

Additional File 2 FGD and KII guides

FGD GUIDE FOR PATIENTS WITH TYPE 2 DIABETES

1. **Opening question:** Do you think your overall health has changed since your diagnosis of diabetes? [**Probe:** *How, difficulties faced while managing diabetes.*]
2. In your experience of managing your diabetes over the years what are some of the (mhealth or telehealth) approaches/techniques you have found useful? (**Probe:** *Which digital technology-(video consultation, health app, tele consultation etc.) have they have been using to manage family members diabetes?*)
3. According to you, how much available/affordable/accessible is digital health technology (telehealth/mhealth)? (**Probe:** *Remind the participant what do you mean by telehealth/mhealth, do you have access to health apps, video consultation, tele consultation etc., is it affordable, are these facilities available to you?*)
4. Over the last two years since the pandemic began, patients have been in touch with their doctors using digital technology [**Probe:** *telehealth-video consult-whatsapp/zoomcall/weblinks, voice calls, message, consults to help manage your diabetes?*] how often did you use digital technologies to manage your health and specifically diabetes during this period? Did others in your family also use these technologies?
5. How comfortable were you consulting your doctor/dietitian over a video or audio call instead of the regular in person visit? Do the kind of questions you asked your health care provider (HCP) via an app or phone consult differ from what you would in person? Basically, how different or similar has this experience been for you?
6. Have you used any mHealth applications (apps) to manage and become more aware about your health condition including diabetes? (**Probe:** *Name of the app, features liked/used*)
7. Did someone introduce you to this technology? How did you become aware of it? [**Probe:** *Did someone help you or you managed yourself?*]
8. Did these technologies help you manage your diabetes better? How? Key features of the technology that helped you. (**Probe:** *Aspects of diabetes management that were aided, SMBG, diet, Physical activity, medical adherence, appointment booking, home collection etc.?*)
9. If you needed someone's support to use this technology, then support was needed for [**Probe:** *login, navigation, connectivity, setting up the app/link, payment, read (small font size), language*]
10. What do you think are the barriers/facilitators in the use of digital health technology for managing a condition like diabetes? [**Probe:** *Role of money/cost, time, family/friend involvement and support, age/gender of the pt./fly member in the use of digital technology in managing diabetes/ strategies that helped patients engage with digital health*]
11. At the current time, if you were to choose between in person visit and teleconsultation, what would you choose and why? So, what future do these digital technologies hold in preventing and managing diseases like diabetes?
12. **Closing question:** Do you want to add anything more to what has already been discussed? [**Check to the interviewer:** *all questions above have been answered and probe accordingly*]

FGD GUIDE FOR ATTENDERS OF PATIENTS WITH TYPE 2 DIABETES

13. **Opening question:** Would you tell us who in your family has type 2 diabetes? (mother/father/husband/wife/brother/sister/aunt/uncle/grandparents/children etc.) Do you think that the overall health of your family has changed since your family member has been diagnosed with diabetes? [**Probe:** *How, difficulties faced while managing diabetes.*]
14. In your experience of helping your family member manage his/her diabetes over the years what are some of the (digital) approaches/techniques you have found useful? (**Probe:** *Which digital technology (video consultation, health app, tele consultation etc.) have they have been using to manage family members diabetes?*)
15. According to you, how available, affordable and accessible is digital health technology (telehealth/mhealth, do you have access to health apps, video consultation, tele consultation etc., is it affordable, are these facilities available to you?)? (**Probe:** *Remind the participant what do you mean by telehealth/mhealth). Who does it benefit the most?*)
16. Over the last two years since the pandemic began, patients have been in touch with their doctors using digital technology [**Probe:** *telehealth-video consult-whatsapp/zoomcall/weblinks, voice calls, message, consults to help manage your diabetes?*] how often did you use such digital technologies to manage health of your family during this period?
17. Have you used any mHealth applications to manage and become more aware about your own health condition and health condition of your family members including diabetes?
18. Did someone introduce you to this technology? How did you become aware of these technologies? [**Probes:** *Did someone help you or you managed yourself?*]
19. Did these technologies help you manage health of your family in a better way? How?
20. Has (or do you think that) your role and responsibilities of caregiver changed with the introduction of digital health technology? Key features of the technology that helped you? Are you aware of any digital health technology that is specifically developed for and used by caregivers of patients with Diabetes?
21. In your opinion, what kind of support was needed to use digital technology for managing the health of the patient with T2D you are caring for? Support maybe needed for[**Probe:** *login, navigation, connectivity, setting up the app/link, payment, read (small font size), language*]
22. What do you think are the barriers/facilitators in the use of digital health technology for managing a condition like diabetes? [**Probe:** *Role of money/cost, time, family/ friend involvement and support, age/gender of the pt./fly member in the use of digital technology in managing diabetes// strategies that helped patients engage with digital health*]
23. **Closing question:** Do you want to add anything more to what has already been discussed? [**Check to the interviewer:** *all questions above have been answered and probe accordingly*]

INTERVIEW GUIDE FOR HEALTHCARE PROVIDER (HCP) (Doctor, diabetes educator/dietitian/nurse)

1. **Opening question:** In your experience, over the years what are some of the best practises/approaches/techniques you have found useful in managing your patients' diabetes? (***Probe:** Which digital technology have they have been using to manage their patients' diabetes?*)
2. Over the last two years since the pandemic began, patients have been in touch with their doctors/Health Care Provider (HCP) using digital technology [***Probe:** telehealth-video consult-whatsapp/zoom call/weblinks, voice calls, message, consults to help manage your diabetes*]
In your opinion/experience, how did the use of digital health technology help people with diabetes to manage their disease? How has your experience been, in using these digital approaches?
3. According to you, how available/affordable/accessible is digital health (DH) technology for patients in India? Who does it benefit the most?
4. How receptive are patients to the idea of reporting their blood sugars over the phone? What are the patient's reactions? Has DH helped in patient adherence to medication, diet, follow up etc.?
5. How has it been to assess patients' adherence to their medications/diet/SMBG during these calls compared to doing it face to face or in person? Do you think that you are able to do this accurately using technology?
6. Do the kind of questions patients ask via an app or phone consult differ from what they would in person? Basically, how different or similar has this experience been for you?
7. In your experience, how easy or difficult was it to incorporate telemedicine into your clinical practice and conduct a visit using telemedicine? What percentage of your patients accepted this digital approach for managing/treating their diabetes?
8. Do you think DH has a role in managing chronic diseases like diabetes? Which parts of managing these conditions can be digitised? Do you think government/stake holders/policy makers would provide funding and/ or infrastructure to support this? (***Probe:** Besides government who else may fund/support digitising chronic disease management?*)
9. What do you feel are the limitations of assessing patients using digital technology? What are the biggest barriers in using DH to treat and manage patients?
10. What in your opinion are the advantages of using DH to treat and manage patients? What future does digital technology hold in patient care? Are these technologies cost-effective in your opinion?
11. How can DH reduce the burden on an already strained healthcare system in our country?
12. Do you think local health-related practices/ experiences can act as barriers in the acceptance of DH?
13. At the current time, if you were to choose between in person patient consult and teleconsultation, what would you choose and why?
14. **Closing question:** Do you want to add anything more to what has already been discussed? [***Check to the interviewer:** all questions above have been answered and probe accordingly*]

INTERVIEW GUIDE FOR COMMUNITY ORGANISATIONS

1. **Opening question:** In your experience, over the years what are some of the best practises/approaches/techniques you have seen useful in managing patients with diabetes? (**Probe:** Which digital technology have they have been using to manage their patients' diabetes?)
2. Over the last two years since the pandemic began, patients have been in touch with their doctors/Health Care Providers (HCP) using digital technology [**Probe:** telehealth-video consult-whatsapp/zoom call/weblinks, voice calls, message, consults to help manage your diabetes]
In your opinion/experience, how did the use of digital health technology help people with diabetes to manage their disease? How has your experience been, in using these digital approaches?
3. According to you, how available/affordable/accessible is digital health (DH) technology in India for patients? Who does it benefit the most?
4. How receptive are patients to the idea of monitoring their blood sugars and reporting them by phone? Has DH helped in patient adherence to medication, diet, follow up etc.?
5. What kind of infrastructure is necessary for accessibility and acceptability of DH? Where does India stand in providing this infrastructure?
6. In your opinion, what kind of trust is required between the DH provider and the patients with diabetes and what can be done to build this trust?
7. According to you, what role does the good internet connectivity plays in the success of DH technology?
8. In your experience, how easy or difficult it is to incorporate telemedicine into the clinical practice in India? What percentage of patients have accepted this digital approach for managing/treating their diabetes?
9. Do you think DH has a role in managing chronic diseases like diabetes? Which parts of managing these conditions can be digitised? Do you think government/stake holders/policy makers would provide funding and/ or infrastructure to support this? (**Probe:** Besides government who else may fund/support digitising chronic disease management?)
10. What do you feel are the limitations of assessing patients using digital technology? What are the biggest barriers in using DH to treat and manage patients?
11. What in your opinion are the advantages of using DH to treat and manage patients? What future does digital technology hold in patient care? Are these technologies cost-effective in your opinion?
12. How can DH reduce the burden on an already strained healthcare system in our country?
13. Do you think local health-related practices/ experiences can act as barriers in the acceptance of DH?
14. With the advancement in technology, many start ups have come up with new devices that can help manage diabetes. In your opinion, how committed are the healthcare organisations towards the uptake of these technologies?
15. At the current time, if you were to choose between in person patient consult and teleconsultation, what would you choose and why?
16. Do you know of any NGO where free support is given to patients with diabetes? Do you think DH technology can enable them reach and help a larger number of patients with diabetes?

17. **Closing question:** Do you want to add anything more to what has already been discussed? [**Check to the interviewer:** all questions above have been answered and probe accordingly]

INTERVIEW GUIDE FOR POLICY MAKERS

1. **Opening question:** In your experience, over the years what are some of the best practises/approaches/techniques you have seen useful in managing patients with diabetes? (**Probe:** Which digital technology have they have been using to manage their patients' diabetes?)
2. Over the last two years since the pandemic began, patients have been in touch with their doctors/Health Care Providers (HCP) using digital technology [**Probe:** telehealth-video consult-whatsapp/zoom call/weblinks, voice calls, message, consults to help manage your diabetes]
In your opinion/experience, how did the use of digital health technology help patients manage their diabetes? How has your experience been, in using these digital approaches?
3. According to you, how available/affordable/accessible is digital health (DH) technology in India for patients? Who does it benefit the most?
4. What kind of infrastructure is necessary for accessibility and acceptability of DH? Where does India stand in providing this infrastructure?
5. In your opinion, what security measures need to be put in place by organisations working in DH that would ensure privacy and confidentiality of the patient data? Are there any specific privacy policies that GOI or our state government have implemented and is available in the public domain?
6. In your experience, how easy or difficult it is to incorporate telemedicine into clinical practice in India? Do you have any data on the percentage of patients who use DH for managing/treating their diabetes?
7. Do you think DH has a role in managing chronic diseases like diabetes? Which parts of managing these conditions can be digitised? Do you think government would provide funding and/ or infrastructure to support this? (**Probe:** Besides government who else may fund/support digitising chronic disease management?)
8. What do you feel are the limitations of assessing patients using digital technology? What are the biggest barriers in using DH to treat and manage patients?
9. What in your opinion are the advantages of using DH to treat and manage patients? What future does digital technology hold in patient care? Are these technologies cost-effective in your opinion?
10. How can DH reduce the burden on an already strained healthcare system in our country?
11. Do you think local health-related practices/ experiences can act as barriers in the acceptance of DH?
12. Do you think nurses / educators (Anganwadi workers for PHCs) can take on more burden of preventive lifestyle care to help with the burden of disease? Can DH help with this? Do you see this becoming policy?
13. **Closing question:** Do you want to add anything more to what has already been discussed? [**Check to the interviewer:** all questions above have been answered and probe accordingly]