The NHS Diabetes Prevention Programme delivery and patient experience: An observational study

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A National Diabetes Prevention Programme

- “Healthier You” NHS Diabetes Prevention Programme (NHS DPP)
- Evidence-based lifestyle behaviour change intervention
- People identified as high risk for type 2 diabetes in England
- Minimum 13 face-to-face sessions over 9 months
- Delivered by four provider organisations
The DIPLOMA Evaluation

- Diabetes Prevention – Long term Multimethod Assessment (NIHR funded)
- Mixed methods research programme, 2017 to 2021

- Seven work streams, including:
  - Service delivery and fidelity (i.e. what is delivered, how is it delivered, and to what extent is it delivered in line with what was planned?)
Research Aims

1. To **describe the delivery of the NHS DPP** by the four providers in the field, including:
   - any **discrepancies** between what was planned and what was delivered and;
   - any **variation** in delivery between providers and sites

2. To **describe observed patient experience of the NHS DPP**, and compare this to variations in delivery of the NHS DPP
Methods

Sample:
- 8 sites delivering NHS DPP across England, n = 118 sessions, 2 sites per provider
- 455 participants consented (36 staff, 398 patients, 21 family/carers)

Materials:
- 118 audio-recorded NHS DPP sessions
- Field notes using Template for Intervention Description and Replication (TIDieR) framework
  - (Location, deliverer, group size, dose and scheduling, activities, materials, tailoring)
- Observational notes taken at each NHS DPP session
  - Views expressed by participants, non-verbal aspects of delivery, other notable observations

Analysis:
- TIDieR framework to describe NHS DPP delivery at eight sites, extracted from audio recordings and field notes
- Content analysis of researcher observational notes, data extracted on instances of patient experience and summarised into categories
# Results: Description of NHS DPP Delivery

<table>
<thead>
<tr>
<th>Provider A</th>
<th>Provider B</th>
<th>Provider C</th>
<th>Provider D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A₁</td>
<td>Site A₂</td>
<td>Site B₁</td>
<td>Site B₂</td>
</tr>
<tr>
<td>Interactive/visual</td>
<td>Interactive/visual</td>
<td>Educational</td>
<td>Educational</td>
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</tbody>
</table>

### What: Activities

- Visual aids; posters; activity cards; worksheets; workbooks
- Visual aids; posters; activity cards; worksheets; workbooks
- PowerPoint; visual aids; exercise bands; workbooks
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- Pedometers; posters; visual aids; activity cards; workbooks
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- Visual aids; worksheets; external leaflets; workbooks
- Visual aids; worksheets; external leaflets; exercise bands; pedometers; workbooks

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### Materials in line with plans?

- ✓
- ✓
- ✗ not enough hardbooks weeks 1-3; no PowerPoint in weeks 1-7
- ✓
- ✗ no pedometers until week 7; no weighing scales in sessions 6 and 12
- ✗ no workbooks in session 9; no weighing scales in session 10
- ✓
- ✓

### Who provided: Experience of facilitators delivering NHS-DPP (ranges)

- 0 – 29 months
- 2 – 12 months
- 4 – 12 months
- 4 – 24 months
- 2 – 12 months
- 0 – 19 months
- 1 – 36 months
- 3 – 13 months
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<tbody>
<tr>
<td>Site A&lt;sub&gt;1&lt;/sub&gt;</td>
<td>Site A&lt;sub&gt;2&lt;/sub&gt;</td>
<td>Site B&lt;sub&gt;1&lt;/sub&gt;</td>
<td>Site B&lt;sub&gt;2&lt;/sub&gt;</td>
</tr>
<tr>
<td>Group size (median)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>14</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Group size in line with plans?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>✗ Some groups &gt;20</td>
<td>✗ Some groups &gt;20</td>
<td>✗ Some groups &gt;20</td>
</tr>
<tr>
<td>Session scheduling in line with plans?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tailoring of intervention</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tailored to group demographic (e.g., discussions about Asian foods and lifestyles)</td>
<td>Tailored to group questions</td>
<td>Tailored to group questions; local services signposted</td>
<td>Tailored to group questions; exercise advice based on ability</td>
</tr>
</tbody>
</table>
Results: Positive Patient Experience

✅ High engagement and satisfaction with the programme (59 instances/118 sessions)
  • Engagement with activities and discussions
  • Enjoyment of mindfulness and visual activities
  • General satisfaction with the programme

✅ Good group relationships between facilitators and peers (51 instances/118 sessions)
  • Good rapport between facilitators and groups
  • Peer support within the groups

✅ Patient behaviour changes (17 instances/118 sessions)
  • Including trying new recipes, increasing daily steps and losing weight
Results: Negative Patient Experience

*Scheduling and size of group sessions (41 instances/118 sessions)*
- Incorrect session dates and times
- Oversubscribed sessions
- Future session dates not confirmed
- Cancelled sessions not communicated
- Waiting list to get onto programme
- Double booking of initial assessments
- Lack of notice for sessions
- *(And more...)*

*Factors influencing disengagement / dissatisfaction within the session (27 instances/118 sessions)*
- Disengagement with activities (e.g. complex information, difficult activities)
- Issues with session resources (e.g. not enough materials, issues with pedometers)

*Venue (15 instances/118 sessions)*
- Difficulty finding the room / venue
- Access issues
- Distance of venue from patients’ homes
Conclusions

Providers

Vary on the types of activities delivered (e.g. educational vs. interactive)

Sites

Vary on the structural issues that occurred (e.g. session scheduling, group size, venues, availability of materials)

Facilitators

Vary on their group management skills and experience delivering the DPP

Patient Experience:
- Relationships
- Behaviour change
- Engagement / disengagement
- Complaints
Implications

- There are significant organisational differences and modes of delivery which appear to generate both positive and negative responses from NHS DPP patients.
- Positive patient experience was observed more often in programmes containing interactive and visual activities, delivered in groups of 10-15 people.
- Modifying structural aspects of the NHS DPP (e.g. reliable session scheduling, reducing group sizes and accessible venues) and increasing interaction appear particularly promising for improving these outcomes.
Thank you for listening.

If you have any questions or comments, please add them as a comment below the video and we will read and respond.

More information about DIPLOMA available at:
Acknowledgements
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The views and opinions are those of the authors and do not necessarily reflect those of the National Institute for Health Research or the Department of Health and Social Care.

For more information about DIPLOMA:  