Online self-management in COPD or asthma:
With or without the Health Care Provider as coach?

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Introduction:
Self-management plays a key role in integrated care strategies for chronic diseases. Self-management suggests that patients manage themselves and the role of the professional is limited.

MyCOPDonline and myasthmaonline are online self-management programs for patients with COPD / asthma. These programs run on the Curavista Health platform. The program consists of 3 elements:
1. Health status / progression;
2. Self-management / actions;
3. eConsult.

In chronic conditions like asthma and COPD a positive effect can only be achieved if patients participate long-term. Therefore, the program consists of an expert system that generates all diaries / forms automatically, gives individualized feedback and reminds patients to fill in the diary / forms using e-mails.
Four hospitals (Havenziekenhuis / Erasmus MC Rotterdam, Sint Franciscus Gasthuis Rotterdam, Ikuza Hospital Rotterdam, Maasstad Hospital Rotterdam and one GP-practice (Molenweg, Steenbergen) incorporated the programs into their daily routine for outpatients.

Aim of the study:
The aim of the study was to retrospectively analyze the adherence of the professional is limited. In contrast, these data suggest that participants make better use of eHealth programs when supported by healthcare professionals. However, not all patients start the program, with the Health Care Provider as a coach. New studies are undertaken to understand why patients do or do not participate.

Method:
We analyzed retrospectively the data of all asthma and COPD patients that joined the program and submitted at least one form. This was to ensure that patients were familiar with the program. Period of enrolment: June 2008 until June 2012.

Baseline characteristics:
We compared the adherence to the program in two groups: (1) the group without the Health Care Provider as a coach (n=134) and (2) the group with the Health Care Provider as a coach (n=134). The content was identical in both groups. Age and gender were similar in both groups and was representative of the overall population.

Baseline characteristics:

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Without Health Care Provider</th>
<th>With Health Care Provider</th>
<th>Total</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929-1939</td>
<td>3</td>
<td>9</td>
<td>12</td>
<td>0.56</td>
</tr>
<tr>
<td>1930-1939</td>
<td>15</td>
<td>28</td>
<td>43</td>
<td>0.03</td>
</tr>
<tr>
<td>1940-1949</td>
<td>20</td>
<td>158</td>
<td>178</td>
<td>0.02</td>
</tr>
<tr>
<td>1950-1959</td>
<td>16</td>
<td>202</td>
<td>218</td>
<td>0.01</td>
</tr>
<tr>
<td>1960-1969</td>
<td>16</td>
<td>196</td>
<td>212</td>
<td>0.001</td>
</tr>
<tr>
<td>1970-1979</td>
<td>7</td>
<td>130</td>
<td>137</td>
<td>0.02</td>
</tr>
<tr>
<td>1980-1989</td>
<td>13</td>
<td>72</td>
<td>85</td>
<td>0.03</td>
</tr>
<tr>
<td>1990-1999</td>
<td>5</td>
<td>28</td>
<td>33</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Results:
In the group without coaching participants lost their interest quickly. Significantly more patients with coaching by the Health Care Provider (69.4% vs 12.9%) adhered to the self-management program (53 times). In addition, more patients with COPD than asthma used the program consistently. Adherence was not influenced by age or sex.

Discussion:
It has been shown that self-management prevents exacerbations, improves care and is a cost-effective investment1,2. The word “self-management” suggests that patients manage themselves and the role of the professional is limited. However, these data suggest that participants make better use of eHealth programs when supported by healthcare professionals. However, not all patients start the program, with the Health Care Provider as a coach. New studies are undertaken to understand why patients do or do not participate.

Conclusion:
“Self-management” suggests that patients manage themselves and the role of the professional is limited. In contrast, these data suggest that participants make better use of eHealth programs when supported by Health Care Providers. This implies not only a behavioral change for patients to achieve self management, but also for the Health Care Provider in a transition from “medication manager” to coach.