

Supplementary file 2- WP 3.3 Qualitative interview topic guides

Intervention Patient Topic guide

Thank you for agreeing to take part in the interview today

Check timing ok

Check consent form filled in / received

Are you happy for the interview to be recorded?

We're interested in your experiences of the service that you have received from CFHealthHub including both the meetings to discuss your nebuliser medication and the website/app you have used.

1. Why did you decide to take part in the research?
2. How did you find being asked to take part in the trial? [Prompts: recruitment, paperwork volume, information provided, questionnaires]

Now I'd like to ask you about your meetings with the person who has been working with you on CFHealthHub.

3. What types of things did they recommend that you do? [prompts: setting goals, solving problems, making plans (myplan), giving you information]
4. Do you think you have had any benefit from these meetings?
If yes, what benefit and what about the service helped you to get this?
If no, what has stopped you gaining benefit?
5. What was good about how the meetings were delivered? [Prompt: what needs to be improved?]

Now I'd like to talk to you about the CFHealthHub website / app.

6. How have you accessed CFHH? [Prompts: laptop, app, mobile version of website, desktop.

Which of these do you prefer?

Why do you prefer it [Prompts: why not the others]

7. What was good about the website? [Prompts: my plan, how am I doing, tool kit, graphs, my treatment]

8. What needs to be improved? [Prompts: my plan, how am I doing, tool kit, graphs, my treatment]

9. Do you think you've had any benefit from using the website?

If yes, what benefit and what about the website helped you to get this?

If no, what has stopped you gaining benefit?

10. Have the website and/or meetings helped you to improve how often you use your nebuliser?

If yes, how has it helped you to do this?

If not, why not?

11. How do the CFHealthHub website and the meetings work together?

12. Has using CFHealthHub helped you to be able to use your nebuliser any better? Why / Why not?

[Prompt: capability skills / knowledge including beliefs]

13. Has using CFHealthHub helped you to find the time to use your nebuliser more? Why / why not?

[Prompt: opportunity / making plans]

14. Has using CFHealthHub made you want to use your nebuliser more? Why / why not? [Prompt: motivation and confidence]

15. How does the CFHealthHub service (website and meetings) fit with the care you were already receiving at the unit/hospital?

16. Do you think you would continue using CFHealthHub? [Prompt: during the study / after the study]

17. Is CFHealthHub a good thing to use in general for people with CF? Why? / Why not?

18. How have you found being part of the study?

Is there anything else that we haven't talked about that you'd like to comment on?

THANK YOU

Interventionist Topic guide

Thank you for agreeing to take part in the interview today.

Check timing ok

Check consent form filled in / received

Are you happy for the interview to be recorded?

Introduction to the interview: Interested in how you've found using CFHealthhub (CFHH) with your participants and any learning from it

The trial

1. What works or could be improved about:
 - a) recruiting patients to the trial?
 - b) collecting data?
 - c) any other aspect?

The intervention:

Now I'd like to go through each of the steps for providing the intervention to get your views on each of these

2. What works or could be improved about:
 - a) how you have assessed participants' adherence levels prior to using CFHH?

 - b) how you set up appointments with your participants?

 - c) intervention visit 1? [Prompts: gathering data, introducing the nebuliser, entering prescription data into CFHH, completion of screening tools, patient feedback, anything else]

 - d) review visit 1? [Prompts: reviewing adherence data, introducing CFHH, explaining modules, setting goals, action planning, identifying suitable tailored content, technical issues, anything else]

 - e) other review visits? [Prompts: reviewing goals, reviewing adherence plans, motivation, problem solving, anything else]

3. What works or could be improved about the training manuals and training sessions?

4. What works or could be improved about the support available from the research team? [Prompts: timing, availability, problem solving].
[Specific prompt for MDT senior interventionist: do you think the training has equipped you to deliver this intervention in your centre yourself after the trial ends? If no, what further training would be needed?]

5. How has the CFHH intervention been received by the rest of the team? [Prompt: how has your communication been with the rest of the team about CFHH?]

6. What sort of follow-up did participants request? How will you handle this?

7. How has the CFHH intervention helped your participants to know how to use their nebuliser? [Prompt: capability / skills, knowledge and beliefs]

8. How has the CFHH intervention helped your participants find ways to use their nebuliser more? [Prompt: opportunity]

9. How has the CFHH intervention helped to motivate your participants to use their nebuliser? [Prompt: motivation / confidence]

General questions:

10. How do your participants access CFHH? [Prompt: app v desktop or laptop. Have there been any issues with access for any of your participants?]
11. How engaged did participants seem with CFHH? [Prompt: What feedback if any have you had from participants about CFHH?]
12. How useful do you think CFHH is for your participants?
13. How easy / difficult has it been to get your participants to use CFHH?
14. Have you seen any changes to the ways in which your participants use their nebulisers since starting CFHH?
15. What have you learnt from using CFHH with your participants?
16. What if any are the benefits to you and / or to your participants of using CFHH?
17. How do you think CFHH fits with the other care offered by the centre?
18. How have you found being part of the trial?

Is there anything else you'd like to say about CFHH?

THANK YOU

PI Topic guide

Thank you for agreeing to take part in the interview today.

Check timing ok

Check consent form filled in / received

Are you happy for the interview to be recorded?

Introduction to the interview: Interested in your views about CFHealthhub (CFHH) and how you think it fits with the centre and your patients

1. Can you describe the key things you did in your centre to help patients adhere to their nebulisers prior to the ACTiF study?
2. How does nebuliser adherence fit with the other things you do for CF patients? [Prompts: ethos of centre to CF and where adherence fits in, other CF treatments e.g. exercise]
3. What involvement have you had in the CFHealthHub intervention? [Prompts: website, interventionist, training of staff]
4. How has it been for you / your centre taking part in the trial? [Prompt: recruitment to the study]
5. Do you think CFHealthHub is a useful intervention? Why? / Why not? [Prompts: what do you think about the: website, feedback about adherence data, interventionist, training?]
6. How do you think the CFHealthHub intervention is operating in practice? [Prompt: what are the strengths / improvements needed?]
7. How does the CFHealthHub intervention fit with the care offered by your centre?
8. How does the CFHealthHub intervention help your patients to know how to use their nebuliser? [Prompts: Skills / knowledge / beliefs. How / Why doesn't it help?]
9. How does the CFHealthHub intervention help your patients to find ways to use their nebuliser more? [Prompts: How / Why doesn't it help?]
10. How does the CFHealthHub intervention help to motivate your patients to use their nebuliser? [Prompts: How / Why doesn't it help?]
11. Do you think CFHealthHub is helping your intervention patients to improve their adherence? If yes, what key things have helped this? If no, what if anything could be done to help this?

12. Has the CFHealthHub intervention changed anything about the way in which you and/or your team approach adherence in your centre?

i) for patients receiving the intervention?

ii) for patients not receiving the intervention?

[Prompts: MDT discussions / differences between control and intervention patients]

13. Which of your patient groups are most likely to benefit from CFHealthHub? Why?

14. Which of your patient groups are least likely to benefit from CFHealthHub? Why?

15. Would you consider continuing to use CFHealthHub in the future? Why? Why not?

17. How able do you feel to go on delivering care related to improving adherence after the study ends? [Prompt: has the study changed the way you will go about this?]

18. Are there any aspects of the research that we haven't talked about that you'd like to comment on?

Is there anything else you'd like to say?

THANK YOU