DAWN

Diabetes Appointments via Webcam in Newham

The Challenge
- Population of 302,500
- Approximately 70% from BME groups, 40% aged 25 and under
- 6th most deprived borough in England
- Prevalence of diabetes: 9.4% (3-4 times national average), estimated rise to 13.5% by 2030. APHO data 2010

The problem
Current service provision is inadequate to meet rising demands or provide care responsive to:
- High clinic DNA rates (33-50% depending on age)
- Lack of self management and poor engagement
- Poor health outcomes.

Aim of our project
1. To offer online consultations in the diabetes clinic to all patients under the care of one consultant and one specialist diabetes nurse, where clinically appropriate and physical examination is not required, using readily available web-based technology.
2. Evaluate and refine the intervention using qualitative and quantitative measures including:
   - clinic activity data, A&E attendance and patient feedback.

Patient Recruitment
- 89 patients recruited during first 10 months
- Age had little impact on uptake of webcam appointments until patients were over 50 (see Table 1)
- Main reasons for declining webcam appointments were: no access to the internet at home (52%), ‘prefer face to face’ (18.5%), not confident with the internet / computer (9%).

Findings
1. Patient responses (19 in-depth phone interviews, 28 online questionnaires and 1 focus group).
   - Key themes included:
     1. Convenience; saving time & money (average of 1.8hrs saved each appointment): “It saves me time from taking time off work and childcare too. Being able to do it from home is brilliant”
     2. More likely to keep webcam appointments: “If I’m at home and I’m free I’d think twice about going to clinic so it’s easier on line”
     3. Much prefer webcam appointments
     4. Quality of care same as face to face: "The same because face to face you can talk same as on web cam. I don’t see any difference”
     5. Feel more in control of discussion when in own home: “You are in the comfort of your own home. Sometimes in hospital I’ve felt the doctor was in control and you don’t want to waste their time …you feel liberated in your own home, it’s on your terms”

6. Need a balance of face to face and webcam appointments: “Think it’s ok for a general overview for how I’m getting on – blood test results but if something is more detailed – foot care and eye drops, you go in for that.”

2. ‘Do not attend’ (DNA) rates
   - See Tables 1 and 2 below – DNA rates and providers

3. A&E attendance rates
   - Reduction in A&E attendance for webcam users; from 12 attends (7 patients) in the year prior to starting webcam appointments to 0 attends so far since (average of 6 months of follow up data per patient). Further time is required to verify these findings.

4. Clinical outcomes measures (glycaemic control)
   - Where patients had several webcam appointments (>2) results were encouraging with an average HBA1c reduction of 2.9%, suggesting greater compliance with medication

Conclusions
- Patients preferred webcam appointments & said they are more likely to attend; generalisable across ages and ethnicity
- You need to select your software provider carefully - ease of use, and reliability of technology matters
- Initial savings are modest, through increased productivity and reduction in health advocacy costs
- Suggestion so far of likely improvements in ‘do not attend rates’ and A & E attendance over time, with longer term health benefits and wider NHS savings.

Next steps
- Embed routine follow-up care using web-based consultation within the diabetes service
- Work with trust corporate partners to deliver efficiency, savings and longer term data.

Acknowledgements

Table 1: Ages of patients who agreed to participate in webcam appointments

<table>
<thead>
<tr>
<th>Age Categories</th>
<th>Patients asked</th>
<th>Patients agreed</th>
<th>% acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>12</td>
<td>11</td>
<td>92%</td>
</tr>
<tr>
<td>20 - 29</td>
<td>50</td>
<td>40</td>
<td>80%</td>
</tr>
<tr>
<td>30 - 39</td>
<td>9</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>40 - 49</td>
<td>9</td>
<td>8</td>
<td>89%</td>
</tr>
<tr>
<td>50 - 59</td>
<td>11</td>
<td>7</td>
<td>64%</td>
</tr>
<tr>
<td>60 - 69</td>
<td>14</td>
<td>4</td>
<td>29%</td>
</tr>
<tr>
<td>70 - 79</td>
<td>19</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>80 - 89</td>
<td>10</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>90 - 99</td>
<td>5</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>143</td>
<td>84</td>
<td>58.3%</td>
</tr>
</tbody>
</table>

Table 2: ‘Do not attend’ (DNA) rates so far using webcam appointments

<table>
<thead>
<tr>
<th>Software provider</th>
<th>Number of webcam appointments</th>
<th>Number of DNAs</th>
<th>DNA rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software provider 1</td>
<td>137</td>
<td>41</td>
<td>30%</td>
</tr>
<tr>
<td>Software provider 2 (skype)</td>
<td>37</td>
<td>6</td>
<td>16%</td>
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<tr>
<td>Overall</td>
<td>174 Appointments (44 patients)</td>
<td>47</td>
<td>27%</td>
</tr>
</tbody>
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