

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*



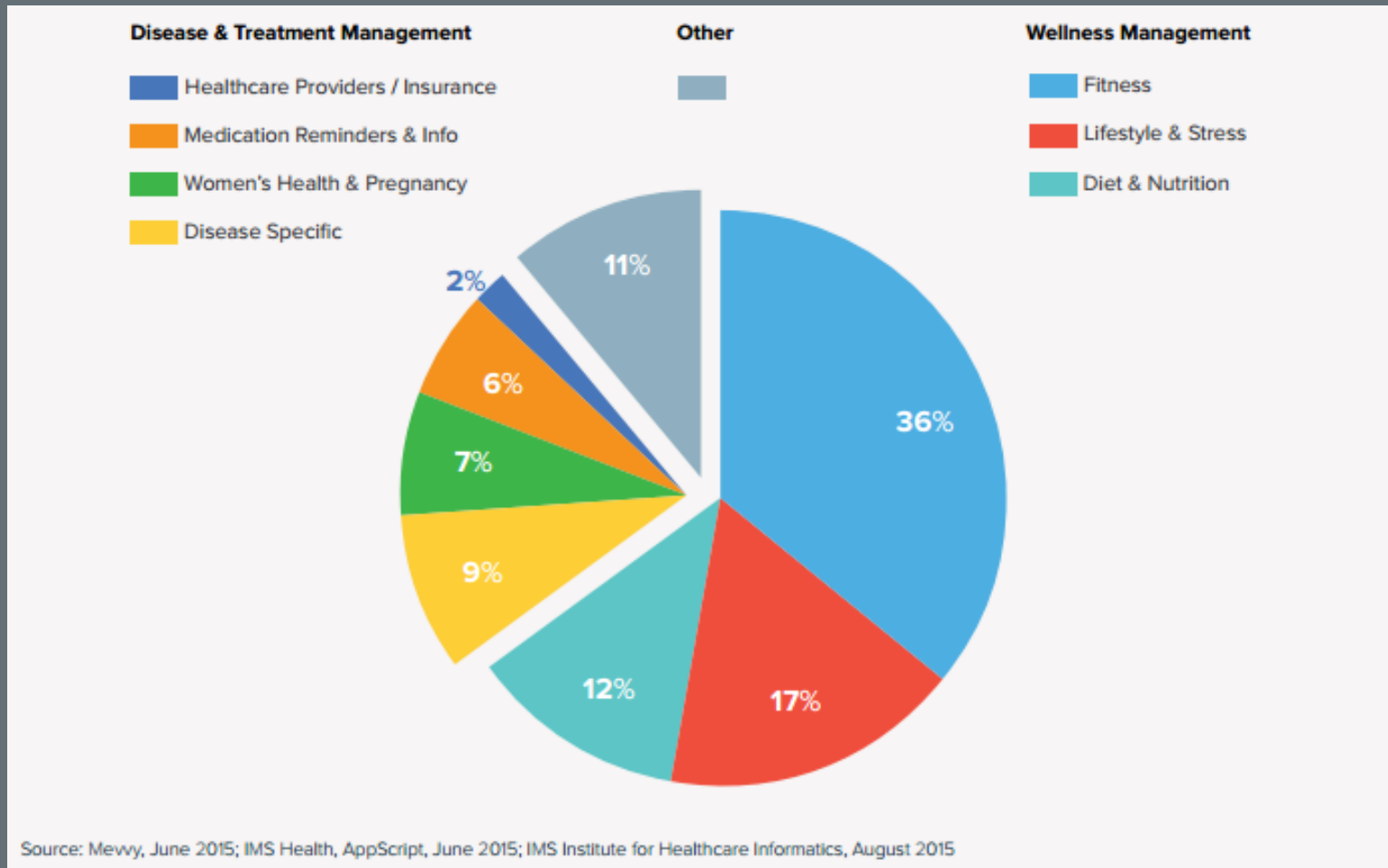
M-health landscape

- Efficiencies
 - Self-management
 - Ubiquity of smart phones
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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



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

INFORMATION &
TECHNICAL

Tailored information,
tips and advice
Meal options and
recipes
Tracking capabilities
Alerts, reminders and
reports

SOCIAL

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

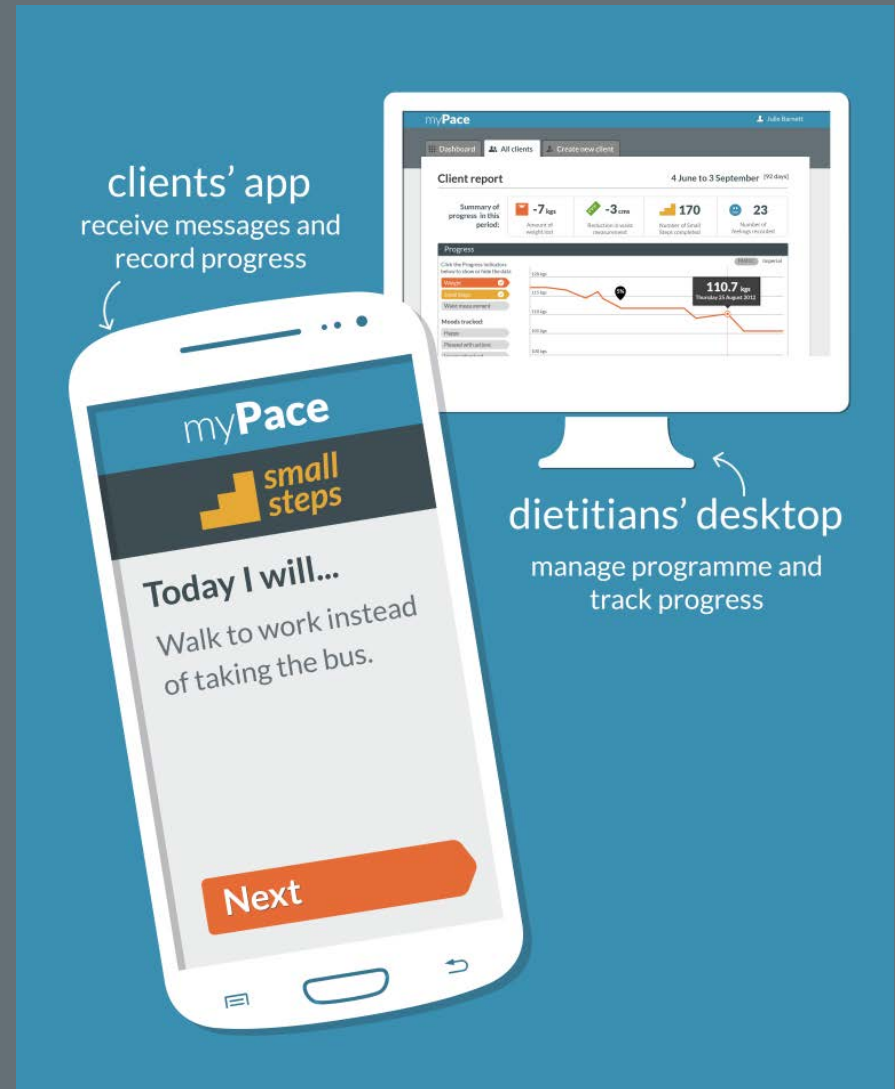


**Extends and enhances the value of
the face to face relationship**

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

Client report 4 June to 3 September (90 days)

Summary of progress in this period:

Number of messages	-7 lbs	Reduction in water consumption	-3 lbs	Number of Goals	170	Number of messages received	23
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Programs

Click the Program indicator where to view or hide the data

Program	110.7 lbs
Weight	110.7 lbs
Goals	110.7 lbs
Messages	110.7 lbs

Needs tracked

Weight	110.7 lbs
Goals	110.7 lbs
Messages	110.7 lbs

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.



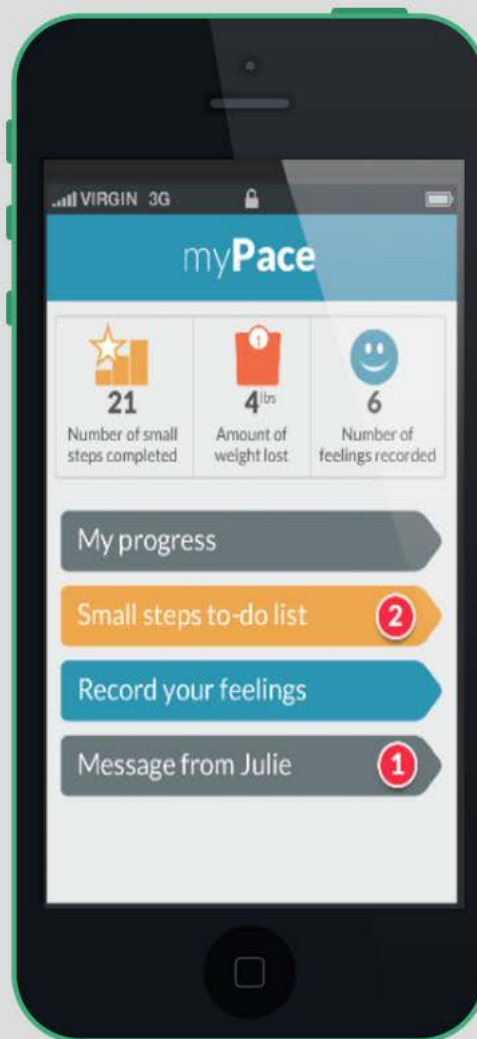
Motivational Messages

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 ($r=0.54$, $p=0.027$)

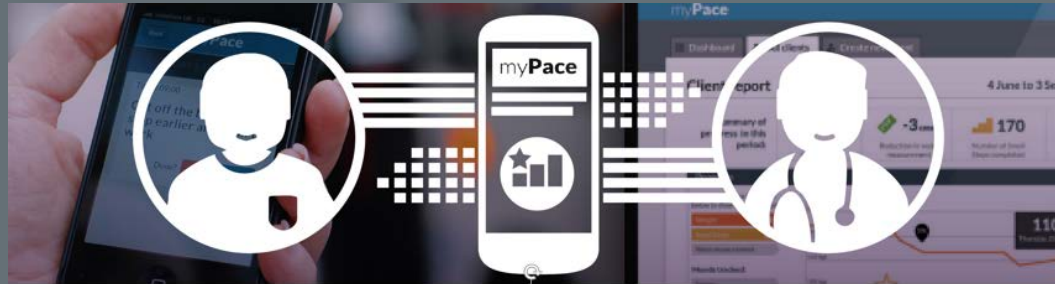
Lessons learned I

- 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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 - Dave Fletcher : dave@whiteoctober.co.uk

Thanks for listening



Questions?

Barnett, J., et al., *myPace: An Integrative Health Platform for Supporting Weight Loss and Maintenance Behaviors*. IEEE J Biomed Health Inform, 2015. 19(1): p. 109-16.

Harricharan, M., et al., *Integrating mobile technology with routine dietetic practice: the case of myPace for weight management*. Proceedings of the Nutrition Society, 2015, p. 1-5.