

Supplementary file 1 WP 2.1 Topic guide for qualitative interviews

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 what it is like to live with cystic fibrosis and in particular how you manage aspects of your treatment.

1. Having cystic fibrosis

Can you tell me what it is like to have Cystic Fibrosis (CF)?

How do others around you react to you having CF?

How difficult or easy is it to manage your CF? Why?

How does managing your CF affect how you live your life? (Prompts: social life, family, relationships, leisure, work)

What motivates you to manage your CF well?

How much support do you have from others to manage your CF?

How much control do you feel you have over your CF?

Is there anything else you would like to say about having CF?

2. Treatments

I'd like to ask about your treatments for CF: nebuliser, physiotherapy, tablets, etc

Can you tell me about the treatments you have for CF?

How necessary do you believe each of the treatments are for you?

Do you have any concerns about the treatments? (medical or social)

Are there times when you don't do all the treatments? Tell me about them.

Have you ever stopped taking medication for any reason? Why? Were there any effects of this?

Do you have any particular goals for treatment?

Are there times when you have to choose between CF treatment and aspects of your life that are important to you? Can you give examples and explain how you juggle your choices?

How much support do you have from others for taking your treatments?

Is there anything else you would like to say about your treatments?

3. Nebuliser adherence

I'd like to focus on your use of nebulisers now: What type of nebuliser do you use currently?: Portaneb, I-Neb, E-flow, Podhaler (TIPS), Colobreathe,

What mucolytic or antibiotic?: Dnase, Tobramycin/ Bramitob, Colomycin/promixin, Aztreonam

How often should you be using your nebuliser? (What is your prescription?)

This is a chart showing your pattern of treatment over the past 6 months

Have you seen a chart of your treatments like this before?

How do you feel about reviewing your treatment using a chart like this?

In these periods you were managing higher levels (e.g. 80%) of your treatment. Can you tell me about those periods? What helped you to manage that? (Prompts in table below)

In these periods you were doing less treatment. Can you talk me through those periods? (Prompts in table below)

Did you want to/ were you trying to use your nebuliser as prescribed? (Motivation)	
Goals	What motivated you to take your nebuliser? How much did you want to use your nebuliser as prescribed? Why? Did you have other goals that get in the way of you using your nebuliser as prescribed?
Beliefs about consequences	What are the consequences of always using your nebuliser? (short term and longer term). What are the consequences of occasionally or regularly missing using your nebuliser? How important do you think nebulisers are for your health relative to other treatments?
Intentions	Did you made a decision to use your nebuliser exactly as prescribed? (why/why not?) Are there situations/times in which you have made a decision not to use your nebuliser?
Beliefs about capabilities	How confident did you feel that you could use your nebuliser exactly as prescribed?
Optimism	Is using your nebuliser as prescribed something that can be done?
Emotion	How do you feel in general about using your nebuliser? Are there any situations in which using your nebuliser makes you feel positive / negative (fearful, anxious or stressed)?"

Reinforcement	Did you have any reward for using your nebuliser as prescribed? (could be from the effects of using the nebuliser, from someone else e.g. praise, or a reward you give yourself) Would you like to be rewarded?/Is having a reward important?
Social/professional role and identity	Do you see yourself as the kind of person who follows health advice? In what circumstances would you not do this? Do you see your nebuliser use as something that you should be personally responsible for? Why/why not?

Did you find it difficult to use the nebuliser as prescribed? (Capability)	
Knowledge	What have you learnt about using nebulisers for CF over the years? Do you feel you know as much as you need to? If not, what is missing?
Skills	What skills do you need to use your nebuliser as prescribed? Do you have the skills to be able use your nebuliser as prescribed? Is there anything that you would like to know more about/have additional help with?
Memory, attention and decision processes	How did you remember to use your nebuliser? Is using your nebuliser something that you always remember to do?
Behavioural regulation	What ways do you have of monitoring how much you use your nebuliser?

Did try to use your nebuliser as prescribed but were prevented from doing so by something or someone else? (opportunity)	
Environmental context and resources	How does your home, work or social environment affect you using your nebuliser? Do they help or hinder? When you need to use your nebuliser how easy was it to do at home, work, other environment? Did you have the time to use your nebuliser as prescribed?
Social influences	Are there any social pressures on you related to you using your nebuliser? (positive / negative) Are there people who help or hinder your use of nebulisers?

Having talked about different aspects of using your nebuliser, what do you think would help you to increase how much you use your nebuliser?

Is there anything else you'd like to say about using your nebuliser?

Is there anything else you'd like to say?

THANK YOU

