Diabetes Type 2 – Lifestyle Changes

**Type of protocol**  
Prevention and Early Intervention

**Purpose**  
The Lifestyle Changes protocol for patients with type 2 diabetes was originally developed by Heather Crockett, the practice nurse at Strathpeffer Medical Practice, with the aim of encouraging lifestyle change amongst patients who have been newly diagnosed. The protocol consists of:
- Tips and advice
- Links to websites and videos
- Monitoring physical activity levels, consumption of fruit & veg, etc.

**Protocol overview:**

The aims of the protocol are to help embed information about healthier eating and activity levels provided during initial consultations following a diagnosis of type 2 diabetes, and to improve the extent to which they are acted on.

The anticipated outcomes of using the protocol are that patients will:
- Make gradual changes towards healthier eating and increased activity levels
- Increase time spent being physically active on a typical day
- Increase the portions of vegetables and fruit eaten on a typical day
- Improve the patient’s understanding of their own health issues

**Corresponding national outputs and outcomes**

NHW = national health and wellbeing

HMHM = taken from the Scottish Government home and mobile health monitoring logic model

Achievement of these outcomes would contribute towards:
- Personal responsibility (*NHW outcome*) – by assisting patients to take greater responsibility for their own health
- Quality of life (*NHW outcome*) – by contributing to a reduction in diabetes complications in the longer term
- Cost effective (*NHW outcome*) – by reducing hospital admissions (long term)
- Better adherence (*HMHM output*) – by reinforcing health information and advice and encouraging adherence
- Increase in self-management / condition control (*HMHM outcome*) – by encouraging adhering to recommendations
- Reduced hospital admissions (*HMHM outcome*) - by contributing to a reduction diabetes complications in the long term

**Pathway**

Use of Florence is an addition, which has enhanced the existing patient pathway for newly diagnosed type 2 patients (and others who are not managing well).

**Development and deployment**

Developed: Jan’16 to Feb’16

First patient signed up: Mar’16

Patients to date: 43

Uptake increased steadily between Jul’16 and Jul’17 but has since noticeably slowed.

**Take Up**

![Graph showing Diabetes Type 2 (Lifestyle) Take Up]
# Florence Protocol Evaluation

## Diabetes Type 2 – Lifestyle Changes

| **Timescale and costs** | Duration of protocol = 12 weeks  
Average cost per patient per month = £0.73  
Average overall cost per patient = £2.04 |
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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Enrolment process</strong></td>
<td>GP practices who have signed up to use Florence offer the protocol to all newly diagnosed type 2 patients (&amp; others) at their initial, post-diagnosis appointment</td>
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<tr>
<td><strong>Deployment</strong></td>
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- Initially used only by Strathpeffer Medical Practice, the protocol is now available to all GP practices, with 15 currently signed up to use it. However, as the number of GP practices with access to the protocol has increased, recruitment has slowed down! The reasons for this are unclear.  
- Since it was originally designed, the protocol has been redeveloped to cater better for those patients who do not have a smartphone, and to enable better monitoring of patient progress. The new version was deployed in January 2018 |

## Patients’ views

| **Text message survey** | Responses received from 16 patients, out of 43 sent the text message survey (response rate = 38%)  
- 94% would recommend Florence to other people in their circumstances  
- 92% felt the text messages from Flo had helped them to make some lifestyle changes (n=12) |
| **Paper Questionnaire A** | Responses from 4 patients, out of 26 sent the questionnaire (response rate = 15%)  
- 75% agreed Florence was helpful and supportive and had enjoyed using Florence  
- 50% agreed Florence had helped them understand and manage their own health |
| **Paper Questionnaire B** | Responses from 5 patients, out of 15 sent the questionnaire (response rate = 33%)  
- 100% found Florence supportive, encouraging, informative and easy to understand, and felt that using Florence had been a positive experience;  
- 100% felt that Florence had helped them remember health information and advice, make lifestyle changes, and improve their health and wellbeing,  
- 80% had found Florence motivating, and felt that Florence had helped them become more aware of health issues, comply with health advice, control their symptoms and manage their own health condition;  
- 80% felt Florence had enhanced their experience of NHS healthcare |

## Free text responses

- Just a good reminder (P.1)
- Directed you to some interesting material (P.4)
- Flo has made me more aware of the condition I have and encouraged me by changing my diet I have lost a tremendous amount of weight (P.5)
- Highlighting aspects of diabetes and pointing me towards food and menus as I am no cook and have very little imagination where food is concerned (P.6)
- Just helped to better understand my condition (.7)
# Diabetes Type 2 – Lifestyle Changes

<table>
<thead>
<tr>
<th>A slight motivator</th>
<th>Have reduced the blood measure from 48 to 42 Reduced weight by 2 stone and by self discipline (P.8)</th>
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<tbody>
<tr>
<td>Dislike:</td>
<td>The whole concept. Getting reminders for not replying within 'her' timeline. Impersonal, irritating. Feels like a cop-out (instead of real human assistance) (P.4)</td>
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<tr>
<td>Suggested improvement:</td>
<td>To be able to answer with a comment as well as Flo’s set format for answers (P.2)</td>
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<tr>
<td>Suggested improvement:</td>
<td>Maybe the odd text once the 12 weeks was up just to remind on the things you need to do (P.5)</td>
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## Clinicians’ views

<table>
<thead>
<tr>
<th>Informal feedback or interview?</th>
<th>The clinician’s views:</th>
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<tbody>
<tr>
<td></td>
<td>• Florence is informative and motivating for patients</td>
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<td></td>
<td>• Introducing Florence provides the opportunity for new conversations with patients who need a bit of encouragement</td>
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<tr>
<td></td>
<td>• The point of diagnosis of diabetes type 2 is critical. Florence reinforces the information we share and discuss and gives the patient time to assimilate all the information in their own time.</td>
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<td>• Florence keeps the information directed to safe and reliable sources on the net</td>
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## Assessment

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<th>Challenges:</th>
<th>Challenges have included:</th>
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<td>• A relatively low take-up rate, partially due to the age group of the patients and/or lack of mobile phone signal</td>
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<td>• Difficulties in getting GP practice nurses to offer Florence consistently to all their diabetes patients</td>
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| Successes | Although the response rate to questionnaires has been quite low, those patients who have responded seem generally positive about Florence and the impact Florence has had on their lifestyle choices and understanding of their health condition |

| Savings: | Immediate savings from use of the protocol are not anticipated, however, if the protocol has succeeded in helping to embed healthier lifestyle choices, it will reduce the risk of diabetes complications in the longer term, and hence of hospital admissions and other costs to the health service |

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<th>Future:</th>
<th>Plans for the future include:</th>
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<td>• Work with GP practices across NHSH and with the Diabetes Specialist Nurses to encourage them to offer Florence to their patients at the point of diagnosis and for those patients who recognise their motivation has dropped.</td>
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<td>• Evaluate the new version of the protocol when it has been used by 20 patients</td>
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