

Guide for Patient Self-Management of Chronic Illness through “Tele-education”



Overview and Purpose.

The digital delivery of patient health education, or tele-education, has drastically increased over the past year, because of the COVID-19 pandemic. Engaging program participants through virtual platforms over the internet has become a need, as well as an innovative method of service delivery for Health Centers across the country. This Guide for Patient Self-Management of Chronic Illness highlights one way of providing “tele-education” to patients using WhatsApp®, a virtual messaging application that allows video and voice calls, text messages, and so much more all through a wireless internet connection.

This guide, along with the attached Participant Telehealth Readiness Tool (Appendix A), provides Health Centers a method of assessing a participant’s readiness for tele-education and describes how to use WhatsApp® to increase and drive patient self-management of chronic illnesses like diabetes, high blood pressure, cholesterol, and others. The guide also gives an overview of the multipurpose features WhatsApp® has to offer to support health center staff in training participants who are unfamiliar with these features to enhance participant engagement and communication with providers through this platform. These features also allow health center staff to digitally deliver self-management education.

Strategies for Diabetes and Cardiovascular Health are also included for your use with program participants to drive successful self-management of chronic illnesses. The goal of implementing these strategies is to inspire participants to take an active role in lowering their glucose, blood pressure, and/or cholesterol levels. Through consistent communication via this virtual platform, health center staff can create a trusting and safe space to motivate participants to live healthier lifestyles.



Please note: Due to HIPAA regulations, WhatsApp® is allowed for tele-education but not for online healthcare delivery given it is not a confidential platform. **The exchange of personal participant health information is prohibited.** Therefore, it is imperative for the health provider to ask for consent in using the application to share health information and should disclose the following statement before providing any tele-education to the participant: *“I am not using a HIPAA-compliant platform and therefore cannot guarantee the security of the technology being used. I will ensure your privacy to the best of my ability. I need to ask for your verbal consent that you understand this risk and are willing to proceed with this service. Do you agree to continue with this tele-education session?”*

Participant Readiness and Assessment

To engage a participant in tele-education, health center staff must first assess their readiness and ability to engage in the digital delivery of patient education. The Participant WhatsApp® Tele-Education Readiness Assessment Tool (Appendix A) will assist Health Center staff in identifying a participant's willingness and/or need for resources and assess their skills to engage in tele-education services.

The health center staff conducts the assessment by asking a series of questions about the needs and resources of the participant being considered for tele-education to determine how ready they are to engage in the digital delivery of services. The responses are scored and based on the final score, recommendations are provided on the "Score Sheet" to help determine the next steps in creating a plan to engage the participant in tele-education.

This assessment can be used in electronic or paper form. To use it electronically, the staff member must fill in the corresponding participant information and save the tool, preferably in the patients' electronic health record. To use it in paper form, the tool should be printed and laminated to be disinfected and reused when assessing multiple participants. Make sure you enter the information in the electronic health record or a paper file. If lamination is not available, individual copies of tools should be printed for participants.

WhatsApp Platform and Features

Once assessments have been completed, health center staff should encourage and engage participants to use the WhatsApp platform by reviewing its multiple features and advantages. WhatsApp® is a free application for iPhones, Android smartphones, Apple Macs, and Windows PCs. It allows you to send messages, pictures, videos, and even voice recordings, and to make voice and video calls over the internet for free, rather than paying to do the same using a mobile phone network.

WhatsApp® has several features that allow for interactive engagement and increased communication between health providers and participants of chronic illness programs. Community Health Workers and Outreach Workers can use this application in providing patient education and sharing health information.

1. Group Chats and Activities

Not only can you have individual contacts, but WhatsApp® also allows you to create groups. This feature is great for sending chats to an entire group of participants and/or for setting up group events.

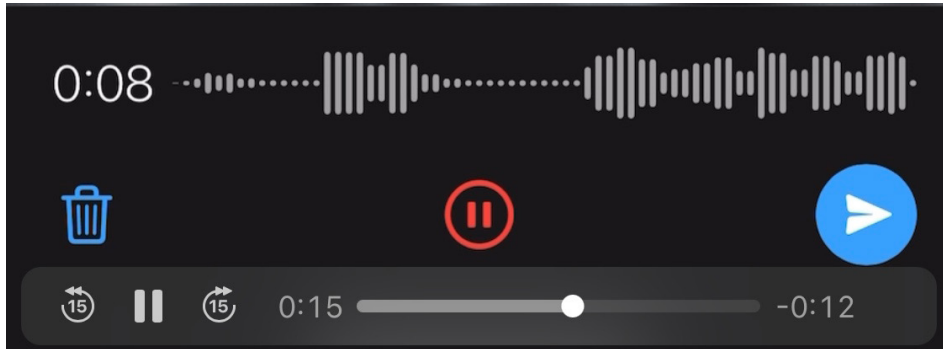
- To create a group, click on the chat and select "New Group" and invite or add your program participants.
- To connect with participants, you can locate their contact through the participant's name or phone number.



If you create a group, it is recommended you develop a set of guidelines that all participants agree to follow when they join. You can create your own with the input from your participants or use the set of Group Guidelines for Online Chronic Illness Support (Appendix B) that NCFH has created to develop a safe digital space for your participants.

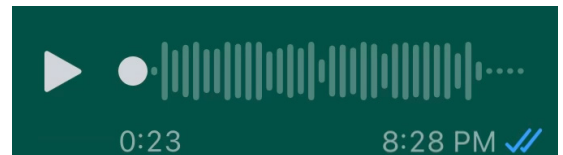
2. Voice Messaging

Voice messaging allows you to record an audio message and send to another person right away. After selecting the individual or group you want to send a message to, simply click on the microphone icon in the lower right corner of the screen and hold it to record your message. Once you have recorded your message, you simply release the microphone icon, and your message is sent automatically.



Depending on the type of device used and the settings for the application, you may have access to certain features that allow you to listen to a message and re-record prior to sending.

- To review your recording, hold the microphone and slide up. Click PLAY and listen to your message prior to sending. If you want to keep the recording, click on the blue icon to send. If you would like to delete the recording, click on the trash icon. Repeat process to re-record.



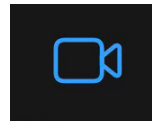
3. Audio or Video Calls

Calls can be conducted on WhatsApp® through audio or video. Calling participants allows health center staff the opportunity to stay connected with participants in a more impactful way and encourages participants to maintain personal accountability for their health.

To call an individual participant, click on their contact information and select the type of call you wish to conduct.



For audio calls, click the phone icon.



For video calls, click the camera icon.

This is a secure and direct way of reaching participants who may otherwise be inaccessible due to accessibility restrictions.

4. File or Resource Sharing

Sharing of files or resources on WhatsApp® can be done through videos and photos to an individual or group. Health Center staff can send health related information by taking pictures or videos of patient education materials. They can also send actual documents by uploading files from your phone. Participants can send things like photos of their daily meals, video of them reading food labels at the grocery store, daily exercise photos, and anything else they would like to share showing their accountability to manage their chronic illness.

To share a resource, click the camera button on the right of the message field and select the photos or videos you would like to send. If you don't have the items ready beforehand, you can click the camera button to take your photo or create a video in real time. Add a caption or use the crop and rotate tools to personalize your resource before sending.



Strategies for Participant Self-Management via WhatsApp®

Now that you are more familiar with the features available on WhatsApp®, here are some helpful strategies you could use with program participants to increase self-management of their chronic illness and to motivate them to take an active role in their health.

We focus on strategies related to two main chronic illnesses: diabetes and cardiovascular health (high blood pressure and cholesterol).

1. Conduct participant check-ins daily or weekly, depending on the needs of each individual participant. Send a message to participants via individual chat messages or voice messaging to remind them to check their glucose levels, cholesterol, or monitor their blood pressure. You can also check in on their progress and remind them of any upcoming appointments or events.

Diabetes

- Remind participant to check glucose levels multiple times a day. Key times for glucose checks are before or after meals, if needed, before exercising, and before going to bed at night.

Cardiovascular Health

- Remind participant to take first blood pressure measurement in the morning, before eating or taking any medications, and the second measurement in the evening, before going to bed.
- Advise participant to take 2-3 readings and wait 3-5 minutes between each reading, to ensure accurate results.

2. Conduct private audio or video calls with participants to provide individualized healthy discussions or conduct one on one virtual health education sessions. Participant calls are a great way to deliver Diabetes Self-Management Education and Support (DSMES), Diabetes Prevention Programing (DPP), and Self-Measuring Blood Pressure programs. Video sessions can also be conducted to show participants how to use different types of health monitors at home.

Diabetes

- Demonstrate how to properly check glucose levels.

Cardiovascular Health

- Demonstrate how to sit and position their arms and body while checking their blood pressure.

3. Promote “virtual” accountability by using video calls or file sharing features. Encourage participants to share pictures of their daily meals or send video of their grocery shopping trips and exercise routines. They can also share pictures or video of self-blood pressure checks, glucose checks, or any other self-monitoring techniques.

Diabetes

- Managing diabetes through nutrition is key. Help participants stay accountable by having them send photos of their daily fruit, vegetable, and meal intakes. They may also send photos of their refrigerator items or food pantry options.
- Participants may send video showing themselves at the grocery store reading food labels and choosing various foods. This allows health center staff to provide feedback and make recommendations.

Cardiovascular Health

- Ask participants to share a daily photo or video of how they are trying to manage their stress and stay active each day by taking a walk, going for a run, participating in a Zumba class, daily deep breathing, or stretching.
- Have participants share a video of them checking their blood pressure using their home monitor to check for accuracy.

4. Send daily health resources and referrals with participants related to their chronic illness using the file or resource sharing feature. When providing health education resources and materials, ensure they are culturally and linguistically appropriate. Consider the participant’s preferred language, interests, literacy level, learning style, and cultural background. The use of various images and illustrations is also strongly recommended.

If a participant reports a challenge or need to manage their chronic illness, provide referrals to the community and additional information on where they can receive assistance or schedule an appointment for them to come into the health center for support.

Diabetes

- Send participants resources surrounding healthy eating or staying active such as different recipes that fit their everyday lives, at home exercise techniques, tips on managing stress or ways to involve the family in living a healthier lifestyle. Financial assistance options that may be available for medications can be shared as well.
- Share with participants resources that demonstrate how to use different health monitors and the proper times to check glucose levels throughout the day.

Cardiovascular Health

- Send participants resources such as ways to stay active, choose healthy foods, keep family recipes while making small substitutions, ways to decrease tobacco use and alcohol intake, and tips to managing stress. Financial assistance options for cardiovascular health medications may be shared as well.
- Share with participants resources that demonstrate how to use different health monitors for checking blood pressure and cholesterol levels and how to accurately position the body for most accurate results.

5. Host group events to promote peer to peer support by using the group video call feature.

Host virtual Zumba sessions, cooking demonstrations, and celebrate special occasions with your participants and their families from the comfort of their homes! Promote active family involvement in leading overall healthier lives through virtual group activities such as at home exercise techniques or celebrate special occasions by sharing music and favorite dance moves to keep hearts healthy and bodies active.

Note: The WhatsApp personal account application allows up to 12 participants to join a group video session at once. You may download the WhatsApp@business application for free which allows for more participants to join in.

Diabetes

- Host group events weekly, monthly, or quarterly to motivate participants to stay physically active and encourage healthier meal options by having cooking demonstrations that are quick and easy. Share how participants can make ingredient substitutions while maintaining the fidelity of the dish.

Cardiovascular Health

- Host group events where participants follow you into the grocery stores and demonstrate how to read food labels and choose healthier options.

Time to Connect!

With this guide, we hope you have learned about the WhatsApp® application and ways to use the different features to promote participant engagement in the self-management of their chronic illness and to gain overall improved participant outcomes through tele-education.

Staying connected via the WhatsApp® application allows people living with different chronic illnesses the ability to receive the health education they need, without having to be physically present in a health center setting. It allows participants to communicate with providers more easily and have the confidence to ask the questions they need to better manage blood glucose levels, blood pressure, cholesterol, and other chronic illnesses. Simultaneously, with tele-education, health center staff can address some participant barriers in receiving health education such as lack of transportation, childcare or work obligations that may otherwise prevent the participant from visiting a health center. The ability to virtually check-in with participants either daily or weekly also allows for a stronger relationship between health center staff and their participants to increase trust and further engage them in actively managing their chronic illness.



APPENDIX A

Participant:

Date:

Assessment completed by:

Participant WhatsApp® Tele-Education Readiness Assessment Tool

Instructions: Please read each of the following questions and check the response that most accurately reflects your participant's current needs and resources to determine how ready they are to engage in the digital delivery of services. Based on the final score of the assessment, recommendations are provided for health center staff in the "Score Sheet." These recommendations will help staff develop next steps in creating a plan to engage the participant in tele-education.

This tool is intended to be used in electronic or paper form. To use it electronically, health center staff must fill in the corresponding patient information and save the tool for the electronic health record. To use it in paper form, the tool should be printed and laminated in order to be disinfected and reused with multiple participants.

Participant Willingness/Need

<i>Please check one box in each row</i>	YES	NO
1. Does the participant understand how tele-education works and the services they could receive using this digital delivery method?		
2. Does the participant express a desire, ask questions, or demonstrate interest in utilizing tele-education services?		
3. Does the participant have a need for tele-education services due to lack of transportation, distance to health center, or after hour appointments?		

Access to Internet and Devices

<i>Please check one box in each row</i>	YES	NO
1. Does the participant own a technological device with internet or wireless Wi-Fi access? <i>If yes, select one below and continue to question 2. If no, skip to question 5.</i> Desktop/Laptop computer Tablet/iPad Smart Phone		

2. Does the participant have consistent internet access at home? <i>If yes, select what kind below and continue to question 4.</i> Dial up internet services High Speed Internet (optic, fiber, DSL, satellite, etc.) Mobile or cellular data		
3. Is the internet service (broadband or cellular) strong and stable in their residential area?		
4. Can the participant afford internet access or have access to a Smart phone?		
5. Does the participant need to access internet or devices in public, shared spaces? (friends or family, library, school, community, hotspot, public Wi-Fi)		
Digital Navigation Skills		
<i>Please check one box in each row</i>	YES	NO
1. Has the participant participated in tele-education services before?		
2. Does the participant know how to navigate their technological device?		
3. Does the participant know how to download and access WhatsApp on their device?		
4. Does the participant know how to access the camera on the WhatsApp application?		
5. Does the participant know how to enable the camera and use it to capture video?		
6. Does the participant know how to access the microphone on the WhatsApp application?		
7. Does the participant know how to enable the microphone and use it to record?		
8. Does the participant have access to a headset or headphones?		
TOTAL		

Answer Value: (Yes = 1, No = 0)

SCORE SHEET & RECOMMENDATIONS

Score 0-4	Provide participant support and resources to access technology to engage in digital delivery of tele-education
<p>Participant seems to not be ready to engage in tele-education at this time due to lack of resources and/or need for additional participant education on WhatsApp application. It is recommended that health center staff take inventory of the participant's technological needs (i.e., device, internet service, skills) and identify available resources that may be able to assist. Health center staff can provide referrals in the community on where a participant can obtain technological devices and/or provide a list of locations where the participant can access free internet in the community. Aside from providing referrals and resources, Health Center staff can help in setting up actual internet services or a device. If the participant needs to access internet in a public space (i.e., library, schools, community centers, etc.), where internet restrictions may be a factor, health center staff should communicate with the participant and select a public space near the participant's residence to provide support in ensuring internet access and downloading the WhatsApp application.</p>	
Score 5-10	Provide participant additional training to build WhatsApp digital literacy skills
<p>Participant needs more education and training to increase WhatsApp digital literacy and engage in tele-education services. After ensuring the patient has access to internet and a technological device available, health center staff can then help participants download the WhatsApp application, create a user profile, and become familiar with its features by practicing the usage of audio and video on the App. The participant should also be informed of how to set up and use the camera, the microphone, and headphones, if needed. Health Center staff should also teach the participant how to enable privacy features, such as having a private browser and clearing any stored information or files. This can be accomplished by scheduling a trial run to practice and answer any participant questions.</p>	
Score 11 -16	Prepare participant to engage in WhatsApp tele-education services
<p>Participant may be ready to start tele-education services via WhatsApp and has the necessary resources to do so. Health Center staff may simply need to orient the participant to the WhatsApp platform, provide guidance on accessing each feature, and provide a WhatsApp contact to connect with them. Health center staff should also review privacy settings and how to properly utilize the device camera, microphone, and headphones. If the participant is very familiar with using this application, they may assist other participants to engage in digital delivery and lead discussions to promote engagement in group activities. By utilizing what may be a familiar application such as WhatsApp, participants will feel an increased confidence in taking an active role to accomplish their health goals and address their chronic care needs through facilitated communication.</p>	

APPENDIX B

Sample Group Guidelines for Online Chronic Illness Support

Support groups for chronic illness are intended to be a safe space for individuals to share personal experiences and feelings, coping strategies, or firsthand information about chronic illnesses. It is important to have guidelines for members to understand how they can receive and offer support to one another by keeping the meeting environment safe and inclusive for all participants. Below are examples of some of the most commonly used guidelines found within online support groups.

1. Safety

For all group members to feel safe, information shared in this group will remain in this group. Posts by members are for the benefit of the community only, not to be copied, shared, or forwarded outside of the group. Any member that discusses another members' experiences outside of the group will be blocked and removed.

2. Respect

To ensure everyone is respected, bullying of any kind, or degrading comments about race, religion, culture, sexual orientation, gender, or identity will not be tolerated. All opinions are encouraged and will be respected. Please keep all political opinions out of discussions. The moderators and admin of this group will monitor all posts and immediately remove them and the users who violate this guideline.

3. Confidentiality

No personal medical information will be shared or asked as per HIPPA Guidelines. If a member of group decides to disclose personal medical information that will be done at their own discretion and will. The intention of this support group is to share resources for educational purposes and to offer support and guidance only.

4. No Solicitation

- No promotion or selling of any products or services.
- No posts for self-benefit such as affiliate offers, personal page, blog, etc.
- No soliciting to get members to join other groups, website, etc.

Admin will delete all content that is related to solicitation.

5. Violators will be removed.

The moderators and admin of this group will immediately remove and block any user that violates the guidelines of this group.

**Additional guidelines may be added by gathering group input.*

Sample Group Disclaimer

Having a group disclaimer for support groups of chronic illness is also encouraged to provide participants a clear understanding of the purpose of the online support group and guidance for seeking medical advice. Below is an example of a group disclaimer that may be used.

"It is important for participants to understand that information shared within the group is not medical advice and has not been endorsed by a physician or medical provider. Please talk with your primary healthcare provider before making any lifestyle, diet, or supplemental change."