

## CDC, Division of Diabetes Translation

### Sharpening Your Vision: DSMES Services as a Connector to Better Eye Health

June 20, 2023

#### Transcript

##### **Slide 1: Title Slide**

Betsy Rodriguez: Good afternoon and good morning to viewers on the West Coast, Alaska, and Hawaii. Welcome to our webinar, *Sharpening Your Vision: DSMES Services as a Connector to Better Eye Health*. My name is Betsy Rodriguez, and I will be your moderator today. I am a Senior Public Health Advisor in the Division of Diabetes Translation, in the Health Education and Promotion team at the Centers for Disease Control and Prevention. I am a Latina woman, who have [has] low vision, and have [has] short blonde hair. I am wearing brown glasses and a light brown sweater and a white hat. I have a blue background with the CDC logo.

##### **Slide 3: Disclosure Statement**

Before we begin, I would like to go over some information about the webinar. At this time, we are required to share our disclosure statement. CDC, our planners, content experts, or their spouses and partners wish to disclose they have no financial interests or other

relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. Planners have reviewed content to ensure there is no bias. The content presented will not include any discussion of the unlabeled use of a product or a product under investigational use.

**Slide 4: Disclosure Statement (continued)**

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**Slide 5: Continuing Education**

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**Slide 6: Please Note**

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### **Slide 7: Have a Question for our Speaker?**

During the webinar, if you have a question for our speakers, please type them in the Q&A box below. If you want to direct your question to a particular speaker, please feel free to note that in your question. We will do our best to answer all questions during the Q&A portion of this webinar. If you have a question about obtaining continuing education credits, where to access the webinar once it is over, or other technical questions, please use the chat box feature.

### **Slide 8: Equitable Delivery of DSMES Services**

Equitable delivery of DSMES services. Diabetes self-management education and support [DSMES] interventions need to be accessible to all people living with diabetes. To address equity in the delivery of DSMES services, interventions can be more effective if they consider the unique needs of various populations. For example, people with diabetes who are racially or ethnically diverse, or sexually or gender minority, or have limited English proficiency or literacy, they're deaf or hard of hearing, blind or have low vision, neurodiverse, living with learning disabilities or intellectual developmental disabilities or other cognitive impairment. This webinar will focus on supporting people living with diabetes who have low vision or are blind.

### **Slide 9: Today's Objectives**

With this agenda in front of us, our objectives for today are, to understand how diabetes can affect the vision and eye health of people living with diabetes, [and to] explain the benefits of regular eye health screening and education for people with diabetes as part

of diabetes care and self-management, including through the provision of DSMES services, and in a community or a team-based clinical setting.

**Slide 10: Today's Objectives (continued)**

We also want to recognize the patient perspective and how providers can assist a person living with diabetes and with vision loss.

Finally, to utilize strategies and resources for delivering DSMES services to people with low vision, limited vision, or no vision at all.

**Slide 11: Today's Presenters**

Today we have wonderful presenters to our pleasure. We have a wonderful panel of presenters joining us today. First, we have Dr. Nita Sinha, Director of Public Health at Prevent Blindness. She will be followed by Serena Valentine, Executive Director of the CORE Initiative, and Lisa Golden, Diabetes Program Specialist with the Texas Workforce Communication [Commission]. Now, I would like to welcome Dr. Sinha.

**Slide 12: Current Landscape of Vision Health for People with Diabetes**

Nita Sinha: Thank you Betsy for inviting me to join this webinar today. My name is Nita Sinha and I'm the Director of Public Health at Prevent Blindness. I am an Indian woman with brown skin, brown eyes, and long, straight black hair. I'm wearing a white and gray stripe shirt and sitting in a Zoom, blurry Zoom background with a gray wall and a mirror behind me.

### **Slide 13: Menti Poll Question 1**

I would like to begin by asking you a question through a Menti poll. Please go to Menti.com and enter the code 1971 7349. You can do this from your computer or mobile device. If you use your computer, be sure to open a new window so that you can keep the webinar session connected. We'll put the link in the chat as well. The question we're asking today is, "how often do you talk to people with diabetes about their eye health and the importance of a comprehensive eye exam?" "Any chance I get", "Often", "Sometimes", "Not as much as I could". I will give you a moment to respond to the question.

### **Menti Poll 1 Responses**

We have some results in. We have some oftens, some sometimes, not as much as I could. I think we have some good responses there. We got an any chance I get, wonderful. It seems like many of you, it would be great to incorporate more eye health education into your services. Let's get started with this webinar and next slide, please.

### **Slide 14: Diabetes and Eye Disease**

Let's start with diabetes and eye disease. If a person is living with diabetes, prevention of complications like diabetes-related eye disease is a priority. Diabetes eye disease can cause trouble reading, seeing faces across the room, seeing at night, or even blindness. In general, the longer somebody has diabetes, the greater the risk of developing vision complications. There are a few forms of diabetes-related eye disease. Diabetes-related retinopathy and diabetes-related macular edema. Both affect the retina—the layer of cells in the back of the eye that acts like the film in a camera. Retinopathy occurs when

small blood vessels leak and bleed in the retina, affecting and impairing vision over time. For some people, serious damage to the eye can occur when abnormal or weak blood vessels grow on the surface of the retina. This can cause the retina to detach, and lead to severe vision loss, or even blindness. Diabetes-related macular edema is a swelling that occurs with retinopathy. It happens when the small blood vessels in the center of the retina, called the macula, become leaky and cause the macula to swell. They can cause the vision to become blurry. Cataracts and glaucoma are other eye diseases that are common among people living with diabetes. A cataract is a clouding of the lens that will cause vision to become blurry and the colors to become dull. Glaucoma is often called the silent thief of sight. A person usually does not notice signs of the disease until a significant amount of vision has been lost. Glaucoma causes loss of sight by affecting peripheral vision. Then over time it can damage central vision and eventually lead to blindness. Once vision is lost to glaucoma, it cannot be restored. You can see these four conditions listed on the bottom of that slide.

**Slide 15: Diabetes and Blindness in the United States**

Diabetic retinopathy [diabetes-related retinopathy] is a leading cause of blindness in working-aged adults in the United States. A recent study published in *JAMA Ophthalmology* last week estimated that one in four Americans with diagnosed diabetes over 40 had diabetic retinopathy [diabetes-related retinopathy]. But it has been found that intensive management of blood glucose levels can reduce the risk of diabetes-related retinopathy by 27 percent.

**Slide 16: What is Vision Loss and Blindness?**

What does it mean when we refer to vision loss and blindness? Vision loss or vision impairment, also known as low vision, is a loss of eyesight that cannot be corrected with glasses, medicine, or surgery, and has a visual acuity of 20/70 or worse in the better seeing eye. Blindness is a subset of vision impairment, and that includes a visual acuity of 20/200 or worse in the better seeing eye.

**Slide 17: What are symptoms of diabetes-related retinopathy?**

There are usually no symptoms in the early stages of diabetes-related retinopathy. [It is recommended that] a person with diabetes have an eye exam every year, or as directed by their eye care professional. The most common symptoms include a sudden increase in eye floaters, blurred vision, sudden loss of vision in one eye, halos around lights, flashing lights, and poor night and color vision. If a person living with diabetes experiences any of these symptoms, have them contact their eye care professional right away.

**Slide 18: What puts a person with diabetes at higher or lower risk for diabetes-related retinopathy?**

For a person living with diabetes, there are different factors that can decrease or increase the risk for developing diabetes-related retinopathy and other eye conditions. As I mentioned earlier, the longer a person has been living with diabetes, the greater the risk of developing diabetes-related retinopathy. Blood glucose management can reduce the risk of retinopathy and vision loss. Some racial and ethnic groups are at higher risks [as related to social determinants of health] such as Black, Latino, American Indian, Asian-

American, and Pacific Islander [individuals]. Smoking increases a person's risk; and managing your blood pressure and cholesterol levels can reduce the risk of eye disease. Women with diabetes prior to pregnancy have an increased risk for developing diabetes-related retinopathy quickly and [it is important that they] see their eye doctor regularly throughout their pregnancy. But women who develop gestational diabetes are at lower risk and are not required to have an eye exam. Lastly, preventing kidney disease, which is another complication of diabetes, will also decrease your risk of vision complications.

#### **Slide 19: How to keep eyes health when living with diabetes?**

How can you help a person living with diabetes manage their health and prevent eye complications? You can remember the ABCs of diabetes to protect eye health and share that with your patients and participants. A is for A1C, manage blood glucose. Have A1C checked every six months. B is for blood pressure. Manage your blood pressure to protect your heart, kidney, and eye health. C is for cholesterol. Manage cholesterol levels. D is for don't smoke, don't start smoking and if you smoke, quit. E is for eyes. Get a comprehensive dilated eye exam annually.

#### **Slide 20: How is diabetes-related retinopathy diagnosed?**

Although people living with diabetes are at higher risk of vision loss and eye diseases, 40 percent do not get an annual eye exam. A person living with diabetes, as I mentioned, [is recommended to] have an eye exam at least once a year or more often as recommended by their eye care professional: an ophthalmologist or an optometrist.



Both can perform eye exams, prescribe eyeglasses and contact lenses, and diagnose disease. An optometrist can also prescribe medications to treat certain eye problems and diseases and may also provide pre- and post-operative care for an eye surgery performed by an ophthalmologist. An ophthalmologist can also treat eye disease, prescribe medications, and perform eye surgery. It is important that when you get your eye exam, that it includes a dilation. Dilation of the eyes is done by using eye drops to widen the opening in the front of your eye called the pupil. This allows an eye care professional to see into the back of the eye and the retina. This is a very important step to take when getting an eye exam for people living with diabetes.

### **Slide 21: How Can You Help?**

Now that you've learned more about diabetes-related eye disease, how can you help your patients? Ask them questions about their eye health. Do they get a comprehensive eye exam with dilated pupils annually? Do you know how diabetes affects your eyes? Have you ever noticed changes to your vision? Do you know what to do if you suddenly have a change in your vision?

### **Slide 22: Make a Connection to Eye Health Care**

Depending on the responses you receive from your patients, connect them to eye health care by referring your patients to an eye care professional, share resources about information about how their eyes can be affected by having diabetes and how often they should see an eye doctor, and follow up with them to track how well they are managing their diabetes with their health care team.

**Slide 24: Diabetes-Related Eye Disease and Mental Health (note speaker asked to skip Slide 23)**

For some, loss of vision or the potential loss of vision can lead to feelings of depression, anxiety, and loss of independence. Not everyone will experience this, but some individuals may notice a change in their desire to socialize with others or increased frustration with the additional time it takes to accomplish daily tasks of living. Some might not share that they have vision loss with their family, friends, or even health care providers. To help support the mental health of your participants living with diabetes-related eye disease, encourage them to talk to their primary care doctor, mental health professional or eye care professional. Encourage them to seek support from others going through similar situations such as in-person or online peer support groups. Encourage them to connect with family and friends and engage in activities that bring them joy. Encourage them to exercise and talk with their health care team on how to do it safely. Have them seek out vision rehabilitation to use the remaining vision they have to the fullest extent possible.

The next couple of slides that I have

**Slide 25: Resources**

share Prevent Blindness resources that will be shared through a link by the CDC staff.

**Slide 26: Resources**

Now, I'd like to welcome Serena Valentine.

Serena Valentine: Thank you so much, Nita. Good afternoon, everyone. My name is Serena

Valentine. I'm Executive Director for CORE Initiative here in Houston, Texas. I am a Black

woman with dark brown skin. Summertime red locks today, and I'm wearing a black blouse. I am also a patient living with diabetes. I have type 2 diabetes and I've been dealing with type 2 diabetes for almost 20 years now. I have experienced blindness and now very low vision loss. I'll walk you all through that very shortly, very briefly. About 2017, I started having floaters in the right eye and severe blurriness. I did not have insurance so I could not check on it as soon as I possibly could. Now, prior to this, I did hear about how diabetes could cause blindness but as a young woman, because I was diagnosed very early on, was diagnosed at age 20, I wasn't really paying too much attention to what could possibly happen. All I knew was I felt okay. Fast forward to 2017, I started having floaters and blurriness in the right eye and I could not see a doctor yet. But eventually, I was able to obtain some health insurance. Then I was diagnosed with diabetes retinopathy in the right eye. The retina was detaching from my eye because my vision started getting worse and worse as time passed by. I got retinal reattachment surgery about January 2018. Three days after that, I was blind. I woke up with no vision in the right eye. So I went to my doctor, time passed by, about a year passed by, still getting eye exams, so that they could monitor the left eye. When I went back around May of 2019, I actually was conducting a diabetes peer support meeting. In the middle of the meeting, I blinked and could not have any vision in the left eye. It wasn't dark, but it was just light, could not see definition in anything. After that meeting, I called in for an emergency visit and I walked into the visit, the retina was detaching from the left eye as well. During this time, I actually was working on eating better, exercising, taking my medications, but time passed by having diabetes for an

extended period of time and I started having eye complications. As I said before, I do conduct diabetes peer support meetings and I actually have a patient in one of my meetings that actually gave me a short story of hers. One day she could not attend peer support and she called me and told me why. She's actually at the eye doctor appointment. She was driving and her vision went very blurry while driving, so she was able to pull over, but she had to get a family member to take her to the doctor. She found out she had an eye stroke. For the record, she does have diabetes as well, but she had no idea that this is something that she could experience as a result of diabetes. Of course, I talk with her about how she's feeling about it. She's not blind. She has suffered some vision loss, but she's not blind. According to her, she's okay. Just to express how important it is for diabetes education and for people to know if you're living with diabetes, you are at higher risk for experiencing eye disease. The most important person on that health care team of people to help you, is yourself. Patients, even myself, I had to learn this as far as advocating for myself at the doctor's visits and everything, asking questions, asking even more questions than maybe I should. I might even get on a few health care providers' nerves [LAUGHTER] because I'm so inquisitive. But it is very important to ask many questions when you're at the doctor's visit. It's important to get your eye exams, especially if you're living with diabetes. It's important for the providers as well to provide, I know there isn't much support that can be provided in a 15-minute interval at the doctor's office. But just like when we go in and we fill out the paperwork to sign in and there's paperwork asking, have you been feeling depressed? Have you been really stressed? Have you been experiencing anxiety? Those questions are asked at

the beginning, but most patients may not even divulge this information. Just having a very short talk, it could be five minutes with their provider. With the provider asking, "Are you okay?" That goes a very long way with a patient and someone who you want to trust you with the information that they give you. Because most patients are already, especially if they're experiencing vision loss and blindness, they're already, probably a little stressed just getting to the doctor's visit. Very briefly, during that time of blindness, I was completely blind. I experienced a lot of things, a lot of emotions, a lot of stressful moments while dealing with blindness and I still do experience some. I'll just briefly say this. I experienced blindness for nine months from May 2019 to about February 2020, right before our pandemic lockdowns. I began to see more and more definition began to appear in my left eye and I gained some sight back. I have about 40%. Now I do have episodes sometimes where I'm not able to see as well for the day and I make adjustments. But it is a very stressful thing to deal with. I dealt with depression. I dealt with being very stressed. I'm also a single mother to a special needs child so that added another level of anxiety and stress, and stressful situations to my life. However, when you have patients in your office, the main thing to try to do is encourage. Hope means a lot with a person who has a chronic illness, anything, it doesn't even have to be diabetes. It can be any chronic illness, anything that someone's dealing with every single day. Hope is very important. I know you're probably thinking, well, how can a provider do that, and a provider has so many different patients? That's true. But just knowing that my provider asked me, how am I doing today, that makes a big difference. That makes me feel like someone does actually care about my well-being outside of just me

having diabetes and what are my numbers and what's my A1C. Have I been keeping up with blood pressure? Have I been doing this? Have I been doing that? But the fact that alone that I can barely see sometimes to check my blood sugars. Sometimes I can barely see to make sure that I'm eating the right foods, taking the right medications. I might have dropped my medications that morning and couldn't find it. Those things are very crucial to a person living with diabetes and vision loss and it can be very stressful. So I just wanted to express to any one of you out there who are health care providers, this special population within a population of people living with diabetes do have certain challenges that can make it hard for them every day. Honestly, a simple question, "Are you okay?" will make all the difference in the world. With that being said, Lisa, I'm turning it over to you.

Lisa Golden: Thank you, Serena. I appreciate your words and the perfect thing for me to jump off of.

**Slide 27: Delivering DSMES Services to People with Vision, Limited Vision, or No Vision**

My name is Lisa Golden. I'm a certified rehabilitation counselor and a certified diabetes care and education specialist. I'm a white woman with red hair and green eyes, and I wear brown glasses and today I'm wearing a white and black and gray and pink swirled blouse. I'm going to warn you that I am trained to use the term blind. Accepting that you have vision loss is much harder than accepting that you have diabetes. So owning those objectives will help people move forward.

## **Slide 29: Menti Poll Question 2**

We have another Menti question for you and you can use the same link as before if you still have it open or we have it put in chat, you can go to Menti.com and enter the code 1971 7349. It's an open-ended question. "What is one of your tips, your strategies, or your resources for supporting people with diabetes, with vision impairment or vision loss?"

## **Menti Poll 2 Responses**

Adapting education materials to vision capabilities. That's really a good one. Even doing something as simple as putting a handout on the copier and blowing it up, it helps tremendously. But sometimes you can use, you've already created the document so you can use others?. Connecting with resources, that's another really nice one. Larger fonts, absolutely. The type of font and the size of the font make a big difference. Let's see. Using adaptive aids and connecting to local resources. Absolutely, I'm learning which glucose meter is adapted for people with vision loss. Providing information of available support groups, discussing workarounds with meters and pumps to enable text to voice, adaptive technology, vision impairment or vision loss screening. Thank you for doing that. I know we probably have a lot more, but I've got a limited time here. We will pay attention to all of these things because we want to share your ideas. Oh, that's a good idea. Referring clients who do not have insurance to our school of optometry for an eye exam at a sliding scale, so it's accessible to them. Connecting with health insurance resources too.

### **Slide 30: Talk about Vision Loss**

Now, I appreciate Serena and sharing her story. One of the things that she's told me over and over again is that she wished somebody had talked to her about vision loss. I find that many professionals do not have these discussions even when people are diagnosed with diabetic eye disease. I encourage you to talk about vision loss with your participants. Tell them that managing your diabetes can delay or prevent further vision loss and other complications of diabetes, since we know there's a tie between blindness and end-stage renal disease. Also, I talked to my participants who have cataracts, that the cataract can block the doctor from seeing any other damage in the macula, including any edema or blood vessel growth. Because some people expect that with the cataract surgery that it will restore their vision only to find out that there is other damage behind that cataract.

### **Slide 31: Talk about Vision Loss (continued)**

Encourage participants not to be afraid of their eyes' status, discussing their eyes' status. You need to know what to expect from your eye doctor and how to proceed with everyday tasks. I asked them to think about how to describe their vision loss or their abilities. I also want people, well, everyone with diabetes to know that if your eye doctor says that you passed your comprehensive eye exam, it is not a waste of your time or money. I wish that people viewed passing an eye exam in the same way as if they got normal labs with your primary care doctor. It's important to have your annual physical, and when you have diabetes, it is especially important that you have an annual eye exam and passing that exam is good news.



### **Slide 32: Participant-Centered Approach**

When you're working with somebody who has vision loss, make sure you're teaching the person directly, and not the others who came to the training or the appointment with them. It is common to have defined roles on who takes care of what in a family, but it is important that the individual living with the vision loss understands exactly how to perform a task and why it is important that that has to be done. They can enlist assistance of others, but they should ultimately be responsible and in charge of their diabetes. Be sure when you're doing the training to allow the person with the vision loss to handle any equipment, teaching tools, or handouts. It is important that they know and understand the products. Teaching tools [could] reinforce what you are describing. You may not know how somebody will accommodate for their diabetes when they live with low vision, but they may have methods on how to read print materials or perform some of those tasks. Let them explore with their hands, their meter, or the food model, or whatever you're using. I do find that my participants may start on something different than I would. For instance, they may want to know about the lancing device before they want to know about the meter itself. I have to be flexible with what peek their interests unless there's a problem with starting with where they want to start. Also make sure that you allow the person with a disability to make the decisions for their diabetes and their health. People [have the potential to] do better when they decide on the self-care tasks and how they will be performed. People think that when you have a disability that you're incapable of making an appropriate decision. Make sure that any choices are the individual's choices and not the choices of the health care professionals

or family members even though they have great ideas. We want to think about the customer's ability. They may do something slightly different from what we would do, but being different doesn't make someone wrong.

### **Slide 33: Considerations for Providing DSMES Services**

Now, we know that advanced diabetes technologies such as insulin pumps and CGMs

[continuous glucose monitors] and smart pens are only partially accessible, probably about 60%. Even talking blood glucose meters often need sighted assistance. I use a lot of workarounds, but workarounds are not accessibility. We should be advocating for our participants to have equipment that is accessible and that they can use the full benefits of that technology. Just because the diabetes technology is not fully accessible doesn't mean you shouldn't offer it. Be sure to tell them about products such as CGMs and tell them all the features. I have participants that have never been told about the CGM reports and have benefited from studying what their blood sugars are like at different times of day or the activities or the foods that have a strong impact on their blood sugar. Consider new technologies and medications for people who are blind. There are prescription assistance programs and discount programs out there that can help people afford these items. But people with disabilities should not be left behind on the newest offerings.

### **Slide 34: Considerations for Providing DSMES Services (continued)**

I also use other technologies to assist in self-care tasks, such as handheld or desktop CCTVs or braille displays. Smart phones, whether they're iOS devices or Android devices, have

built-in accessibility features. You can look under settings and then accessibility to find out all of those features. Sometimes they work with some of the diabetes apps and some of them don't. There are other apps that can be helpful in diabetes care such as AIRA, which is a paid app. You get five free minutes a day and the people you speak to are trained in how to help and are bonded in case you're doing something personal like your health care or your banking. These services, they're called visual interpretation services. They're useful to obtain information on anything a sighted person can see. It is amazing how much you can cover if you plan ahead for your five free minutes. There are free visual interpretation services too. You might use some of the other apps like Be My Eyes, TapTapSee and Seeing AI for things that are not so personal, such as reading a food label, organizing your medications, or just seeing that your clothes match. There are consumer guides that have products that may be useful for people who are blind, such as in the Consumer Guide from the American Diabetes Association, or there's a professional site about diabetes technologies from the Association of Diabetes Care & Education Specialists. Some specific products for people who are blind include the Count-A-Dose, which is a device that allows someone to draw insulin out of a vial into a syringe. There are insulin magnifiers, there's a variety of talking meters, including blood pressure meters, there's talking food scales, weight scales, thermometers, and more.

### **Slide 35: Resources for Low Vision**

I really appreciate the blindness organizations that are out there that help people with all aspects of their daily lives. Organizations include the American Foundation for the Blind and the American Council of the Blind, who does have a specialty group called ACB Diabetes in Action, and they have a podcast as well. The National Federation of the Blind [NFB] also has a special program called Diabetes Action Network for the Blind, or DAN. In addition, they have the NFB news line, which has audio versions of diabetes magazines including *Diabetic Living*, *Diabetes Forecast*, and *Diabetes Self-Management*. Hadley School for the Blind has a number of insights on how to live your daily life from gardening to physical activities to healthy recipes and healthy cooking. There's also a Talking Books program for every state. The Talking Books program is a free program, and they can guide people who are in school to obtain talking versions of their textbooks or just your regular fiction and non-fiction books. They're very helpful.

### **Slide 36: Vocational Rehabilitation**

Now, I work for a vocational rehabilitation [VR] agency. Our job is to help people with disabilities get or keep a job, or advance in their employment. In order to receive services from my agency, the individual has to be 14 or older with a physical or mental disability which is a substantial impediment to employment. Low vision or blindness is definitely an impediment to employment. But there are also services in every state for blind children. Just because somebody is under 14 doesn't mean they can't receive services to help them with their independence. Especially for the younger population, school is their path to employment, and they need support in being successful at school.

You could Google your state and Blind Children's Services and find those. I have a link here for AskJAN, which has the state vocational rehabilitation agencies.

### **Slide 37: Vocational Rehabilitation Services**

In VR, the services may include stuff like job exploration or counseling for adjusting to blindness or support. It's difficult when people lose their vision later in life, and they need support, and to talk things through to adjust to that vision loss. Other services might be career planning, including if they need to explore a different job from what they currently have or have done in the past. People who are also fearful of losing their SSI [Supplemental Security Income] and SSDI [Social Security Disability Insurance] benefits, especially their Medicare or Medicaid, by becoming employed, and VR can help them plan to maintain their benefits. There are specialty benefits under the Social Security Administration for people who are blind or low vision. There may need to be some learning experiences and training, whether that's college and learning to use the computer when you have vision loss that can be received through VR. Selecting the right assistive technology is a complicated process. Helping people have some hands-on experience with the technology and training to go with it is necessary. They may need orientation mobility services, in other words, learning how to use a cane or a guide dog. There are also specialty services for individuals who are deaf blind.

### **Slide 38: Independent Living for Older Individuals Who are Blind (OIB program)**

There is also a program for individuals who are aged 55 or older who have severe visual impairment in which they don't want to work, but they want to remain in their current

home environment. It's called the OIB program, OIB stands for Older Individuals Who are Blind. Services may include obtaining adaptive aids or independent living skills training such as how to organize your kitchen, how to mark your appliances, how to attain large print or audio items. There are a lot of great lessons and information about independence by the Mississippi State OIB Technical Assistance Center, and I encourage you to take a look at, and learn more about living with low vision. The OIB program is a part of vocational rehabilitation services, so you can refer to the previous list of state agencies or just search your State for "older blind independent living," and you should be able to find those programs.

### **Slide 39: Menti Poll Question 3**

We have one more final Menti question for you, and you can use the same link as before. Or again, it's Menti.com and the code 1971 7349. Here's the question: "After hearing this presentation, how comfortable do you feel about talking about eye health and the importance of a comprehensive eye exam?" Are you "very comfortable," "somewhat comfortable," "still uncomfortable" or you're "not sure?" There's a good number of very comfortable and somewhat comfortable, but there's still some that are uncomfortable or not sure. I would really hope that in the Q&A that we can maybe help you feel more comfortable with discussing eye health. Thank you for this opportunity. I'm going to go ahead and turn it over to Betsy.

#### **Slide 40: Question and Answer**

Betsy Rodriguez: Thank you Lisa for that great presentation. Thanks to all of our presenters. We would like now to begin our Q&A session. Please type your questions in the Q&A box, and we will do our best to answer all of them. I don't know [about] you all, but when I was listening first to Dr. Sinha talking about all of these aspects related about losing the vision, and then after listening to Serena's story, which speak a lot to my own story as well, and then listening to Lisa from the perspective of the many things that we can do, especially when providing DSMES services, for me, has been eye-opening. I want to thank you our presenters for sharing all that great information with us. For those that are helping me with the Q&A, do we have any questions that I cannot see from here?

Support Staff: We have one question so far, but I see a couple of others coming in. Is digital retinal imaging an acceptable substitute for dilation? Is it more accurate than dilation? I don't know if any of our presenters can address that one.

Nita Sinha: Hi, this is Nita. I don't know if I could really answer this question on the accuracy, based on the dilation, I think, that would be looking at the research and looking at the optometry and ophthalmology professions to answer that question, but one thing to mention, is that, there is retinal imaging that does occur for those who don't know what it is, it's a screening technique that's used sometimes in primary care offices for individuals who aren't able to go to eye care professionals due to various reasons. There's not one locally near them. It's hard to get an appointment depending on those situations where that is used as a screening technique to get them to eye care. I don't want to answer on behalf of the professions, but I believe that the "gold standard" is

still a dilated eye exam for those who have been diagnosed with diabetes and have retinopathy. But I don't want to be quoted on that.

Betsy Rodriguez: Thank you, Dr. Sinha. One question that I have, and maybe this one is for Serena. Serena, if you will have the opportunity to be in a room full of diabetes care and education specialists, what will be that short, straight to the point message that you would like to share with them regarding considerations to be taken when providing DSMES services? What would be that elevator speech that you would share in that room? Serena?

Serena Valentine: Yes. I'm sorry. I lost the mute button, charge it to my eyes. I would definitely tell some diabetes care and education specialists that people who are dealing with vision loss, sometimes we act like we're okay but we're not. Even if we're adapting, sometimes an encouraging word is important and the reason why it doesn't sound too medical, but we're used to going to doctors' visits and going [to] hear about blood tests and numbers and all of these other things. But just to hear from a doctor that is going to be okay, and you can still live, you can still thrive with vision loss. It doesn't seem like something that is imaginable, especially for people who do see. I hear people tell me all the time, "I can't imagine how you function every day with hardly no sight." I just say I adapt. But a lot of times you have to appeal to the mind of someone who has lost a sense. It's a sense, is one of the five senses we're losing and it's something that is not easy to deal with. An encouraging word that things can get better, when it comes to diabetes education, the most important thing is learning how to regulate blood sugars. Because it can get worse or it does not have to be something that gets worse from your



starting point, if you learn how to eat better, exercise, take your medications as prescribed, and learn how to manage stress, and that's a big one. Stress can make all the difference in diabetes management if you think about it that way. That's what I would say.

Betsy Rodriguez: That's wonderful, Serena. You just remind me, [of] one word that I'm always keeping close to my heart, I will say Serena, and that is hope. I think that for those of us who live with diabetes, hope it's all about it. When you hear that encouragement words, yes, you're losing sight. But still, there are many other things that you can do. There are these adaptations, these are resources, those wonderful resources, for example, that Lisa was sharing with us. There is hope out there. Before starting to talk about what is the practice, what is the insulin, the hormone here and the glucose level, and A1C and all of those numbers. We have to remind that we are [a] person first and then the condition doesn't define us. When you're dealing with complications diabetes-related, like vision loss, there's still hope there. Serena, I want to thank you for your words, for sharing your story with us, and for giving us the sense of yes, indeed, there is hope out there. Thank you, Serena. Now Lisa, I think I have this question for you. We have something in common, Lisa, we are diabetes care and education specialists. But when we were getting ready for putting this webinar in place, this is the first time I heard about having accessible introductions. Even though I have seen those being done in my center [at CDC], I never realized how important that is, and then just the fact that in our webinar today we're doing accessible introductions is recognizing the needs of those that might be listening to us, who might be having low vision problems. Then that made

me push toward even further, Lisa, to thinking in my sections are their diabetes care and education specialists. The question I have for you, and maybe you don't have to address all of those things, but the question that occurs to me is Lisa, let's put this scenario in place. I have been hired in a recognized and accredited program. My quality coordinator has given me this curriculum, and this is the cohort of patients that you will be having and I will be having that day, 25 people that are a mix of newly diagnosed and people who have been living with diabetes for a long period of time. Then I remember attending a webinar from CDC with Lisa, Serena, Dr. Sinha, talking about low vision. Then I start asking to my [myself] question, where do I start? How do I apply these things? Lisa, what will be your quick, quick, quick, very quick tip for those that are offering DSMES services in that scenario and thinking about low vision people?

Lisa Golden: I think people with low vision, they just want to be included in whatever. There's a lot, we rely on our vision so much, and there's some things that can be missed. In a situation like this where people haven't seen us before, it helps to have that description out there. But then like I have meetings with my colleagues who are blind that they've seen me 100 times. But maybe I'm wearing a special outfit and I want to make sure that they know that I'm wearing something special or you with your hats, being able to describe so that everybody can get that. It really does help. I would say, try to think about how you would describe something instead of just showing people, being so visual about everything. Now, I love teaching tools and I'm always thinking about how I'm going to adapt those teaching tools so that people can appreciate it. But sometimes it's as simple as putting that item just in their hands. Sometimes it's my participant that

will describe back to me, this is what I feel. Then I can say, oh yes, that's such and such button and it's going to do this for you and know that you've got the object turned around and this part should be at the top, and then it'll make more sense to you. I guess, just start thinking about how to describe things to people and just make sure that whatever is going on during that class, that if somebody is there with the vision loss and they really can't see what's going on, that they're not excluded from that information.

Betsy Rodriguez: I think that you have said the right word here, it's excluding. So it's all about inclusion, and it's all about considering the diversity that our patients may have and being first in this situation, so diabetes-related complications like vision loss and how I can adapt my classes to include them from the beginning to the end. Having them into consideration right at the beginning and not in the middle of someone telling me, "I'm sorry I can not see what you're showing here." I guess that we don't want to be put in that position. Listen, like three weeks or so ago, Lisa, I came up with this idea. I do have now [in my group] two persons with very low vision. I was teaching the plate method. It occurs to me to use cardboard dividers and make the division of the plate method. That's what's exactly what I was doing and giving them the plate with those cardboard dividers that I glued to the plates so they can feel what do we mean when we say half of the plate from vegetables and the other half you divide it by half and one half will be for carbs and the other half will be for proteins. They actually were able to touch the plate and be able to see the diameters, we say nine inches of the plate. All of those things that they can play with it for lack of [a] better word to describe it, but then been [be able] also to grasp the concept of what do we mean by the plate method and how do

we divide the macronutrients into [the] plate. Just something that came out of having very limited resources in the programs that I am doing, so I don't have money to buy things. I had to create it by myself. I ended [up] using that strategy and let me tell you, Lisa, it worked. Do you have any other types of tips that you might want to share for DCEs [diabetes care and education specialists] that they can use in their classes?

Lisa Golden: Well, often, well one of the frustrations is getting blood to the test strip. That's one of those really hard things to be able to teach, and it does take practice. Keep in mind that everybody gets the "not enough blood signal" sometimes. Really going over how to get a good drop of blood, meaning wash your hands with a mild soap in warm, not hot, water. Make sure that you are drying your hands and having that friction create, increases the circulation in your hands. Then how to squeeze the finger from underneath and get the drop of blood. There are other techniques that we use... Just even just talking to them about getting a good drop of blood, the same tips that we'd give for everybody, that really helps if you've got the increased circulation. Then things like you're doing where you are using cardboard. But I love the plate method and I've even taken like "dollar store" plates and putting that old "puff paint," the [inaudible] you can put a line of puff paint down the middle of that plate, and then another one to quarter off. Then in your hands is a wonderful way to do portion sizing. I always say your protein is the size of the palm of your hand. If you make a fist, that's your half the cup. If you put your two hands together, you make a bowl that's like a full cup. I can describe a lot of things. The tip of your thumb being the size of a block of cheese that you should be having. There's a lot of things that I can use. There are things that they can relate to

and understand. You've got to remember that when people lose their vision, it doesn't mean that they don't understand visual concepts anymore. You can bring them back. It's just everybody gets blown away with oversized portions, so now we have to use our hands to get them back to the appropriate portion sizes. Where somebody else might be able to do that visually. It's the same concept, it's just using a slightly different technique.

Betsy Rodriguez: Thank you, Lisa. I have a question here. It says, is diabetes vision loss reversible? My mom has very bad diabetes and states that she lost the vision on one of her eyes completely. Who can answer that question to [for] Sylvia?

Lisa Golden: I can answer it or Nita, do you want this? Okay. To my knowledge and I am not an eye professional, but to my knowledge, there is not something that will completely reverse diabetic eye disease. There are some injections that give you a few lines of reading better and that's been a great success story for eye professionals, better than the laser surgeries and other things that we've had in the past. But it's not a perfect cure. The best thing is prevention and letting people go to those annual eye exams. Because if we can get it earlier, maybe you can, like Serena was talking about, do everything you can to get your blood sugars as in range as possible and that can help prevent, and you may be able to heal some from that. But sometimes when people get to the point that they really have severe eye damage, there's limits to how much can be done.

## Slide 41: CDC Eye Health Resources

Betsy Rodriguez: Yeah. I would like to add the fact that the best way to protect the eyes is what you just said, prevention, and that prevention resides precisely in keeping blood sugar in range, timing range is very important. Post-prandial values, those values of low glucose two hours after each meal. It really helps you see how far or close you are to be in good management of your diabetes. The closer you are to the values that your doctor has been telling you that your values for you, because this is an individualized target, that's the best that you can do. Also annual eye exam, we have to reinforce the importance of people living with diabetes to get the eye exam at the beginning of the diagnosis and then thereafter on [a] yearly basis. If you progress and finally you develop some of the conditions, then those eye checkups could be more frequent. I have a comment here from Christina, she says excellent presentation. I have an anonymous attendee that said, no questions, just want [you] to know this was one of the best webinars I have attended this year, keep you in my prayers. Let me see what else? Let me see. I think I have another one here. If a client is experiencing the floaters and blurred vision and the eye doctor does the diabetic [diabetes] exam, but says they see nothing wrong, the eyes look good. What steps should they take next? Oh, okay, I see. This is a situation where the client is experiencing the floaters blurred vision. The diabetic [diabetes] eye exam has been done, but the doctor said that there is nothing wrong. What are the steps should be taken next? I will [would] say change the doctor. [LAUGHTER] [OVERLAPPING] Go ahead.

Lisa Golden: It's a positive thing that they did go to the eye doctor and just continue to be monitored because maybe there isn't a lot of damage or anything that the doctor is concerned with today. But that doesn't mean that this time next year there won't be something that needs treatment.

Nita Sinha: And, in addition, the doctor might ask them to come back in six months versus a year or much sooner to monitor if things are progressing, that they aren't seeing anything. I think that going by your doctor's recommendations that they might need to be seen earlier versus an annual eye exam. Just looking at that.

Serena Valentine: Also, I was going to say, I always teach my participants in class that the patient does have a certain amount of accountability. If you go and the doctor says, okay, I don't see anything, maybe [you] can't switch doctors right now. Take that as okay, I'm going to continue to work on my blood sugar regulation. Keep going. Don't stop because you think you're okay, you've got to keep going because we've been emphasizing prevention during this whole webinar.

Betsy Rodriguez: That's a good point, Serena. Here we have another one. It says she was scheduled for a surgery, but A1C was 14 and [it] had to be canceled a year ago. Since then, her vision has been deteriorating very rapidly. And thank you for all of this wonderful information provided.

Lisa Golden: I'm sorry to hear that she's experiencing that. All I can say is keep working on lowering your A1C so you can get that procedure done. But we don't want to do it too dramatically because that might cause further eye damage. But slow a little bit, a half a

percentage point will do a lot of good and then work on another half a percentage point on your A1C. It's just slowly but surely, start bringing it down.

Betsy Rodriguez: Indeed, every point counts, right?

Lisa Golden: Yes, absolutely.

Nita Sinha: One thing I want to stress, in addition to just some of the questions that were asked.

I know we're a little over time is that, encourage the participants or patients that you work with to ask questions. If they have questions, doctors have such a limited time to spend with each patient, but really encourage them to ask questions if they're not clear on what is happening or what they should do next. That may help them through their process and their journey to see if they're happy with their doctor and if they're not happy with their doctor, to go to somebody that they feel comfortable with.

Betsy Rodriguez: Exactly. Thank you to everyone in the audience for some great questions. If you have additional questions, please send them to the email address on your screen. We will follow up with you after our webinar. This concludes our question-and-answer session and as we wrap up our webinar, I want to share a few resources from CDC-related to eye health. We have put together a handout of all of the resources that were included in this presentation. We will put a link to the handout in the chat. Next slide.

#### **Slide 42: Thank You**

This concludes our webinar. Be sure to get your continuing education credit. Instructions are on the screen and will be emailed to you. As a reminder a recording of the webinar and these



slides will be shared in the near future. Thank you for joining us today. Thank you to our presenters. Thank you to our attendees. Bye for now.