Table 1: Patient characteristics

<table>
<thead>
<tr>
<th></th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong> (male/female)</td>
<td>27/17</td>
</tr>
<tr>
<td><strong>Age</strong> (years, mean; range)</td>
<td>71; 55-85</td>
</tr>
<tr>
<td><strong>Severity of COPD (GOLD)</strong></td>
<td></td>
</tr>
<tr>
<td>GOLD stage II</td>
<td>14</td>
</tr>
<tr>
<td>GOLD stage III</td>
<td>21</td>
</tr>
<tr>
<td>GOLD stage IV</td>
<td>9</td>
</tr>
<tr>
<td><strong>Duration of symptoms</strong> (years; range)</td>
<td>1-&gt;25</td>
</tr>
<tr>
<td><strong>Home oxygen use</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>Previous attendance of pulmonary rehabilitation programme</strong></td>
<td>33</td>
</tr>
<tr>
<td><strong>Living set up</strong></td>
<td></td>
</tr>
<tr>
<td>Living with spouse/ family</td>
<td>29</td>
</tr>
<tr>
<td>Living alone</td>
<td>15</td>
</tr>
</tbody>
</table>
Interview schedule pre trial (individual interviews patients)

*Introductions/ written consent/ audio recorder on*

As you know we are currently developing a mobile health system to support people living with COPD to manage their own condition. We would like to find out a bit more about how you currently experience your condition, and who manage COPD at home at the moment and what you think of such a mobile health system.

1. First of all, could you tell me about how your condition affects you on a daily basis?
2. How do you currently manage your disease on a good day (self, carer, health care professional input)?
3. Tell me a bit more about what a good day is like/ bad day is like.
4. **Do you know what an exacerbation is?**
5. **How do you symptoms change when you have feel an exacerbation coming on? How does it start?**
6. How do you manage you condition when you have a bad day?
7. What are the main issues that you face in managing your condition?
8. **How well do you feel you understand your condition?**
9. **How confident do you feel in managing your COPD at home?**
10. What is your experience of the current care provided to you by the respiratory team (nurses/ GPs/ PR/ clinic)?
11. Is there anything you can think of that might facilitate the management of your condition?
12. How do you feel about using IT in your daily life (mobile phones, computer, internet, smart phones)?
13. How do you feel about using technology to help manage your condition?
14. Can you think of any difficulties/ challenges such a system might bring?
15. What do you expect from this application in terms of managing your condition?

Many thanks for taking part in this research.
Interview schedule post trial (individual interviews patients)

*Introductions/ written consent/ audio recorder on*

1. How did you get on over the last 12 months?
2. Any particular difficulties with using the intervention? (usability)
3. Tell me a bit more how using the intervention impacted on how you manage your COPD.
4. How do you think using the mHealth intervention may influence the way you manage your COPD (symptoms/ exacerbations/ medication)? (Self-management)
5. How has the tablet computer influenced the way you take your meds (reg inhalers/ stand-by antibiotics) and continue with exercise (if at all)? (Adherence behaviour)
6. Did the tablet computer change the way you manage an exacerbation?
7. Which aspects of the intervention did you find useful
   a. Videos
   b. Textual information
   c. Data review
   d. Sats
   e. Symptom diary
8. Which aspects of the intervention did you find less useful or harmful?
9. Tell me about when you would use the intervention. (routine/ incorporation into everyday life)
10. Did the intervention make you feel more confident in managing your COPD at home?
11. How has the intervention (if at all) impacted on the way you used to access care services?
12. Is there anything we could do to improve the system?
13. Would you continue using this system should it become available on the NHS?

Many thanks for taking part in this research.