Appendix 1: Questions for semi-structured interview with HCPs

Icebreaker

- Are you happy to start?
- How long have you been working here?
- Could you brief introduce your team? e.g., how many people in your team, what kind of services you offer to patients.

The purpose of this interview is to understand your perceptions and experiences of providing COPD care.

• COPD journey/ Pathway

· Have you ever used the phrase "care pathway" or "care journey" during your working? Which one (pathway or journey) do you use more frequently?

A care journey refers to the process that patients go through in order to receive care, for example. When patients would like to see their GP, they will have to book an appointment, go the GP surgery and probably waiting a while and then do the consulting with GP. This whole process we call it care journey.

• Looking at the picture, do you agree with this primary care pulmonary rehabilitation pathway? Is there any difference in the pathway you have known?

Probes: Can you describe a more detailed care pathway of PR? I am interested in all the professionals that are involved, i.e., what they do for the people with COPD and the information they need.



- What is your main role along the primary care pulmonary rehabilitation (PR) pathway?
 Probes: what other professionals do you have to work with? Can you describe what they do for you?
- What information do you expect to receive from other professionals you work with? What information will you pass to the next stage's healthcare professionals? Probes: Could you tell me more about-----?
- Does the COPD patient have some knowledge about the PR pathway? / Do they know where they can get support?

Probes: Could you tell me more about-----?

• Can you recall the last time you talked with a new patient with COPD? Can you describe what you did for him or her? Perhaps it may be useful to think of how things happened along the care pathway. How did you feel at that moment?

Probes: Could you tell me more about-----?

Perception and experience of Pulmonary rehabilitation service:

- From your perspective, what is the purpose of pulmonary rehabilitation? Probes: Can you tell me more about-----?
- Can you recall a person with COPD who was reluctant to take up PR? What factors do you think affected his/ her uptake and attendance?

What factors do you think may affect people's uptake and attendance of the PR pathway? Probes: Which (three) factors do you think are most important?

• Do you know someone who declined PR because they think the course does not provide what they need?

Probes: Could you tell me more about-----?

- How do you know whether or not a patient who took up the PR programme or quit at a later stage? Probes: How do you communicate with your patients? What information do you expect your patients to tell you? What information do you convey to the patients?
- Does PR always work? Can it be further improved?

Probes: Could you tell me more about-----?

The relationship between capabilities and accessibility

- Do you think there are any connections between people's personal capabilities (physical and cognitive abilities) and their uptake and attendance of PR?
- · What affect those people cannot access pulmonary rehabilitation (any stage of the pathway)?
- Do people give up PR because they think their capabilities are not sufficient to manage the PR programme?

Probes: Can you tell me more about-----?