat. The housing issue is beyond the need for more units and eradicating the waitlist. For this reason, our group feels that working toward the long-term goal of creating a new housing wing would be an incredible, pivotal solution that would both provide more units and create more areas to socialize. Socializing areas can be built into the housing to enhance the elderly's lives and minimize feelings of isolation.

Conclusion

The primary goal of our innovation team was to find solutions for Easton's elderly housing issue. However, the overarching objective of the class was to enhance the quality of life for the senior residents of Easton. As such, we decided to shape our solutions not only around Elise Circle and Parker Terrace residents' pain points and concerns, but also around the welfare and self-interest of Easton senior citizens.

Upon observation, we found that many of the elderly residents were rather content with aspects of their living conditions and the corresponding amenities; nevertheless, more strides could be taken to enhance their quality of life. The fact of the matter is, elderly residents — no matter how much money they are willing or able to spend on housing — deserve to be in a positive and uplifting environment. The first step in creating this atmosphere would be to bring in college students for volunteer opportunities. Not only will this type of program benefit the elderly community's living circumstances by gaining additional maintenance assistance, but college students will get to envelop themselves in an environment they aren't as familiar with, on top of earning college credit for their participation.

While the solution of bringing college students to Easton may seem minimal, it is the only solution that confronts the initial issues we discovered at the outset of our project in some way, shape, or form. For instance, bringing in student volunteers would reduce Easton's money-spending, thereby confronting the funding issue. It would also challenge the maintenance issue

by, in and of itself, having more bodies to help keep up housing facilities. Lastly, it would tackle the issue of making the waiting worthwhile because residents would have something to look forward to whenever college students visit. Later down the line, the Easton Housing Authority can garner the support and sufficient funding to work on establishing a new wing of units and social spaces. However, as for now, the most effective solution resides in the hands of the students — both literally and figuratively.

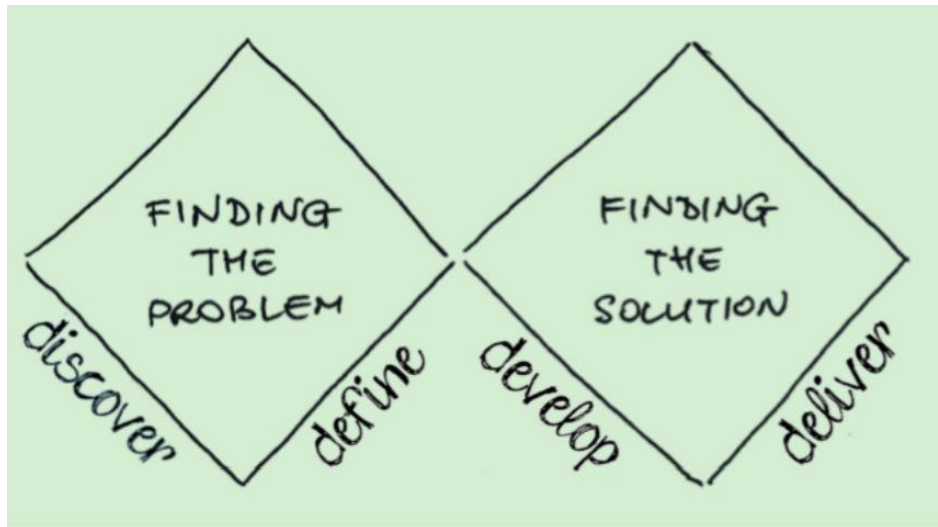## Exhibit A – Double Diamond Approach

Exhibit B - Empathy Map

Team 4: Social Participation, Inclusion and Employment

Introduction

At the beginning of the semester, our group was given the task of solving issues for the elderly within the topic of social participation, inclusion and employment in Easton, a town 90 miles away from the City of Boston with a population of approximately 23,357 people. This task meant that our mission with Easton was to investigate social problems, discuss with the members of different elderly communities' levels of inclusion and evaluate their access to employment. With the help of the Council on Aging (COA), we were able to visit Easton twice and interview residents about their daily lives, including their struggles within the community. The areas which we visited in the first trip were the COA, Queset House and the Library. The COA is the main facility for all programs and services for the elderly. Many activities take place within the facility such as bingo and fitness classes, and it is also the location for the administration whose job is to assist the elderly and coordinate programs and daily activities, like social programs and employment opportunities. The library, known as the Ames Free Library, is in North Easton, a short walk from the Council on Aging. It is a free library welcome to all residents and visitors in the town of Easton. The library, as well as having books, provides many services for the elderly and other individuals, like technology classes and different types of book clubs. The Queset House, a short walk from the library, is a mansion that prides itself on being a "learning commons." The term "learning commons" means that it is a center with the purpose of being a learning hub that aids and education on technology. Within all three facilities, we were able to note and analyze pain points regarding the elderly. During our second visit, we visited two elderly housing facilities, the Easton Public Housing Facility and The Residence Five Corners. In both facilities, interviews were conducted with residents and employees of the centers to get a better understanding of their daily lives and struggles.

By discussing and analyzing interviews and services provided by the COA and Easton, our group was able to come up with a solution using the double-diamond model. The solution presented in this paper will potentially improve and solve social, inclusion and employment problems the elderly community experiences and positively impacting the town of Easton, Massachusetts.

Diverging the Problem

During our first trip to Easton, we focused on interviewing the elderly about their daily routine, quality of living, and social life to identify any problems they encounter that we could improve.

We specifically focused on social activities, jobs and volunteer opportunities, transportation to programs, and interactions between the older and younger populations.

After interviewing the elderly at the COA, we identified shortcomings in the methods of communication between the council and the elderly. Most of the communication about activities are done through a newsletter offered by the COA called The Coordinator. It is released at the beginning of every month including all the events that will take place at the COA during that month. We find that this method is ineffective because last-minute changes due to harsh weather conditions or unforeseen circumstances cannot be addressed in the newsletter. It also requires the COA to prepare and plan a long time before the event. However, the COA can't move to digital communication since many of the elderly do not know how to use electronic communication. We also found that the sociability of the elderly's lives was dependent on transportation. Easton does not offer public transportation which proposes great inconvenience. There is a shuttle bus that runs through the neighboring towns but they only stop at certain places and only operate on weekdays. Therefore, individuals who don't live near a bus stop would be better off using other means of transport. Inconvenience also arises since it can't be used on weekends. Although, the COA offers a van service that is by appointment for doctors' appointments, some find it cumbersome to use. Additionally, we asked the elderly about how often they interacted with children or teenagers and they said they rarely did besides see their grandchildren. Few expressed desires to have more chances to interact with younger people since they think that engaging with youngsters can help them enforce vitality.

Aside from the COA, we visited other facilities such as the Ames Free Library and the Queset house to inquire into other opportunities and activities offered in Easton that are available to the elderly. We discovered that both facilities offered many services and activities, such as book clubs, movie screenings, arts and crafts and a podcast station. However, we found that many of these resources are not widely known by the community. We proposed that advertising could increase exposure for the services and decrease marginal cost and use.

During our second trip, we visited the housing authority and The Residence at Five Corners. Interviews at the housing authority helped us address a lower class of elderly that we didn't have a chance to encounter during our first visit. We found that there were few recreational activities in the housing authority. An interviewee expressed his wishes of having events and activities at the authority, especially during the winter when he can no longer go outdoors. In terms of transportation, the housing authority offers a service, known by residents as the Happy Bus, which takes occupants to the supermarket or drugstore but does not offer rides to social events or facilities, such as the COA. Additionally, the housing authority has a common area, but residents are not allowed to host events there unless the whole community is invited. This is problematic because it discourages residents from using the space and prevents the space from being used optimally.

On the opposite side of the spectrum is The Residence at Five Corners. Compared to the housing authority, the quality of living at The Residence is much better and the residents did report many problems. The Residence offers daily activities for its occupants such as bingo, happy hour, exercise classes and movie night in the building. They have easy access to stores with a Shaw's and CVS next door. They have a well-developed shuttle system and high schoolers also often come to volunteer. The main problem with The Residence is that there are too many activities happening all the time and occupants are often not very aware of them. Currently, programs are posted the night before, therefore, awareness can be increased through better advertising.

Addressing the issue of employment, after our two trips to Easton, we found that not many of the elderly desire to work. Most of them moved to Easton in order to enjoy life after retirement with the financial capacity to not need to work for the rest of their lives. When asked if they would do volunteer work, some considered the opportunity but many said they are not interested in working. Elderlies that expressed interest in working came from the housing authority since many do not make as much money as the other groups of elderly interviewed. However, even though they would prefer to work, working would increase their rent and in turn decrease their income.

Converging the Problem

To begin our converging problem process, we framed our innovative challenge with the goal of defining a wide solution space. Our proposed question was: How might we create solutions to resolve the residents' pain points while increasing social participation, inclusion, and employment among the elderly? After observing and interviewing the residents, we identified their pain points: loneliness, uncertainty over work opportunities, limitations set by the Housing Authority, sociability limited by transit, not knowing how to fit, generational gaps, and distance to community hot-spots (i.e. grocery stores, COA, restaurants, etc.). We used these pain points as our main themes in conjunction with the overarching theme of our project: social participation, inclusion, and employment.

After identifying our design themes, we created new opportunity areas. An opportunity area is created prior to idea generation and allows the themes to be phrased as a problem that opens the door to many possible solutions. The goal of the final opportunity area is to pose a "how might we" question that is refined enough to promote focused thinking while broad enough to promote radical, innovative thinking.

Prior to refining our opportunity space, we needed to ensure we had an accurate picture of our customers, the elderly, so we defined our customer journey and identified customer touchpoints. Touchpoints are when the customer and product/service interact. We noticed the

elderly do not interact with the social programs and volunteer/employment opportunities as much as we would hope due to flaws in the advertising of the programs, difficulty transporting themselves, and lack of interest. When the elderly do interact, the programs are often ones solely offered to elderly, so there is a lack of inclusion in the community. After gaining this insight, we were ready to redefine our opportunity area and narrow our "how might we" question.

To get a slightly narrower solution space after analyzing our observations, gaining insight, and defining our themes, we reframed the problem as "How might we design programs that better advertise social programs, inclusion, and employment to the elderly while accounting for the issues of transportation, lack of interest, and Housing Authority regulations?"

Following the proposal of our problem question, we began brainstorming and thinking of both radical and rational ideas. Our brainstorming process consisted of both individual and collective brainstorming. Group members brought individual ideas to the group meeting and then worked together to collectively brainstorm additional ideas. The initial goal of both brainstorms was to create as many diverse ideas as the group could. An opportunity area that promotes radical thinking allows for a large quantity of diverse ideas, which diverges the design process and allows for a better chance of narrowing down the ideas to a few feasible, quality ideas.

The group used the Idea Funnel concept to help further narrow down our ideas and sort through which ideas were realistic and which were radical and unfeasible. After brainstorming, we had many radical and realistic ideas resulting from the broadness of the opportunity area. Radical solutions are often the ideal solutions but are not possible due to constraints. Ultimately, the chosen solution needs to be practical and not fail to monetary, time, or social constraints. To end the design process with a feasible solution, the Idea Funnel starts with many brainstormed ideas and narrows them down to a few realistic service concepts.

Diverging the Solution

In the process of creating solutions we first focused on addressing the promotion of already existing events for the elderly in Elise Circle and Parker Terrace. As we researched and learned of social spaces around Easton, we realized several social opportunities already existed in but were not widely utilized or publicized. We specifically had the Ames Free Library, Queset House, and Council on Aging events in mind. Initially we wanted to advertise these options via flyers that would be sent to their houses, but upon a second thought we realized flooding their mailboxes with papers would deter them from reading the advertisements altogether. Our second approach to promoting events to the elderly focused on phone calls over paper notifications. Ideally, there would be an automated service that would periodically inform the elderly residents of the housing communities of events taking place during that week. This

phone service would also allow the elderly to unsubscribe and not receive the calls, in case they are not interested in the events offered.

We saw opportunities for quality-of-life improvements in already available recreational spaces in Easton. The Ames Free Library has a good collection of books, but we saw potential value in investing some money in reading tablet devices that allow the elderly to adjust the font size of the text they are reading. This would be more inclusive of those with poor eyesight who still have an interest in reading. The connected Queset House has a multitude of underutilized rooms, which need more advertising. The two paths accessing the Queset House are inconvenient as one path is uncomfortably narrow and the other is unnecessarily long for the elderly to walk. Widening the narrow path slightly alleviates this issue and makes the Queset House more physically accessible.

In our next round of diverging solutions, we looked at the options and opportunities of the elderly in the housing communities. One of our interviewees stated the residents were barred from gatherings in their common area, but a change was in consideration that would allow gatherings in the community room only if the entire housing community was invited. This is an improvement, but it still leaves the elderly with no nearby space for private gatherings, such as family celebrations. Our group responded to this problem by suggesting a proposal that would allow the residents to reserve the room ahead of time if they want a private gathering and otherwise leave the room open to the whole residential population. We saw this is as a reasonable solution, but later realized how changing a rule of a government residential area may be difficult, if not infeasible.

Through both interviews and observations our group concluded that the elderly could benefit greatly from having more recreational events open to them more often. At this stage in the solution creation process, we honed in on bringing events and activities to the elderly due to transportation being inconsistent at best for many of them. We looked at areas such as the garden surrounding the Ames Free Library and the open spaces within the two housing communities and saw potential for outdoor events. We even considered coordinating with nearby local high schools to have their students do basic community service chores for the elderly such as clear the walkways of snow in the winter, raking leaves in the fall, and otherwise maintain the general area. Upon revisiting this idea to work out more details, we considered the possibility of patronizing the elderly and reworked this idea to now have the elderly work together with the students on community projects such as fundraisers and charity events. Activities like these have the elderly working as equals to the students, as opposed to leaving them mostly inactive with nothing to do. In recent years it has become more common for high schools to mandate community service for their students to graduate, so a project such as this would mutually benefit the students in addition to providing for the elderly. While discussing possible activities we realized the elderly lack basic recreational activities. We immediately suggested the prospect of introducing simple activities to the housing community. More

specifically, we looked at placing puzzles, word searches, board games, and perhaps a billiards table in the common gathering area at the housing communities. The only real drawback of this idea is the possibility of these recreational activities being overlooked and underused, in which case we would have failed to solve the problem.

With each solution presented came with the problem of logistics. Each of our solutions came with the questions of scheduling, cost, parties involved, organization, promotion, and hiring staff to look over them. Our group imagined these new activities would be placed on a consistent schedule, which we imagined to be the same day of the week twice a month. Perhaps the most determining factor, each activity would require some amount of money to run them. Due to not knowing the budget of the housing communities, our group favored effective solutions with lower costs. In terms of coordinating events, we were hopeful in getting the Council on Aging to work together with the housing communities at Parker Terrace and Elise Circle. Their coordination would divide responsibility and costs between the two groups, as well as guarantee event timings do not conflict with each other. Promoting these events would be handled either by their current methods of communication or by our phone subscription service idea. We envisioned the events to be casual, and with the Council on Aging working with the housing communities, the staff required to run them would be minimal. Our final solution had to be low cost, address the issue of transporting the elderly, have consistency, require minimal staff to operate, support multiple types of activities, attract the elderly to participate and make them feel invited. To address all of these issues we created our final solution: The Mobile Social Bus.

Converging on the Solution

The Mobile Social Bus could make its trips on a bimonthly schedule, bringing activities to the Public Housing Facility. Activities could range from being outdoors centric to indoor, and although the focus would initially be on utilizing the resources Easton already has - like crafts and board games - over time the focus could be placed on activities that individuals vote or request to enjoy. The buses that the town currently use for elderly transportation could be utilized, although this would require working around the current bus schedule and possibly hiring an extra driver to accommodate for these events. Eventually, a more appropriate vehicle could be purchased and used, but to immediately get the project off the ground, the town's current vehicles are the most realistic option. While paying an extra driver can become costly, the benefits will outweigh the cost in the long run, as the town's current resources for the elderly will be better utilized.

We found that a Mobile Social Bus would be the best solution because it best encompasses the combination of pain points we are trying to address. As the social participation, inclusion, and employment group, we needed a way to not only get the elderly population more involved, but to do so in a manner that would let them engage with different parts of the community. We found

that while Easton has the supplies and resources to engage these individuals, the biggest issue was accessibility. It is difficult for a lot of them to get to the Council on Aging, and even more so to get to the Queset House, which had a collection of resources and recreation rooms. Equipped with the technology, space, and supplies - like crafts - to engage the community, all the components were there, but not in a way that could be easily accessed for a lot of these individuals. Even for the individuals who can easily get around, we are seeing that the effort it takes to plan and attend these activities and events is overtaking the benefits they present. A Mobile Social Bus would bring the activities to them, making them less of a hassle or inconvenience to access. By loading various activities into the van, and bringing them to the Easton Public Housing Facility, you remove an entire aspect of the process that is again and again holding back these individuals. In addition to making the activities more accessible, the bus would form as a secondary way to advertise said activities, as it will be easier to maintain interest in the programs if they can see and experience them occurring. We have found that a decent portion of the individuals we spoke to are aware of some of Easton's programs, and how to get more information on them if they wanted to, but there is a disconnect in following through on any interest. Because they are hearing about these events as concepts, it is easy to become disengaged from making the effort, as the only way for them to become involved is if they take the initiative. If the activities are actively occurring in their immediate area, they become something tangible and much easier to connect to. Not only would the Mobile Social Bus address the pain points associated with social participation, but it would also provide a way to increase inclusion as well. In class, we discussed how some elderly people struggle to feel like equals when in situations with younger counterparts. While interactions between these individuals may occur, it is important that they are done so in a way that isn't demeaning or condescending, and this can sometimes be difficult to naturally achieve. Within the Mobile Social Bus, local teens would be able to volunteer in mobilizing and running various activities and programs, providing an outlet for the two populations to interact in a productive and enjoyable atmosphere.

Conclusion

By implementing our research into a solution, we hope to be able to solve social participation, inclusion and employment struggles within the town of Easton for the elderly. Through our research, we became aware of the struggles elderly face in their everyday life allowing us to pinpoint further problems that need solutions. It is important to not make the elderly feel like a burden in society, so by implementing different ways of improvement we hope to see the elderly community in Easton strive and be more active members of society. By understanding and discovering the main problem, we were able to develop and deliver a proper solution. The overall two main struggles the elderly community in Easton face are lack of access to social activities, referring to communication, advertising and distance, and the lack of inclusion with other residents of Easton. A perfect solution would be to find an innovative way to both facilitate

access to social activities, while promoting inclusion between all residents of the town. Our idea of the Mobile Social Bus is a positive way in which the COA may bring social activities to the elderly who may be unable to reach the COA facilities at the hour of the activity or even due to lack of advertising. By bringing it to the Easton Public Housing Facility, we are facilitating access, inclining more residents to attend social events, and cutting the stress of transportation for many elderly residents. In turn, the Mobile Social Bus is also a great way to implement occasional activities with different age groups. Occasional activities between elderly and age groups should implement the concept of inclusion and make elderly feel welcome. This would be ultimately done so by creating activities that would require a 50/50 effort without making one group feel as if they are unwelcome or out of place. Examples of an activity may be implementing a community service between local high schoolers and the elderly by making sandwiches for the homeless. This would mean equal effort from both ends by making it interactive between both parties, while benefiting a completely different population.

Overall, we have very much enjoyed our time visiting Easton, MA, getting to know the town and what it has to offer. The highlight of it all was meeting people with many stories and life experiences, which ended up being our motivation for our solution. Making the assignment personal made us want to find the best solution for a community of individuals who have given so much to the society we are all a part of today, which many people may not recognize. By implementing the Mobile Social Bus, we hope it motivates the elderly to participate more, which will hopefully improve their overall quality of life and in some small way express gratitude for all they have done for Easton.

Team 5: Information, Communication and the Digital Divide

Introduction

Our group is responsible for finding and solving problems related to communication, information, and the digital divide within the elderly community in the Town of Easton. Technology is constantly changing and innovating, causing former physical entities to become digitized. As Nelson predicted in "How the 'digitization of everything' will become a reality," everything is being digitized. This means that conventional forms of communicating and getting information are being rapidly converted to and/or replaced by digital versions. What happens to the people who cannot keep up with those changes? The people whose brains can't rewire to adapt to new technology.

Older people have been scientifically proven to not be able to adapt as quickly to change as their younger selves. This is because of the psychological effect of age on the brain's ability to learn. According to Cattell Crystallized Intelligence refers to the knowledge, facts, and skills that are acquired throughout life and Fluid Intelligence refers to the ability to solve new problems, use logic in new situations, and identify patterns. When a person is young they have almost no Crystallized Intelligence and a lot of Fluid Intelligence; however, as a person approaches their sixties, they actively gain more Crystallized Intelligence and actively lose their Fluid Intelligence. When a person is in their sixties, they begin to show a complete total loss of Fluid Intelligence and their Crystallized Intelligence begins to decline. All this points to the fact that it is hard for elderly people to keep up with new technologies.

The goal of our research is to find a way to minimize the digital divide between the elderly and the developing technologies. Our method of collecting data was by interviewing the elderly of Easton. We made two trips to Easton. During the first one, we interviewed almost ten women who were over the age of 60 and under the age of 82 and asked them broad questions that were related to communication, information and their technology use. During the second trip, we asked more specific questions to the elderly and sought out important people who run the town.

The elderly in Easton have their ways of communicating, getting information and using technology to stay in touch with what is going on in the town. The population of Easton, including the elderly, attend town hall meetings to try and express concerns with decisions happening in the town and so forth. Another form of communication that the elderly have in the town is with *The Coordinator.* In *The Coordinator,* events, transportation schedule, and news are sent specifically to the elderly. With technology, the Easton library offers thirty-minute blocks to help with any technology issues anyone in the town may have. The department

dedicated to the betterment of the lives of the elderly in Easton is called the Council on Aging. They offer technology classes to the seniors that are taught by the town's high school senior students. The classes though, as some of the seniors we interviewed said, were not frequent. Some did not even know the classes had been offered previously.

In what follows, we begin by diverging on the problem in order to identify the basic symptom problems. Secondly, we converge the problems by bringing them all together in order to define the root problems. Afterwards, we show the techniques we use to create and evaluate solutions. Following the discovery of the main problems, we diverge on the solutions where we build a stockpile of possible solutions. Then, we converge the solutions and build a showcase of the best solutions to the root problems. We close the paper with a discussion of how we hope the solutions will be implemented and how the town can benefit from our proposed solutions.

Diverging and Converging on the Problem

The various interviews gave us useful insights into the seniors' lives and their pain points with regard to communicating, exchanging information, and technology. The problems the elderly identified to us varied from person to person but they tended to share common themes. The amazing innovators of IDEO say that problems are symptoms of the root problem. We needed to narrow the pain points, symptoms, to figure out the specific root problems that we could solve. We derived these pain points from our interviews with the seniors on the first day of our visit to Easton.

When looking over our interviews with the senior population of Easton, we were able to determine three pain points that were consistent with the majority of those that we spoke with. The first pain point is that many seniors feel that the screens and keyboards on phones and tablets are very difficult to see because the letters are too small. This is a common problem for many of the seniors because eyesight deteriorates over time. The second pain point we noticed was that *The Coordinator* is not delivered in another form other than print and it being available online. The third pain point is that technology develops too fast. A woman we interviewed, named Charlene, said it is very difficult to keep up with technology when it is constantly changing. Our brains begin to change and it becomes harder to keep up with the fast changes that happen on our smart devices, according to Charlene.

Seeing these pain points helped us in thinking more clearly and understanding how seniors feel about technology and communication in the town. We formed general patterns with these interviews such as the seniors with family geographically closer to them were more accepting and proficient in technology than those who did not have family close by. Also, those with less financial circumstances had a lower interest in knowing about technology. Another

observation we made was that those who were above the age of 80 were more reluctant and unwilling to know about technology than those under the age of 80.

With the pain points and observations we made, we determined our two main problems to focus on. The first problem we wanted to focus on was the lack of communication between the people, especially the seniors, and those who run the town. *The Coordinator* is useful in its current state, but could attract more seniors since there is still a lack of communication. Many seniors did not know that technology classes are offered. We wanted to try and improve communication between the elders and the events happening in the town.

For the second problem, we wanted to address the issue of seniors' interaction with technology, meaning our second problem is the lack of knowledge many seniors have on technology. Many seniors have a lot of misconceptions about technology- some are afraid of it due to privacy issues, a few are angry at it for taking away their jobs, etc. Some seniors who do use it have only a limited knowledge of it and some are even unaware of some very important and helpful features such as increasing the font size, alarms, video calling, etc. that can make their lives easier. So, we decided that lack of knowledge on technology is another main problem that we wanted to address.

Techniques Used

Our group utilized diverse techniques to converge on the problems that the elders in Easton faced and to develop the solutions for these problems. The techniques include the double-diamond model, storyboards, and brainstorming.

The double-diamond model is a model that suggests that there should be converging and diverging when coming up with an idea. As a group, we identified the areas that needed focus, developed potential solutions and settled on radical solutions that would work. Using the double-diamond model, we understood the problems the elders in Easton faced: lack of communication between elders and those who run the town, and lack of knowledge on technology.

For defining the problem further, our group realized that the problem was that the elders were lacking resources to receive information about both the town, and technology. Under execute solution of the double diamond model, our group needed to come up with radical solutions that would target the main problems the elders were facing yet also remain effective after a long period. We also needed to consider money and time aside from the solution's effectiveness. Eventually, these techniques helped us explore different solutions that could solve our main problems, like technical advancements to ordinary services.

After using the double-diamond model to identify the problems and think of possible solutions, our group chose specific techniques to converge on one or two concentrated solutions.

The first strategy our group utilized to get close to a possible solution was storyboards. Storyboards are used to develop hypothetical sequences of interactions in the redesign. As a group, we drew out the entire process that we witnessed and experienced from interacting with elders. The first image was an elder interacting with her cell phone, and trying to tap on the small screen with one single finger. These images were drawn chronologically, and ended with the hopeless elder feeling upset and annoyed. The storyboard allowed us to communicate the elders' concerns, and it was easier to empathize with the elders because we could physically locate the problems in the pictures. Each member contributed to the storyboard to identify which scenes of the storyboard we should target, and because the only requirements were paper and pen, it was quite easy to start the process of exploring problems.

As a group, we shared ideas to identify which solutions would be radical and possible. Our ideas converged when talking in a group as compared to thinking of solutions independently. This is because our thoughts on each problem are different, so the outcome is thus different. We each wrote down our possible ideas on a shared google document, then built off of these ideas, and the group evaluated the ideas together. This allowed for an open discussion on possible solutions based on what each of us thought of. At times we would point out that an idea would not seem as efficient compared to another idea, or argue that there are other ways to branch off from it, but this criticism was beneficial since it helped us converge towards identifying the problem.

We then brainstormed about these problems, their contexts and mainly their roots individually. Later, we discussed and developed on the ideas as a group. This also seemed to be very fruitful and helped us to get further in our understanding of the problems of the elderly of Easton. We discussed that there were various programs in place like that of the high school & students teaching seniors technology, and the library technology sessions etc. that many seniors knew nothing about. We also figured that the categories that we were trying to make for the seniors were not well defined and not very relevant as multiple main issues were common between all categories. Through further discussions, we arrived at our two main problems.

Because our main problems were lack of communication and lack of knowledge on technology, brainstorming and storyboarding were necessary techniques needed to explore solutions. Both of these techniques branched off of the double-diamond model. These techniques were beneficial and helped us narrow down on specific solutions, because it was certainly difficult to identify a single product or service that would magically improve an elder's experience with technology. But through using these techniques to converge on a solution, our group was able to simplify the process, listen to other group member's ideas, and think creatively and realistically.

Diverging on Diverse Solutions

Once we were able to determine our two main problems, we used various strategies to think about radical and realistic solutions to then narrow down on possible solutions. One of the problems we focused on, as previously mentioned, is the lack of knowledge in technology, especially with smartphones.

Our group came up with two ideas, one can be considered radical and the other more realistic. The first is that seniors who are more comfortable and knowledgeable about technology would teach other seniors who are not as comfortable with technology. The idea behind this is that a handful of seniors we interviewed during our first trip to Easton complained about not feeling comfortable seeking out help regarding technology for fear of judgment. We believe that learning from someone who is closer in age and better understands the typical life of a senior would provide a more comfortable learning environment for those who are interested in better developing their skills in technology.

On the other hand, for a more realistic idea, it would be a similar aspect in teaching the seniors but with student-run groups at universities in the surrounding Easton area. When students or young adults are required or feel forced to teach to others, even with technology, they are not always as patient or thorough with instructions. We believe that with student-run groups that involve volunteer members or even volunteer groups partnering and going to Easton to teach the seniors, they will be more patient and thorough with their teaching.

For our second main problem, the lack of communication between the people of Easton and those who run the town, we also came up with one radical and one realistic solution for this problem. The radical solution we thought of was creating an Easton app. The app would not just be for the elderly, but all residents of Easton. It would be a way to get up to date updates on the town involving town hall meetings, events for all ages, and other news about the town. When we were presenting our second deliverable, a member of a different group had mentioned how many seniors feel that they do not want to be ostracized from the rest of the town just because they are seniors. An app would be a way to be inclusive of all the residents in the town no matter age, race, sexuality or creed. Another benefit of the app is that if seniors have children out of town who wanted to download the app and follow updates about the town, they easily can. A big problem though with this solution is that it is very costly to create a good functioning app, making sure the program is easy to work with and having someone to keep updating the app with all the content it needs. An alternative to this to make communication efficient especially for the seniors of Easton is making *The Coordinator* available in pdf form via email subscription. The current printed version of *The Coordinator* and its delivery to the senior community would still be available, but there would be the option of the subscription.

Overall when thinking of these radical and realistic solutions for each of the problems, we wanted to keep three things in mind that we believe is important when finding a solution to a problem. These three things are participation, effectiveness, and cost. Ultimately, every solution is effective, but what determined our final solutions were participation and cost. We also devised a chart of the various solutions with some pros and cons focused on these three determining factors (Appendix A). The final solutions are based on the previous ones mentioned, but with further details.

Converging on the Solution

Based on our radical and realistic brainstorms, we determined that the final solution to best serve the Easton community is to make *The Coordinator* delivered via email and inviting local student groups to teach technology courses.

Making *The Coordinator* accessible via email would not only raise awareness about events to the elderlies in the Easton community but also allows for families of the elderlies to get involved and stay connected. We propose that *The Coordinator* be accessible and sent via email using MailChimp or Constant Contact, which are email marketing platforms that are both free and simple to use. The print version of *The Coordinator* will still be accessible for those who prefer the printed format. After our interviews with the elderlies, we discovered that while many individuals may not be comfortable with technology, there is a large number of individuals who do use electronics and stated that their lives would be enhanced if the events were communicated better to them. The email subscription of *The Coordinator* can also allow family members of those who live outside of Easton to subscribe and follow what their elderly relatives may be doing and remind them of events in the town. Having the events placed on *The Coordinator* be available via email would be a useful and realistic fix to this problem to better serve the needs of the elderlies.

The second solution tackles the lack of knowledge about technology. We believe that the key problem is that many elderlies do not know how to use technology. This statement is proven through our many interactions with the seniors in Easton. However, rather than dismissing technology, we think it is best to embrace it while also using this opportunity to build a community.

A solution to this would be inviting local groups within a university, potentially from Stonehill College, to teach technology courses. Our solution is a more advanced version of what already exists, and we will explain how it is different in the following paragraphs. This weekly program would be run primarily through volunteer members as opposed to the current system. After assessing the needs of the seniors, we realize that there are different levels of knowledge about technology. The class breakdown would include an introductory presentation

of the concept of the week. Elders would then be assigned a "lab" assignment to complete and students/volunteers would walk around to help them individually, similar to office hours. Each class would recap the previous week and cover something different.

However, for this program to be successfully implemented, it needs to be communicated well on two levels: with the volunteers and the elderlies. First, Easton must collaborate with a local high school or college technology class to inquire about this volunteer opportunity. After the volunteers and the weekly course topics have been determined, the implementation of the technology courses needs to be effectively promoted to the elderlies. This can be done through *The Coordinator* and word of mouth. We have already assessed that there is a desire to take the courses, so we assume that there is a greater interest amongst the seniors.

With these two solutions implemented, we believe that the elderlies who live in Easton will be more well-versed in technology and on events that are happening in Easton, making their quality of life happier and more connected digitally and socially.

Conclusions and Final Thoughts

Our experiences in Easton gave us insights on the lives of the elderly there. We collected data through observations and interviews to find out the problems that they are facing regarding communication, information, and technology. We used various techniques and came up with two solutions to diverse, but related problems: having *The Coordinator* delivered via email and inviting local student/volunteer groups to teach technology courses. Our hopes are that by adding a subscription option via email for *The Coordinator*, there would be a greater awareness about events, leading to an increase in participation and communication. By connecting seniors to their community, we believe that the seniors would be happier with the communication and technology in the town.

Bibliography

Cherry, Kendra. "What Are Fluid Intelligence and Crystallized Intelligence?" *Verywell Mind,* Verywell Mind, 14 July 2019, www.verywellmind.com/fluid-intelligence-vs   -crystallized-intelligence-2795004.

Nelson, Patrick. "How the 'Digitization of Everything' Will Become a Reality." *Network World,* Network World, 12 Jan.2016,www.networkworld.com/article/3021797/howthe-digitization-of-everything will-become-a-reality.html.

APPENDIX A – Pro and Con Chart of Various Solutions

Solutions:	Pros:	Cons:
Making *The Coordinator* available through e-mail subscription.	Spreads information to more people à effective E-mail subscription is cost-effective for the town and seniors.	Some seniors do not currently have or use email.
Making an Easton app	Anyone can download and access it à increases participation and effective in spreading the news	Expensive to make a good functioning app. More work in general for the town in managing the app.
Seniors teaching other seniors how to use technology	Seniors feel more comfortable with other seniors à effective and increase participation	The number of seniors who are comfortable with technology and willing to teach other seniors is significantly smaller than the number of those who are willing to learn.
Collaborate with student-run and volunteer-run groups on technology classes.	Groups who volunteer to teach are more willing to teach and patient in teaching.	Can have a time-restraint since it must follow times only available to these groups. Getting these groups from their university or organization to Easton may not be easy. Spreading the word about partnering with Easton for this may be hard in the beginning.

Team 6: Community and Health Services

Introduction

Senior citizens often rely on those around them for socializing and support. The elderly population of Easton are lucky enough to receive support in both these areas from their local senior center. At the beginning of the semester, we were tasked with finding ways to improve the community and health services for the senior citizens of Easton. Through several visits and conversations, we were able to gain knowledge of what problems these older residents are facing and come up with our solutions. We toured multiple facilities and spoke to senior citizens regarding their overall experience and level of satisfaction. After observing the services, and speaking to its users, we synthesized our findings and identified strengths and areas for improvement. Participants of the services articulated that their favorite aspects were the great staff, exercise classes, and the free food being offered at the events. Despite being costly and infrequent, the recreational activities organized by the council are very well-liked by the minority who know it exists. What we learned while developing this project was that the main issues with the health services include insufficient funding for recreational services, lack of promotion, and overcomplicated information regarding medical care. Using frameworks like the double diamond that we learned in class, we ideated and problem solved for the elderly residents of Easton.

Preliminary Interviews

We prepared for our visit to Easton through our first individual assignment in which we each conducted interviews with three elderly people. Through our preliminary interviews, we were able to better understand the perspective and daily lives of people over 60+. Through these interviews, we were able to better formulate questions, and opinions on what the community health services should include before our visit to Easton. Easton is a relatively small town compared to the City of Boston, which is why we expected the facilities to be less extravagant, and the health services to have less funding. We also believed that the facilities would have an old age home-like atmosphere. Additionally, we believed that upon entering the facilities, there would be more excitement in the room than normal, as the elderly tend to liven when around the youth. Our interviews ahead of time and our ideas going into the trip together informed our views as we ventured on our first trip to Easton.

On October 2nd, we took our first trip to the Senior Center in Easton to find out more about issues from the Seniors themselves. To start the interview, we made sure to explain that we

intended to "gain a better understanding of both the strengths and the problem areas of the community and health services provided by the Senior Center, so we can bring attention to the issues" to help come up with solutions. To give us background on her specific health, the woman we spoke with said explicitly that she was "very aware" of the irregularities of the sidewalks or places where it is difficult to walk because of her issues with walking. She planned on having knee surgery on Halloween, but for the time being, she had to use a walker. We asked her to describe the services she felt were most valuable that are provided by the Senior Center. The first example she gave was the service to take people to and from their doctor's appointments for four dollars if in Easton or six dollars if in an adjoining town. She then described a service called "Are You Okay?", which is a call made out in the morning to any Seniors with few family and friends that would like to be checked in on. She explained that if they do not answer, a worker comes to their home to make sure they are okay. Lastly, this woman told us about recreational services such as yoga classes, bingo, and art classes that those who know about them love, but unfortunately the classes are not well known among the community. Another service she found under-utilized due to lack of awareness was the cooling and heating station provided by the Senior Center in extreme weather. Overall, our first interviewee provided key insights into the issues that senior citizens were facing.

Our second interview that day was with the medical professional in the Senior Center that educated seniors on the various plans and intricacies of Medicare. He said that on average, he sees 3 clients per day, which equates to 10% of the elderly population in Easton. He explained that most Seniors are not proactive or made aware of the service he provides. He went on to provide us with the same Medicare plan breakdown he gives seniors. We found that while listening to his explanation, it was very difficult to understand the plans even when giving our full attention and asking questions. We found that there were too many plans that a Senior can choose from even though most of them would never work for them due to income or current and past illnesses. In the interview, Samantha proposed the idea of a flow chart to clear up the confusing interconnected information, and the professional said that he had never thought of that before but that it was a great idea. He also said that when there were Medicare educational seminars held, not very many people came presumably because making Seniors aware of when and where these happen is not a task anyone is dedicated to doing.

The last interview we conducted was with a woman in her 50s who suffered from a brain injury and had to relearn many common tasks to regain her autonomy. Unlike the first interviewee, this woman wanted to tell us about two issues she felt passionate about instead of letting us lead the topics discussed. She explained the importance of integrating seniors more with technology and creating more events that allow people of all ages to get together. She felt that the seniors were being dismissed and shut out of a progressing society, which not only hurt them but everyone else as well. Walking away from this first trip, we were able to reassess many of the preconceived notions we had. We found a common thread of lack of promotion and awareness of the tools available to the elderly.

Secondary Interviews

Preparing for the second trip we had several objectives. The first goal we had was to continue to validate the assumptions we had made before the first trip. Given the small sample size of interviewees before, we wanted to take advantage of this chance opportunity to get feedback on our ideas. Our second goal for the trip was to hear what our interviewees thought of the solutions we had come up with after visiting the first time. While our first visit informed our solutions, we wanted to make sure we did not lose sight of the real issues. By talking with the second group of interviewees we were able to get a sense of if we were on the right track. Additionally, we were able to gather information on what other issues our second interviewees were facing. We then could use this information to further inform our solutions. The second trip made it possible for us to narrow our solution scope and ensure we were on the right track for our project.

Our first interview during our second trip to Easton was with an elderly couple. Despite some initial hesitation when we first arrived, the gentleman who greeted us lowered his guard and let us join him in his apartment. This couple had lived in Easton for six years, but very infrequently made their way to the senior center. We learned this was because when they interacted with the center, nothing they complained about was ever resolved. These interactions left a sour taste in their mouth and a disinterest in any senior center-based programs. Because of this, they have not been involved in many community activities and do not seek those opportunities out. This left us wondering if maybe they knew what opportunities were available to them whether they might be of interest. If they were disengaged from the senior center, what other ways could we get information about their programs to them? For exercise right now, they go for walks around their neighborhood. Naturally, the ability to do this ends when it becomes too cold outside. If they ever are interested in engaging with the senior center, the indoor workout classes during colder months would be a good option. We also interviewed them about how they picked their Medicare plan and they told us they got help from their doctor. Their doctor had already narrowed it down to four choices for them and then they were able to pick from there. This was interesting feedback because before we had assumed that the senior center was their only resource for picking a plan. In reality, we now know that their doctors are also helping in this process. This interview was beneficial because it helped us uncover why people are not engaging with the senior center and how they are navigating the world of healthcare coverage.

For our second interview, we spoke with a woman who lived by herself. She has lived in Easton for eight years and has a part-time job which keeps her busy during the day. Our second interviewee previously lived in Danvers, MA on the North Shore and during her time there was engaged with that senior center. However, while she was very involved in that senior center, she has not been engaged with Easton's in the same way. Having visited a few times, she finds it an

uninviting place given that there are not areas where people can gather and hang out. Additionally, the classes are in the middle of the day and meaning that anyone who works during the day in even a part-time capacity cannot attend. Her recommendation was to find ways to offer the classes at times when those who work can attend. She thinks that she would attend if they were at a more convenient time for her. In comparison to our first interviewees, this woman was eager to be engaged with the community and had had many positive experiences. She provided the insight that many people will complain about situations but when given a forum to express their concerns, attendance will be very low. Regarding Medicare, she validated our hypothesis that many people find the plan selection process very difficult. She added that the gentleman at the senior center was a little helpful but that at her age a lot of assistance is needed to pick a plan. In conclusion, our second interviewee was excited about engaging in the community but felt isolated when it came to interacting with the senior center.

Our third interview during our second trip was with the Fire Chief of Easton. Our hosts in Easton arranged this interview because they knew the Fire Chief would have many helpful insights given his interactions with the elderly. They were correct. Many of the calls the fire station receives are to help the elderly. Frequently they are called on when seniors trip and fall or need help getting back into bed. During this interview, we learned about the programs the fire department offers. These programs range from seminars on food safety to keeping track of medicine. This interview was particularly insightful because it addressed new problems we had not been focusing on before. As we wrapped up the interview with the Fire Chief, he suggested that the elderly try to find ways to exercise more often to minimize the calls for help after trips and falls. This validated our assumption that the elderly should take advantage of workout classes at the senior center. The fire chief provided valuable insight and offered a unique perspective on the issues the elderly face.

Synthesis and Analysis

Moving into the solution forming part our project, we relied on the double diamond framework, understanding the problems, prioritizing which ones we want to focus on, ideating on solutions, and then picking the best one. To start we identified three main issues based on the first trip. First, there is a lack of funding. One of the interviewees mentioned that there are fewer recreational activities compared to the town nearby. The town would be able to offer more recreational activities at different times if there was more funding. Second, there is a lack of promotion for the recreational activities that are offered by the Town. Although the town offered many recreational activities like yoga classes, many of the elderly residents don't know that these programs are even being offered. Third, many of the residents found it difficult to understand how to pick a Medicare plan. Before the trip, our focus was on the health care services offered to the elderly, but through the trip we were reminded that medical insurance is a key component of healthcare. Steve, the professional at the community center, told us that there are around thirty medical plans and each of them has its own intricacies. He also

mentioned that although he offered many opportunities for the elderly to come for help picking a plan, he was overworked and knew there were many residents he was not able to reach. The first time identified many of the key problems we hoped to solve for throughout the rest of the project.

The second trip confirmed many of the problems we had identified on the first trip. First, a lack of promotion for workout classes. We interviewed one couple who did not live right next to the community center who shared that they were not aware of the yoga classes organized by the center. In addition, they thought that walking around their home was enough exercise and workout classes would not be necessary for them. During our second interview, the woman we interviewed agreed based on her past experience that picking a Medicare plan was difficult to do, validating the problem we identified on our first trip. In our last interview with the Fire Chief, he told us about the problem of the elderly falling from the bed which was a new problem that we had not identified before.

These two trips changed our perception on what the pressing health and community service issues are. The first trip enabled us to identify the three main issues. While before the trip, we focused on personal health issues, learning about issues like the community workout classes and Medicare plans gave us a better sense of how issues can effect a whole community not just one person. On the second trip, we gained a deeper understanding on the issues that we had found previously and began to identify possible solutions. For example, the distance to the community center may make the promotion more difficult. Finally, after going in-depth into the research process and properly analyzing our results, we began to identify solutions which could tackle not only the symptoms described to us, but also address the real underlying problems. The solutions themselves have three divisions that work in cohesion to facilitate the desired result.

Solutions and Recommendations

For the insufficient funding of community and health events, we identified three solutions: creating a fundraising club, recruiting volunteers, and acquiring sponsors. We decided that it is necessary for there to be an organization of both elderly and non-elderly people focused specifically on fundraising for their events. A unit of both younger and older people will provide a chance for the elderly to hang out with people who are not just their own age, something we learned they enjoy. The fundraising club would take no pay, and be a for people to continue using the skills that they have developed throughout their life. After talking to Team 5, they lent us their data on how although there are a plethora of elderly folks who do not want to work anymore, there are many who still do. They are looking for something to take them out of their homes and keep them busy; what better way to do that than involve them in something which gives back to their very friends and family? This club could appeal to this specific group. Those who already have worked in a financial field, or are highly interested in giving back are also the

intended participants so that it can be as beneficial as possible. Because of this unique attraction, we see this as a great option because it is a community builder within itself. It has the power to get people together and focused to produce a positive result. Other ideas that we had for the insufficient funding were to recruit volunteers and to utilize sponsorships as a means to save money. Both of these ideas are something that can be implemented with the club, thus they are more specifics, which is why we felt it so important to have the fundraising club as our primary focus regarding this problem.

Our second problem had to do with the lack of promotion the Senior Center sent out. The center itself has many great opportunities for people to make use of such as bingo, dance classes, art, music, and free food. These resources, however, are not currently maximized by the elderly population. To solve this problem we came up with a few ideas for how the senior center can promote their programs. The first idea is to offer classes in a park, downtown, or anywhere in the open. Offering classes here would allow for the drawing in of new people who walk by and see the classes taking place and wonder what is going on. The elderly also complained about living so far away from the center, but with the center now taking classes out to the community you can guarantee that it will end up being closer to people. This reciprocal feedback loop will bring in new crowds over time, while also making it occasionally even easier for people to get to the outdoor activity, expanding that community we hope to develop. Other ideas we had were an app with an events schedule and streetlight banners, both effective ways to casually inform people of what is going on and remain visible as time passes.

For our third problem, a confusing Medicare plan picking system was our main focus, delving deeper into the health side of the community. Samantha originally came up with an idea for a flowchart which we all thought would be the most ideal way to solve the problem. We believed that this would help because as we sat through our lecture with the Medicare worker we found it very difficult to understand the different options. We were looking for something to help us understand the plans, but besides his outdated pamphlet with dense text, there was nothing to aid in our understanding.

Our round two interviews allowed us to conclude that many people go to their doctor instead of the senior center to figure out their Medicare plan. We see the flowchart as something easy and low-cost that the center can use to draw the residents back in and increase the number of residents on the correct medical plan. Other ideas that we had for this topic were to staff an elderly person and to involve university students or a whole class on designing this product. We saw these as both secondary ideas because the main product we would want for these groups to work on is this flowchart.

Conclusion

For each of these problems we looked deep into the pros and cons and ultimately decided to go with the Medicare flowchart as our one solution because it hones in on a serious problem while applying to many people that need help. It is low cost and also provides people with the means to make decisions on their own, saving them money and saving the Community Center time. We strongly urge the Town to build this out to benefit the elderly population of Easton now and for generations to come.