Embedding relationship and behaviour change evidence in digital delivery: The example of myPace

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Enabling patient-centred care through information and technology
Kings Fund 2016
M-health landscape

- Efficiencies
- Self-management
- Ubiquity of smart phones
Some m/e-health successes... but

- Few clear routes into NHS
- Reluctance of investors
- Uptake of m-health innovation piecemeal
- Accreditation focus reviewed
Health apps landscape

**Disease & Treatment Management**
- Healthcare Providers / Insurance: 11%
- Medication Reminders & Info: 6%
- Women’s Health & Pregnancy: 7%
- Disease Specific: 2%

**Wellness Management**
- Fitness: 36%
- Lifestyle & Stress: 17%
- Diet & Nutrition: 12%

**Other**

*Source: Mevvy, June 2015; IMS Health, AppScript, June 2015; IMS Institute for Healthcare Informatics, August 2015*
What did dietitians and patients want?

**Dietitians**
- Reliable calculations (clients’ daily energy needs, usage, BMI)
- Track intake and output
- Accessible presentation of information
- Personalised approach
- Motivational alerts
- Social contact to share experience
- Connect the client and dietitian
- Feedback capabilities

**Consumers**
- Tailored information, tips and advice
- Meal options and recipes
- Tracking capabilities
- Alerts, reminders and reports
- Help with motivation and control
- On-going personalised expert supervision and coaching
- Accountability
- Social networking features
“I think that there is a potential for thinking about ‘digital – human hybrids’ and how digital technology can work with personal support from people - whether it is buddies in terms of peer networks or professionals. That is a whole area of research that has great potential”

Susan Michie, NUIG m-health conference 2016
myPace...

is a theory and evidence-based, digital engagement tool aiming to enable sustainable behaviour change by enhancing the relationship between health and wellbeing providers and their patients.
Extends and enhances the value of the face to face relationship
Therapeutic relationships affect...

- Patient understanding
- Patient motivation
- Patient adherence to treatment
- Professional & patient satisfaction with treatment
- Clinical outcomes
Digitising the therapeutic alliance

clients’ app
receive messages and record progress

dietitians’ desktop
manage programme and track progress

Today I will...
Walk to work instead of taking the bus.
myPace is highly customisable and adapts easily to a range of practices. Modules can be combined in creative ways to match each patient’s and health professional’s needs.

**Initial Measurements**
myPace allows users to record their initial height, weight and calculates their starting BMI.

**Two Way Communication**
myPace allows two-way communication between health professionals and patients.

**Motivational Messages**
myPace allows health professionals to send motivational messages to their patients helping them to achieve their goals.

**Journal**
Reflect and record thoughts, experiences and observations.

**Mood Tracker**
myPace tracks self-reported moods and allows for analysis of mood patterns over time.

**Small Steps**
myPace encourages clients to incorporate small, feasible changes into their lifestyles.

**Progress**
Track behaviours, moods and weight and small steps – together or separately!

**Resource Library**
Collect and share accredited resources for clients to use anytime, anywhere.
What about behaviour change techniques?

- Whose behaviour: Client and health practitioner?
- Involvement of health practitioner means making a distinction between:
  - techniques that relate to the content of the interventions
  - techniques that focus on the relational style of the practitioner delivering the intervention
Implementation

- Organisation of the hierarchy of BCTs in relation to workflow in the consultation
- Terminology of some BCTs is unclear
- Content of some BCTs runs counter to tenets of patient centred care
- What about context? Which BCTs for who and when?
- Notion of techniques may threaten professional identity by undermining skills to deal with complexity
Feasibility studies

- There was a significant correlation between the percentage of weight lost and the number of face to face consultations ($r=0.41$, $p=0.05$) at 3 months.

- The total number of face to face consultations was significantly correlated with the total percentage of weight lost over the whole 6 month trial period ($r=0.56$, $p=0.03$).
App retention and weight loss

- 88% 3-month participant retention rate
- Significant correlation between the total number of days the app was accessed over 6 months and the percentage of weight lost between months 3-6 ($r=0.54$, $p=0.027$)
Lessons learned I

- Work with expert software developers
- Health professional AND patient – doubly challenging
- Challenges of decomposing effects – which modules are most effective for which people and when?
- Closely consider routine workflows
Looking ahead

- Sustaining software developed in research projects is very difficult.
- myPace can be inhabited by different theories and concepts across a range of behaviour change domains.
- Contact us if you are interested!

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Thanks for listening


Questions?