

**Online Supplement**

Table S1. Supporting quotations for themes

<b>Major theme 1. Physical activity is important, however people with COPD are inactive</b>	
Physical activity is a key component of disease management for people with COPD	<i>"I would regard physical activity or regular exercise as an important part in the management of COPD...most of the time I would regard physical activity as a priority"</i> C05, Physician  <i>"The role of physical activity... is integral... one of the most important aspects (of COPD management)"</i> C07, Physiotherapist
People with COPD are inactive	<i>"People who are very severe, most of them are inactive and (have)... things that they no longer do... (and) have given up on their social activity"</i> C04, Nurse  <i>"They (patients with COPD) are...avoiding doing things that might create the breathlessness..."</i> . C03, Physician
Patient education about physical activity is critical	<i>"It's important that patients understand that (physical activity) ... is not just a part of a treatment when they first come to see a medical person; they learn to integrate (it) into their whole life... if you don't spend time educating people and making them understand why it's important, you'll make the task very difficult for them"</i> C07, Physiotherapist  <i>"In the subacute setting, I try to give them some education about (evidence for) the benefits of pulmonary rehabilitation and physical activity (in the) COPD population and try and convince them that way to do more physical exercise...it depends (on them) if they take that on board, but I've provided them the information"</i> C08, Physician
<b>Major theme 2. Assessment of physical activity in people with COPD is challenging</b>	
Difficulties in assessing physical activity	<i>"Most people think of the classical symptoms of COPD as dyspnoea, cough and sputum production, but... reduction in physical activity is also an important symptom. It is not something that people obviously complain about...and from a clinician's point of view it can be difficult to identify"</i> C05, Physician

	<p><i>"Often, they don't know accurately, but there will be more vague discussions...I guess by exploring what they are doing...trying to tease (out) approximately how active they are."</i> C03, Physician</p>
Healthcare professionals commonly inquire about functional capacity	<p><i>"That is something that needs to be decided on an individual basis...for that particular patient. You can't use FEV<sub>1</sub> to decide"</i> C05, Physician</p> <p><i>"...So, if they are not as severe they can do things, so we talk about increasing that aerobic capacity and pushing themselves a lot more than they are."</i> C02, Physiotherapist</p>
Exertional dyspnoea is perceived as an important indicator of activity levels	<p><i>"It depends also if they're getting severe (dyspnoea) on a six-minute walk test, then obviously I'm not going to be prescribing as them as much (physical activity) as the younger person with (fewer) comorbidities who is probably moderately short of breath on the walk test"</i> C15, Physiotherapist</p>
<b>Theme 3. Physical activity advice is not a priority and health professionals may lack expertise</b>	
Physical activity advice should be individualized for each patient	<p><i>"I try to let people choose what their preference is, so we talk a little bit... about (physical activity) that will fit in their lifestyle and that they are going to enjoy and will be sustainable, rather than something that I am twisting their arm to do and they might do it for a month or two and then give up"</i> C01, Physician</p> <p><i>"That is something that needs to be decided on an individual basis...for that particular patient, you can't use FEV1 to decide."</i> C05, Physician</p>
Lack of perceived expertise when providing activity advice	<p><i>"The problem is... what are the right physical activities to be performing?... The frequency? ... it is difficult, as a medical practitioner... to have the knowledge of what they can do. It is a little bit difficult to go into that with great detail with patients"</i> C02, Physician</p>
Physical activity advice is not always prioritized	<p><i>"I don't (talk about physical activity)! Unfortunately, to date, a lot of my practice, and I think a lot of physicians' focus, is around medication issues"</i> C02, Physician</p> <p><i>"A lot of the physicians have ten minutes to consult and they don't have the time... (it is) just easier for them to refer... there is a lack of consistent advice (regarding) physical activity"</i> C02, Physiotherapist</p>

<b>Major theme 4. Promotion of physical activity for people with COPD is a shared responsibility</b>	
Activity promotion should occur in every medical interaction	<p><i>"It should probably start from... community settings... going from general practice through to... any allied health or physiotherapy settings... nurses that are specialized in the field, respiratory physicians through to... the more formal, usually physio-based, pulmonary rehabilitation programmes"</i> C01, Physicians</p> <p><i>"Someone has got to be ready to have the conversation... if you're not going to see them again, you can encourage them, put the idea in their head... get them to understand the importance of physical activity as a priority. Give them the information about how it may be beneficial for them, and at least that's an opening... (physical activity) is something that you can talk about when you see a physician, it's something that you can talk about if the nurse is visiting you at home, it's something you can talk about with all these other people as well"</i> C11, Physiotherapist</p>
Healthcare professional are uncertain about the differences between the concepts of physical activity and exercise	<p><i>"If patients need specific advice on exercise prescription... if they have severe COPD or they have a number of comorbidities, whether that's anxiety... or musculoskeletal comorbidities or something that's going to make exercise prescription a little bit more complex... ideally... they should be referred on to a physio or an exercise physiologist... they're different, quite different (exercise and physical activity prescription) ... I don't think exercise prescription is everyone's job... (but) physical activity is everyone's job"</i> C11, Physiotherapist</p> <p><i>"The medical team... the GPs... I would be happy for them to motivate people and encourage people to participate in exercise... we want medical staff to be on board"</i> C04, Physiotherapist</p> <p><i>"I mean certainly, we encourage all our patients with COPD to do some form of physical activity. The main form physical activity we recommend is pulmonary rehabilitation."</i> C06, Nurse</p>
The general practitioner role in prescribing physical activity is crucial	<i>"There is a proportion of (people with) COPD that never get to see the lung specialist. They are only being seen by the GP and that... is difficult because different GPs... may not be as comfortable... to get the patient to do some (physical activity)"</i> C08, Physician

	<p><i>"It is probably harder for GPs... than physicians, who probably have got more time in the consultation with patients and probably have more knowledge and motivation"</i> C05, Physician</p> <p><i>"Just simpler things like...prescribing time outside, is something that general practitioners have started doing for patients who are really depressed to try and sort of...get that sunshine and...do some physical activity."</i> C12, Physician</p>
Healthcare professionals need more education about physical activity prescription	<p><i>"Better knowledge among healthcare professionals is important... some people don't understand that reduced physical activity is an issue... that cycle of low fitness level and worsening breathlessness and so on is important in COPD... they don't often know the evidence"</i> C05, Physician</p> <p><i>"Having the role of physical activity in COPD... highlighted and accepted as being an integral part of their therapy"</i> C01, Physician</p>
<b>Major theme 5. Effective strategies to improve participation in physical activity are inconclusive</b>	
Few effective interventions to improve physical activity are available	<p><i>"If it is really severe, I struggle to prescribe anything"</i> C05, Physician</p> <p><i>"We haven't got a lot of options"</i> C10, Nurse</p> <p><i>"I suppose probably from my point throughout our service, I suppose, it would probably be better to have better access to getting physio to see a patient at home. So, having better resources or easy access for that."</i> C10, Nurse</p>
Pulmonary rehabilitation improves physical activity	<p><i>"In terms of options for patients who can barely walk...if they can't walk in their house, then I don't have lots of smart recommendations...any real day-to-day suggestions...any practical solutions... other than...refer them to pulmonary rehabilitation"</i> C05, Physician</p> <p><i>"(Physical activity) is something that I don't necessarily focus on that much because I send them all to pulmonary rehabilitation and let them take care of it"</i> C12, Physician</p>
Not all patients are referred to pulmonary rehabilitation	<p><i>"Pulmonary rehabilitation is only suitable for a minority of COPD patients... pulmonary rehabilitation is not a treatment in itself, it is a way of teaching people how they can do exercise, but the treatment is really the exercise that they are doing themselves at home..."</i> C05, Physician</p>

	<p><i>"(If) they say no (to referral for pulmonary rehabilitation), I say "That's fine. It's just what we recommend." C12, Physician</i></p> <p><i>"The ideal scenario would be to do a pulmonary rehabilitation programme and then move through maintenance and make a lifestyle change...we would love every patient to go to PR but we know that only about 2% of people get there...unfortunately that isn't happening." C07, Physician</i></p>
<b>Major theme 6. Physical activity recommendations are poorly recalled</b>	
Physical activity guidelines are poorly recalled	<p><i>"I don't know of any guidelines per se for just general physical activity. There may be some; I am just not aware of any" C01, Physician</i></p> <p><i>"I can't tell you from the top of my head, but overall what I understand that (physical activity) is something that is encouraged, that patients should not be sedentary regardless of their severities unless they are in the palliative kind of situation" C08, Physician</i></p>
Few drivers to translate activity guidelines into daily clinical practice	<p><i>"I have no doubt that they exist in the guidelines... (Which are) a great resource... (but) tend to be long and detailed and (not) easily... incorporated on the spot into clinical practice" C03, Physician</i></p> <p><i>"Guidelines are there and they're helpful, but I think we can improve on them... there is still a lot to learn" C13, Physician</i></p>