Appendix A. Semi-structure interview guide and interview items asked.

<u>**Introduction-Motivation:**</u>
Many Americans struggle to get eyeglasses. We are conducting a study to learn about the barriers to getting eyeglasses, success stories where people have gotten eyeglasses and helped their vision, and people's thoughts around eyeglasses and wearing eyeglasses.
- What are your thoughts after hearing this introduction?
- After hearing this introduction, what do you think the rest of the session will be like?

<u>**Testimonial:**</u>
Jean knows that she needs because she can't see to read anymore, but it is hard for her to get eyeglasses.
- What are your thoughts about Jean's story?
- What have your experiences been with getting eyeglasses?
- Are your experiences anything like Jean's?
- What issues, if any, have people you know had getting glasses?
- What issues, if any, have you had getting glasses?
- What do you like and dislike about the story?
- How could we improve this information?

<u>**Self-efficacy:**</u>
"I can get glasses if I need them."
- What are you thinking when you hear the statement?
- What are your thoughts about how easy or hard it is to get glasses?
- Interviewer: If you needed glasses, how would you go about getting them?

<u>**Social Determinants of health:**</u>
1) Sam is not sure he can afford to buy eyeglasses. So, he is not going to get them right now.
- What were you thinking as you heard this message about costs?
- What, if any, thoughts do you have about the cost of getting an eyeglass prescription?
- What, if any, thoughts do you have about the cost of buying eyeglasses and the frames?
- How would feel about talking to your doctor about the eyeglasses?

2) Scenario: A friend of Sam's got her eyeglasses at a church event.
- What are your thoughts about the story?
- What do you think about the cost saving strategy that the message describes?
- Would you feel comfortable asking a friend for help to find a good price on glasses? Why or why not?

3) Scenario: A friend of Sam's asked her friend for help to get her eyeglasses.
- What are your thoughts about the story?
- What do you think about the cost saving strategy that the message describes?
- Would you feel comfortable asking a friend for help to find a good price on glasses? Why or why not?

4) Scenario: One of your friends got their eyeglasses on the Internet.
- What are your thoughts about the story?
- Which strategies discussed in these messages would you be willing to try?
- What do you like and dislike about these stories? How could we make them better?

<u>**Access to Care:**</u>
1) "I would like to get eyeglasses but it is hard to get to an eye doctor for a glasses prescription."
- What are you thinking when you hear the statement?
- What, if any, thoughts do you have about getting to an eye doctor for eyeglasses?
- What, if any, issues have you faced in getting a prescription for glasses and then getting the glasses?
- How easy is it to get to an eyeglasses shop from where you live?

2) "I would like to get eyeglasses but it is hard to find a place that sells eyeglasses."
- What are you thinking when you hear the statement?
- What if any problems have come up for you when you thought about or tried to get to a store to buy glasses?
- What, if any, issues have you faced in picking up the frames and deciding on which lenses to buy?

3) "I worry that eyeglasses may harm their eyes."
- What are your thoughts about this statement?
- What, if any, problems can people have with glasses?
- How does wearing glasses affect your eyes?

Insurance:
"Grace waited until she got insurance to get eyeglasses."
- What was going through your head as you heard this section?
- What, if any, experiences have you had with insurance and getting glasses?
- Have you got any eyeglasses through insurances in the past?

Competing Priorities:
"I know I need eyeglasses but other things are more important to pay for and concentrate on right now."
- What were you thinking when you hard this message?
- How is the story similar or different to your experiences?
- How does trouble with vision compare to other things going on in your life?

Value of Vision:
"It is important to wear eyeglasses if you have trouble seeing things."
- What was going through your head as you heard this section?
- What do you take away from this message?
- After hearing this message, how do you feel about wearing eyeglasses when things are blurry?
- How, if at all, does wearing or not wearing eyeglasses affect your life?

Personal Health and Vision:
Many people have medical problems that they have to deal with and their medical problems cost a lot of time and money. They don't have time to get eyeglasses. They get by with the vision that they have.
- What does this section make you think of?
- How bad do you think your vision is relative to other people?
- What, if any, trouble have you had in your personal life because you didn't have glasses?
- What are currently the most important things for you to be able to see well?
- How, if at all, would getting glasses change what you can do in life?
- How does it feel to discuss these values?
- How, if at all, has you vision (or lack of eyeglasses) ever affected your ability to pay your bill?
- Did not having eyeglasses hurt your ability to get a job?
- To help out at home?

Motivation:
Story: Shelia thought her vision was fine until she mixed up her medicines at home because of the small print on the bottle, and she had trouble seeing her television.
- What were you thinking as you heard Shelia's story?
- How, if at all, can you relate to Shelia's experiences?
- What, if anything, has motivated you to try to get glasses?
- How is Shelia's story similar or different to your experiences?
- How does the story relate to your own motivations?

Attitudes/ Norms: Stigma, peer influence, perceptions
- "Wearing eyeglasses makes your eyes weaker."
- What are you thinking as you heard this message?

- Do many people you know wear eyes glasses? What are they like?
- What do you think about people who wear eyeglasses?
- How, if at all, do people who wear glasses have more eye problems?
- How, if at all, do people who wear glasses get treated differently?

Safety:
- People who wear eyeglasses are weaker and old.
- What's going through your head as you listen to this part?
- Would you be worried if wore eyeglasses in certain places? Can you describe that?
- How does your vision impact how safe you feel in your community?
- What, if any, issues have you had imagined yourself wearing glasses?

Cosmesis:
1) "Most affordable eyeglasses make people look ugly."
- What does this part make you think of?
- What, if anything, comes to mind when you think of how people who wear glasses look?

2) "Most eyeglasses are hard to wear and are always falling and breaking."
- What are you thinking as you heard this section?
- Have you ever bought a pair of glasses that didn't work?
- What, if any, issues have you had when you tried on or wore glasses in the past?

Technology:
Right now, you can buy cheap eyeglasses online. Someday, everyone will be able to get an eyeglass prescription on the Internet.
- What goes through your mind as you hear this information?
- How would getting glasses from the Internet work for you?
- How comfortable do you feel getting eyeglasses from the Internet?
- What might be some problems you could foresee in getting glasses from the Internet?
- What other ways could you get glasses?

Discussion:
- As we wrap off, any other thoughts about this discussion?
- Does this discussion change any of your feelings about getting eyeglasses?
- Were these topics helpful for you?
- What other topics would you like to discuss?
- How can we improve this discussion when we talk with the next person?

Test results:
- How, if at all, did taking the eye test change the way you were thinking about glasses?

Appendix B. Qualitative Analysis Method Guided by Grounded Theory

Grounded theory is an inductive process of generating theories based on qualitative data. Coders typically follow a stepwise approach typical of grounded theory: 1) familiarization, 2) open coding, 3) axial coding, 4) focused coding, and 5) theory building.

In the familiarization stage, three investigators (OJK, JC, PANC) independently read the interview transcripts and became familiar with the context and general interview topics. Coders determined that thematic saturation, the point at which additional interviews provided no new themes, was reached after reading twenty-five interviews, and this was confirmed when interviews 26-30 yielded no new themes. Open coding involved identification of recurring concepts from thirty interviews. Instances of these concepts were identified and subsequently, during axial coding, relationships between these concepts were considered. Twelve core concepts encompassing related themes were identified and discussed during focused coding. Two coders then worked separately to organize sections of all transcripts into these concepts, coming together to resolve inconsistencies in coding and develop sub-categories (OJK, JC). A third investigator (PANC), who is a recognized expert in the field of ophthalmic qualitative research, agreed that no thematic content had been overlooked and adjudicated where inconsistencies could not be resolved between coders. Coders engaged in memo writing throughout all stages, creating written records to track thought processes. The transcripts were coded and analyzed using standard content analysis methods with Nvivo 12.0 (QRS International Pty Ltd., Victoria, Australia) software. Agreement between the two coders was calculated as the percentage of time an excerpt was coded under the same theme. Finally, the team conducted a close reading of the codes, memos, and analysis and see if any new theory or hypothesis were generated from them.

Appendix C. Barriers, Facilitators, and Example Quotes for each Theme.

Barrier or facilitator	Quote	Number of participants expressing barrier (% of patients expressing barrier)	Number of times referenced
Barriers to eyeglass correction			
Cost	I don't have cash. Mine are extremely expensive. Each lens is different and each bifocal is different. So that's four lenses I have to pay for. The last time I bought glasses they were $670. I can't imagine five years later what they are going to be now. Even if I got just the basic frame, the basic frames are like $60, $70. Then the lenses. It's the lenses that cost—so infuriating. I didn't get [glasses] as often as I needed them because I can't afford them. My insurance helped me pay for the eye doctor but not with the glasses. So I have to pay for them myself. So sometimes I waited [to get glasses]. Even at America's Best: two pairs for $65 with an eye exam. $65 is a lot for somebody that doesn't have a substantial income to take out at one time, when you say I could pay half on a cable bill or I could eat, or pay the light bill, you know. Glasses are expensive. And it's hard, but it's kind of like choosing between eating and seeing. You got more bills. You got to keep a roof over your head. You got to have food to eat and things for your kids and things. The glasses will have to wait. Take care of the primary things first. Self-preservation is the law of the land. You got to have a roof over your head you got to have food to eat. You got to put clothes on your kids backs. You got to have some money and then you take care of [glasses]. Rent's coming up again. I can never even set $5 aside, that's how tight things are. When you don't have very much money, you got to go to what's important. And sometimes it seems like getting glasses is not as important as paying the rent or the utility, because they wouldn't put you out on the street if you don't have glasses, but they will if you don't pay your utilities. Glasses, eating; easy choice. Glasses, paying the utility bills; easy choice. I got to raise my daughter. She is four months old. I can forget glasses. I got to make sure she eats. If it comes down to my daughter, that's who is going to eat, that's what I'm going to take care of. I would go blind for her.	29 (97)	312

	I have a lot of health issues. I already pay for a lot of medications. Some things come before glasses. Glasses are expensive. And it's hard, it's kind of like choosing between eating and seeing.		
Negative experiences	My glasses are humongous. They're heavy and they're not comfortable at all. They're always falling and they're just not comfortable. I'm always pushing them up. [Glasses are] uncomfortable. If it's just too much pressure on my nose, it gives me a headache. It seems like every time I get them, I lose them. Most affordable glasses make people look ugly like coke bottles. Because of the frames, big lenses, who wants to wear big lenses like that? Several times I got a pair that the arms has broke off of it.	29 (97)	263
Lack of access	I am looking into programs such as clinics or churches or other places that might be able to assist [with glasses]. I know there are programs available but their waiting lists are extremely long. I need a new pair [of glasses] really bad. And I've been calling around, calling around, just starting at the top of the list literally and going down through the phone book. Trying to find one that will take my combination of insurance because it's a Medicare with Medicaid backup. So one has to compliment the other, it just won't take the one or the other. For some reason the systems won't process it. Where I live, there's [an optical shop nearby]. There's one about two miles from where I live, but they don't accept my insurance. Well, you've got certain doctors that won't take Medicaid, you've got certain doctors won't take Medicare. I've called my insurance company and they told me that we don't cover eyeglass wear. And I was like they don't cover anything at all. They were like we don't cover eyeglasses or doctor's visits.	27 (90)	175
Misperceptions	It can actually make your vision worse, if you wear the wrong prescription. It's a muscle weakness of the muscle, that's why the eyes keep getting worse. I haven't tried to pay for glasses out of pocket, but I don't think you can. They mostly want insurance. So I haven't tried that. The wrong prescription can do more harm than good.	19 (63)	45
Lack of trust in healthcare system	[My primary care physician] says I don't know where you can go. That's the story I get from my PCP. They don't know where to send you.	15 (50)	53

	I feel comfortable talking to my [primary care doctor]. My eye doctor not so much, he don't care, he's there just to do the exam and get a paycheck. I understand the whole concept of having to cover the lights in the building. But I think the markup [on glasses] is just extremely high. [My eye doctor] is just there to get a check. I mean, he is getting paid, he don't care. I feel we are literally being gouged financially for a medical device, which you need.		
Lack of transportation	Many people don't have transportation, so how are they going to get there? It's only certain places you can go, might be halfway down in Detroit somewhere. Who got the money to go down there? I don't have any transportation and I am on that public bus. It takes me two buses and also to get to my doctor's office. So I have to get on two buses to get there. So that's probably about an hour. But if I was in a car it took me maybe 15 minutes. I'd have to walk or ride a bike [to the eye doctor]. I can't drive.	9 (30)	29
Facilitators to eyeglass correction			
Positive experiences	Well I have glasses and my life has been changed tremendously, I can read and see better so no more squinting. [I feel] safer [with glasses] because I could maybe have seen some things in my community, [like] abandoned houses that I didn't notice before wearing my glasses that need to be taken down or boarded up. Honestly, I look sexy with glasses on and my glasses real nice, real nice and I got good taste. [People with glasses] are more likely to get a job, the one who can't see can't get no job because they can't do the job [without good vision]. Wearing glasses affects my life in terms of my overall functionality. I can drive a car, I can walk, I can see, I can recognize people and things. It's allowed me to become a part of the general public and population. The last place I lived was not a safe environment. When you are not in a safe environment, you need to be able to see around you. And without glasses you won't be able to see it well.	29 (97)	230
Easy access	Walmart sells glasses. A lot of the major chains: Meyers, Walmart, I don't know if Kroger's got them. But there're a lot of places that have little shops in there where you can get glasses. The Gift of Sight helped me get [my glasses]. I couldn't afford them without the Gift of Sight. That's an organization that helps people get glasses.	27 (90)	143

	[If I needed glasses] I would go through my case manager through Community Mental Health and let them work for me. Because I have mental issues so my case manager through Community Mental Health takes care of all that stuff for me. I get my eye exams with the help of State Insurance, so I'm happy about that. No issues. My insurance takes care of that. How easy and hard is it to get glasses? It's not hard for me because I have insurance. It's hard for the people that don't have insurance. I can get [glasses] every two years on my insurance, so it's not hard.		
Convenient transportation	I think if your eyes is bad enough, you're going to find a way to get to the eye doctor, be it cab, bus, or with Medicaid. Yeah, with Medicaid they have a number that you can call that will get you to whatever appointments you need to be with. Ask someone for a ride. Everybody knows somebody who has a vehicle. And there's always the bus system. I have transportation [to go to the eye doctor]. I have transportation to get there, and if my transportation is bad I call a family member to come take me.	27 (90)	65
Trust in healthcare system	I have had no [problems getting glasses]. I guess I have a good team of doctors around me making sure everything is easy for me. My doctor is very cooperative and she checked my eyes very carefully. It depends on where you go because some [clinics], you walk in and it is like, the people look and say like "what are you doing here, this is not for you." And some places when you walk in they are happy and they treat you like you're family, they greet you and they will make sure you are well taken care of. So it depends on where you go.	17 (56)	62
Low cost	At Eyeglass World, $69.99, you get two pair of eyeglasses and your eye exam is free. I think anybody can come up with $70 to go up here and take care of that. Nowadays you can get a fairly cheap pair of glasses. Unless you just wanna be fashionable. I think it is the website of zenny.com. These are what is called designer eye glasses for like $6.99, $9.89. You just put the number in the way you wear the eye glasses and then they ship it to you. If everybody was informed about that, then it will be helpful for people who didn't have any money.	12 (40)	18