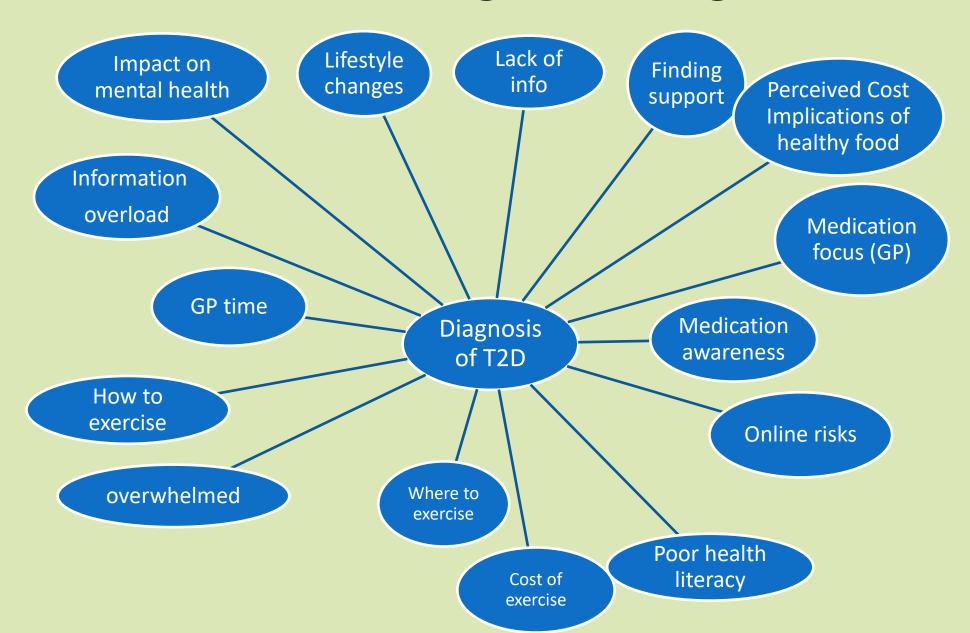


John Smith Cath Aitken, BSc (Hons), MSc, PhD, FRSPH

Patient Challenges at Diagnosis



The Patient Wish list

| Understanding my medication/s | Support understanding food labels | Menu planners | Adapting recipes | |
|--|-----------------------------------|---|--|--|
| Identifying sugar when it's not called sugar | Easy to read information | How to use an online App | Using Youtube as a support tool | |
| What is a 'safe App' | How to start exercising | Central point for information | Community offers | |
| How to involve my family | Local services that can help me | Access to online support | Information at point of diagnosis | |
| Recognising trusted information sources | Free exercise classes | Support for people with Learning Disabilities & their carer/s | Mental wellbeing support | |
| Take control | How to live well with T2D | Access info at time convenient for me | Digital skills for accessing online health support | |



NHS RightCare Pathway: Diabetes



| The National Opportunity | 5 million with non-diabetic hyperglycaemia Most receive no intervention | 940, 000 undiagnosed Type 2 diabetes | >50% of diagnosed receive no structured education within 12 months of diagnosis | 60% of Type 1 and 40% of Type 2 are not completing care processes | Few areas have high quality Type 1 services embedded | 30% of hospitals don't have multi- disciplinary foot teams | National variation in spend and safety issues on non-elective admissions | |
|-----------------------------|---|---|--|---|--|--|--|--|
| Service component | Risk Detection | <u>Diagnosis</u> and Initial <u>Assessment</u> | Structured Education Programmes | Annual Personalised Care Planning | Type 1 Specialist Service | Service Referral and key relationships | Identification/ Management of admissions by Inpatient diabetes team | |
| | Cross Cutting: 1. Shared responsibility and accountability 2. Participation in NATIONAL DIABETES AUDIT 3. Consistent support for patient activation, individual behaviour change, self-management, shared decision making 4. Integrated multi-disciplinary teams | | | | | | | |
| Interventions | NHS Diabetes Prevention Programme | Protocol for diagnostic uncertainty | Education programme (including personalis ed advice on nutrition and physical activity) | recommended care processes and treatment targets | Type 1 Intensive specialist service | Triage to specialist services RCA for major amputations | Inpatient diabetes team, shared records, advice line | |
| Target outcomes | Decreased incidence of Type 2 diabetes | Improved detection | Better diabetes management and reduced complications | Reduced variation in completion of care processes | Reduced risk of Microvascular complications | Year on year reduction on major amputations | Reduction in errors in hospitals, reducing LOS | |
| The evidence | Intensive behaviour change can on average, reduce incidence of Type 2 diabetes by an average of 26% | Diabetes prevalence model for local authorities and CCGs | Improved health outcomes and reduction in the onset of diabetic complications in both Type 1 and Type 2 diabetes | Control of BP, HbA1c and cholesterol reduces risk of macro and micro vascular complications | Type 1 services deliver year on year improvements in blood glucose control | MDFT and supporting pathway reduces risk of complications | Young Type 1 and older Type 2 diabetes patients have higher rates of non-elective admissions | |

Health Junction's Patient-driven Solution

Overview

We identified a need to bettereducate Wirral's T2D patients

Aim

Encourage them to manage their condition more effectively through the use of a digital intervention

Solution

Develop a bespoke software product, delivered through customised digital tablet hardware & undertake initial pilot with T2D patients diagnosed within previous 2 years

Our Challenge – to improve patient health literacy HOW?

- ➤ Enable patients to easily find, understand & use information & services to inform their health-related decisions & actions
 - Eating well
 - Exercising at home
 - Understanding condition
 - Digital Skills
 - Supporting mental wellbeing
 - Self-referral opportunities
 - Health at Home (using Health Apps)

- Links to local community organisations e.g.Wirral Infobank, Local Council...
- Links to national support (Diabetes UK etc..)
- Increase health professionals offer to patients

Development Steps



Step 1 – Patient Focus Groups

Patient experience of T2D pathway at point of diagnosis

STEP: 5 - Launch

Device with patients

Step: 4 – Integration

User interface

User Testing of content

Network Functioning

Connectivity testing

Step 2 - Content

Design

Styles

Themes

Layout

Step 3: Device design

User Interface

IT Networking

Wire Frame mapping

User Experience



User Experience

The system will offer a selection of content all designed to be visually engaging and easy to interact with, including:

- Documents
 - Guides
 - Fact sheets
 - Checklists and planners
- Videos, Audio

Content will be separated into topics, with the relevant materials sitting within. Based on user response to the initial questionnaire, these visible topics will be bespoke to their key needs.

Users will also be able to share self-taken readings of key health metrics such as blood pressure or weight.



Health Junction T2D Solution



Digital Skills



Eating well with Type-2 Diabetes



Health at Home



Links for more information



Local Services



Pre-diabetes - reduce your risk



Support for people with a learning disability



Understanding Type-2 Diabetes







Examples of the Device Content

- Guides & Tip Sheets
 - Eating well to manage T2D
 - Managing my Anxiety
- Videos
 - Having Diabetes and a Learning Disability
 - Meditation
 - Being active at Home
- Website Links
 - My Diabetes My Way
 - Diabetes UK
 - British Heart Foundation
 - Adult Lifelong Learning

Device Content also included Patient Reported Outcome Measures (PROs)

PROs built into system design:

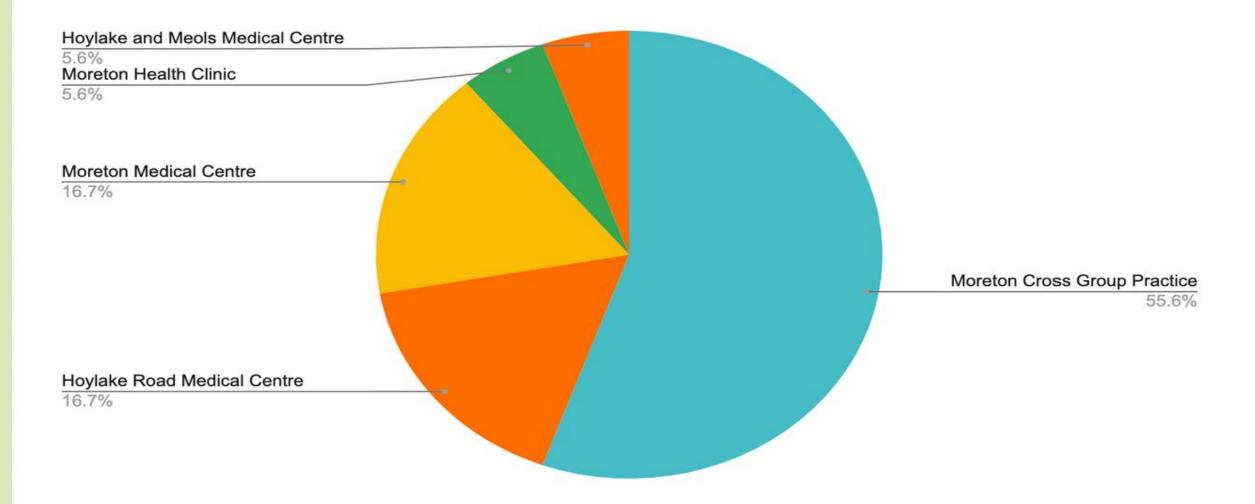
- sWEMWBS
- Health Literacy
- Self-efficacy

- Completing PROs unlocks device info (start)
- ➤ After 2 weeks device prompts users to complete PROs (End)

Piloted in a Wirral Primary Care Network

Patient Breakdown by Surgery





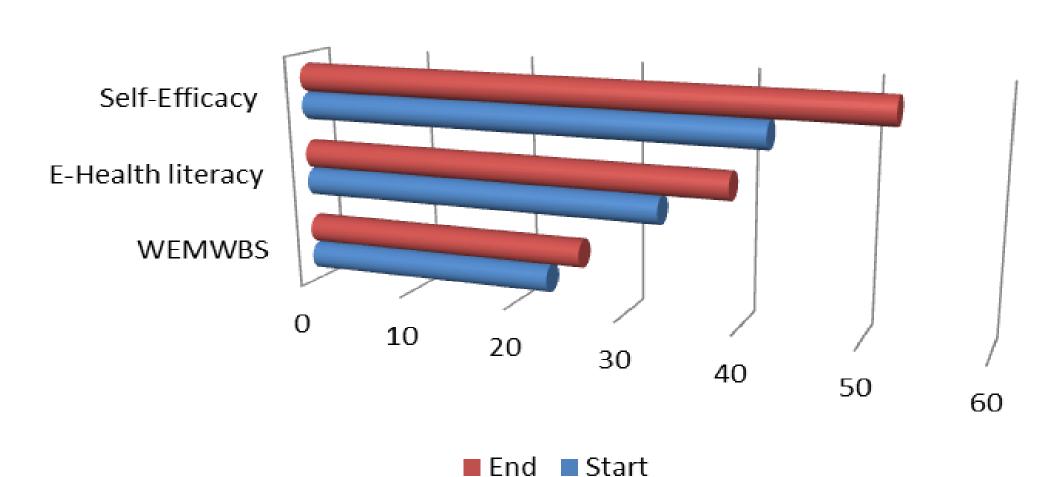
Sample data (20 patients)

Most Popular Content



- 1. Eating well with Type 2 Diabetes
- 2. Health at Home
- 3. Understanding Type 2 Diabetes
- 4. Links for more information
- 5. Eating Well to Manage Type 2 Diabetes
- 6. Local Services
- **7**. Your GP
- 8. Digital Skills
- 9. Pre-diabetes reduce your risk
- 10. Low Carbohydrate (Low Carb) Diets and Type 2 Diabetes

Patient Reported outcome Measures Pre & Post Health Junction Digital intervention



Patient Case Study - Muriel

- T2D female; age 77 years
- Overweight
- Poor understanding of condition
- GP says she's socially isolated
- Diabetes nurse referred to Health Wellbeing Coach (HWC)
- HWC socially prescribed Health Junction Digital intervention

Patient Muriel - Outcomes

Muriel > Most useful content

Muriel's Self-management improvements

- T2D information
- Local Community Support info
- Lifelong Learning info
- Local Authority website
- PCN Website Info & support from local PCN

- All PROs improved scores
- Accessing HWC support
- Self-referred to digital skills course at Lifelong Learning
- National diabetes websites
 & services accessed
- Joined Health Junction's Weekly Walking Group

Project Challenges

- Time taken to design & develop technical solution
- Implementation & Launch hampered by COVID-19
 - Difficulties caused by suppliers (shortage of staff etc...)
 - Delayed access to patients
- Impact of COVID-19
 - staff sickness/shielding etc
 - shifting NHS priorities
 - Leadership had to shift focus
 - Reduced staff time to support project
 - Delivery & collection of devices
- Introducing new interventions into the pathway
- Changing behaviours in staff
- Modernising offers
- Patients level of digital skills & health literacy
- Patients fearful of digital change
- Investment one-off funding
- sustainability

Challenges creating relevant and useful content

- Producing content in suitable formats
- Producing meaningful content at quantity
- Producing accurate, high-quality content takes time
- Content has to be accessible to wide demographic
- Aligning content with the wider patient needs
- It's not enough to create generic 'one-size-fits-all' content
- Creating quality content requires journalistic, design, creative & technical skills
- To be effective, content marketing needs to shift from a passive to a proactive process, where patients are guided forward and encouraged to consume more related content as they go, rather than being left to their own devices

What Worked Well

- Patient- driven content
- Patient engagement once COVID receded
- Partnership with PCN
- Positive Patient Feedback eg easy to use, accessible...
- Early evidence suggests behaviour change happens
- Process empowers people to make better choices
- Self-referral opportunities-non-clinical interventions
- Engagement with HWC

And more!!

What Tomorrow Looks Like....

T₂D

- Expand offer to include a T2D Online Portal Locally relevant – for patients who don't require a device:
 - Updated local information/local community assets
 - Information driven by local PCNs & Patient groups
 - Local diabetes lead pre-recoded discussions from clinicians for patients
 - Local podcast
 - Membership scheme
 - Link to approved web sites

Adult Carers

 utilising the lessons learnt we have been developing a digital intervention for Adult Carers

Questions?

