

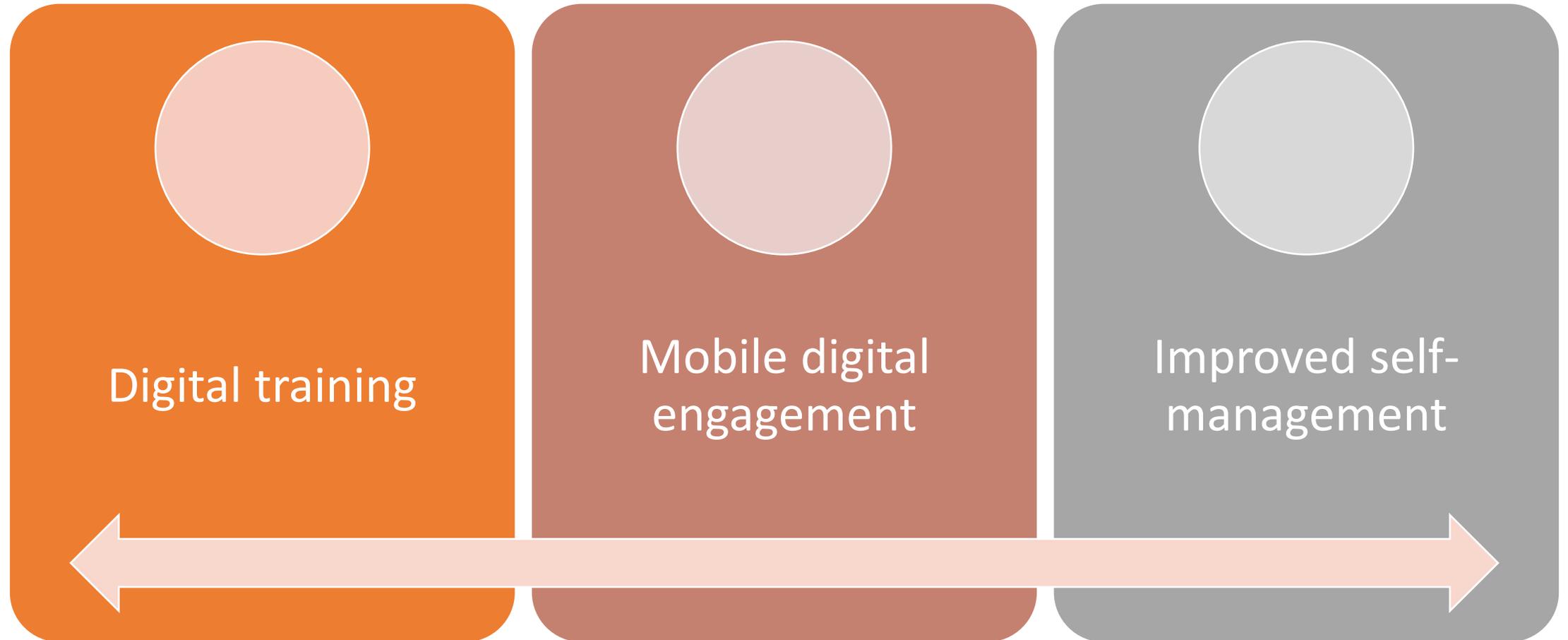
September 2015

A mHealth pilot program at a large integrated health care centre

Mobile digital communication and health management

@pareshdawda

mHealth Pilot Program



Co-design workshop

11 Practitioners and the research team (N=15)



22 July 2014

Online surveys

Open-ended and close-ended questions, longitudinal data (5 dropouts, final N=28)

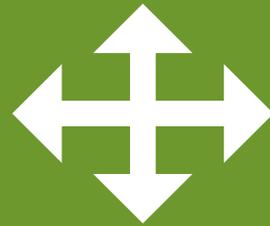
- Oct 20-Nov 2
- Jan 12-30
- Mar 16-29
- May 18-31



Oct 2014 to May 2015

Participant interviews

Complementary to the online surveys (N=12)



28 Feb to 28 Apr 2015

Practitioner interviews

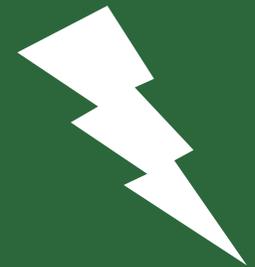
Perspective of GPs, nurses, and dietitians about their patients' participation in mHealth (N=2)



13 Mar 2015 - ongoing

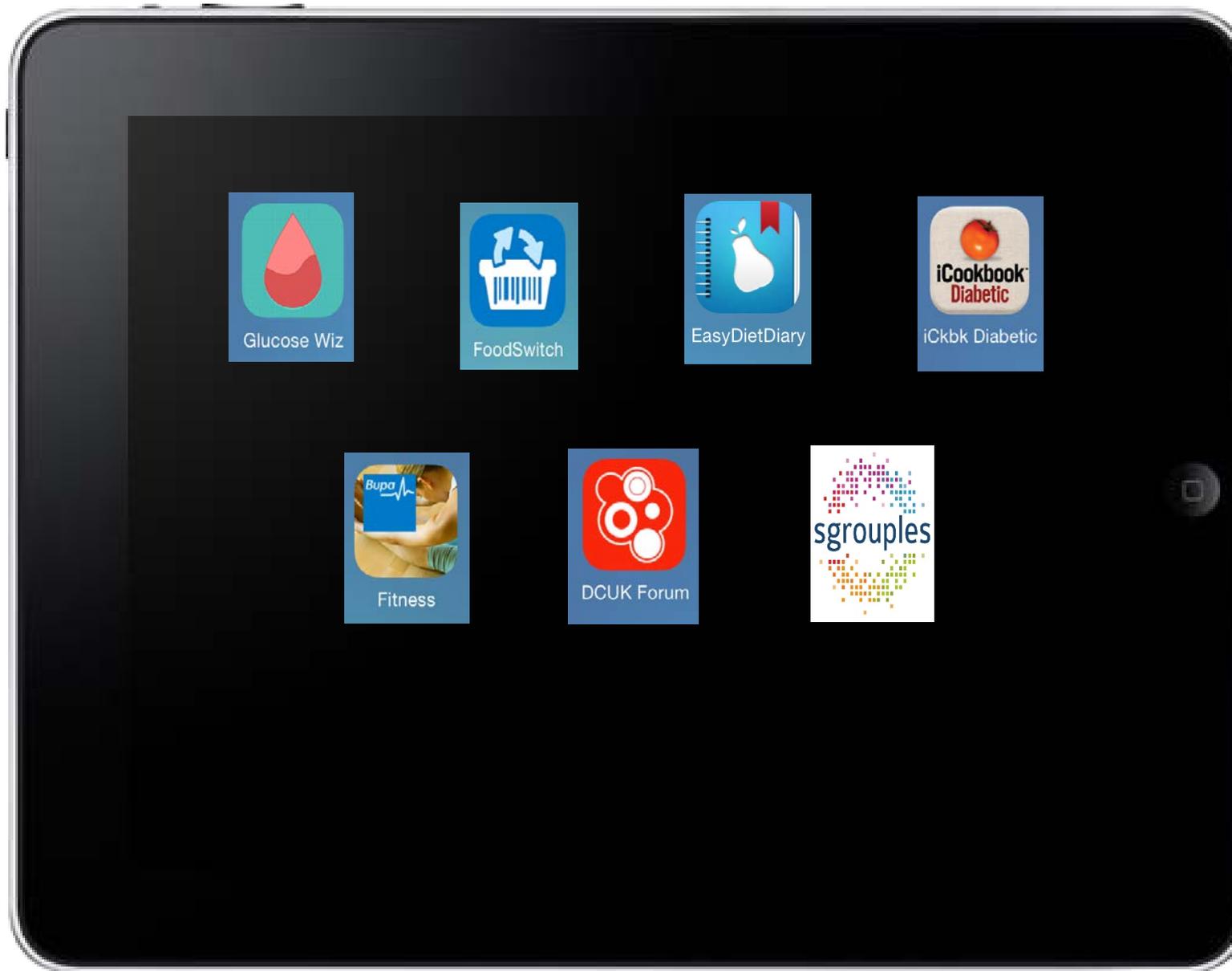
National GP survey

Perception of mHealth in urban and regional Australia (N=388, response rate 5.45%)



26 Mar to 5 May 2015

mHealth Pilot Program



Six invitations to patients

1. Use a 'diet' app(s) to explore, plan and evaluate their food intake
2. Use an 'exercise' app(s) to improve physical health
3. Keep a journal on their tablets to reflect on their daily challenges and success
4. Engage with other participants and/or participate in online support group(s)
5. Measure and record what they would in their diabetes book on their tablets via recommended app(s)
6. Access authoritative information via an online repository on their tablets



GENDER

53% **47%**
Male **Female**

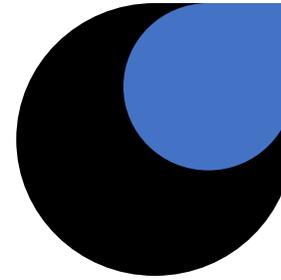
AGE GROUP

One 30s **Nine 60s**
Four 40s **Four 70s**
Ten 50s

EDUCATION

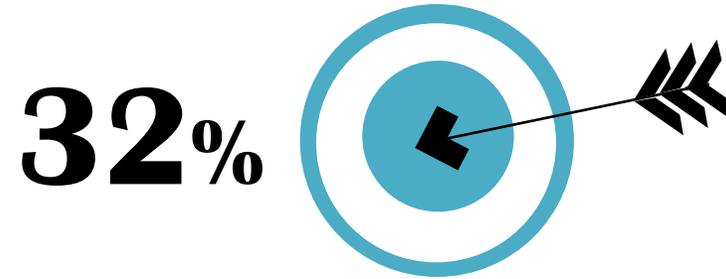
25% **Above**
Uni

DIAGNOSED



<1 year **5-10 years**
32.1% **21.4%**
1-4 years **11+ years**
21.4% **25%**

INCOME

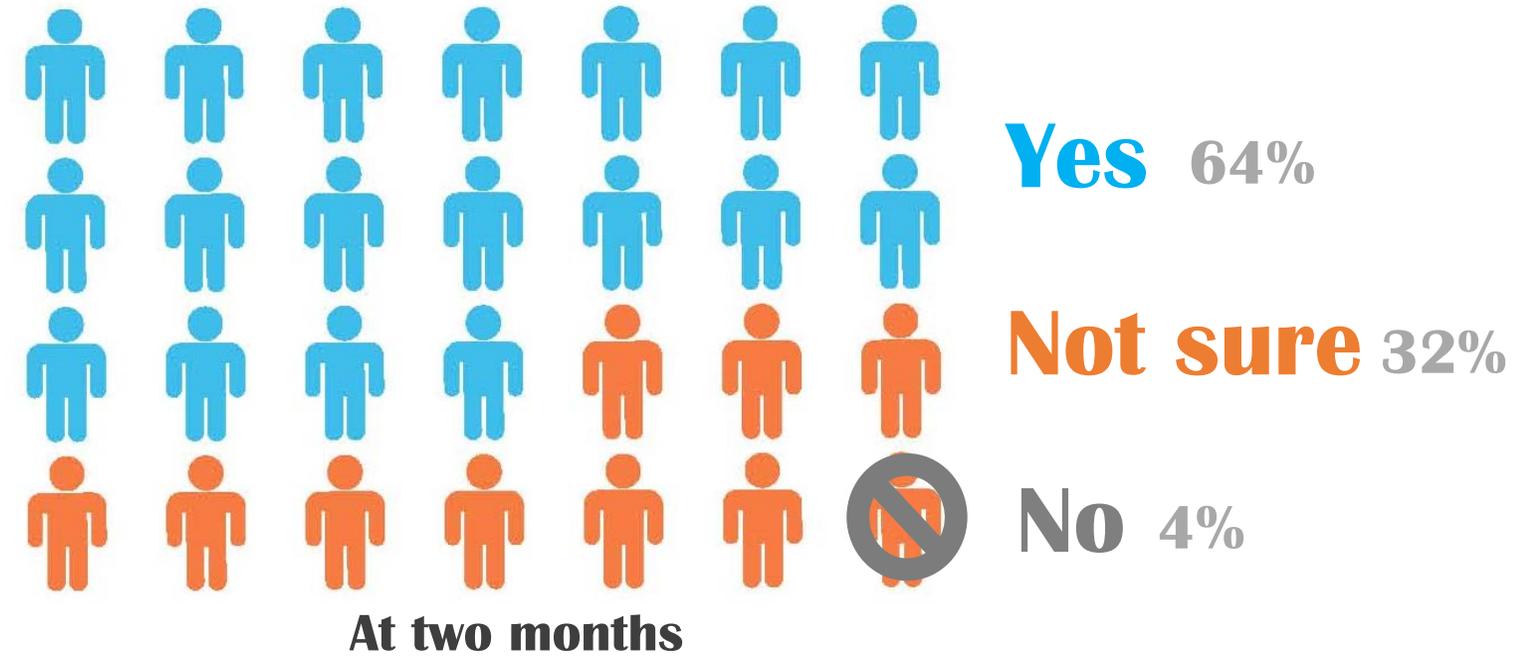


32%
Annual Income 100k +

Participants



iPad helped manage diabetes



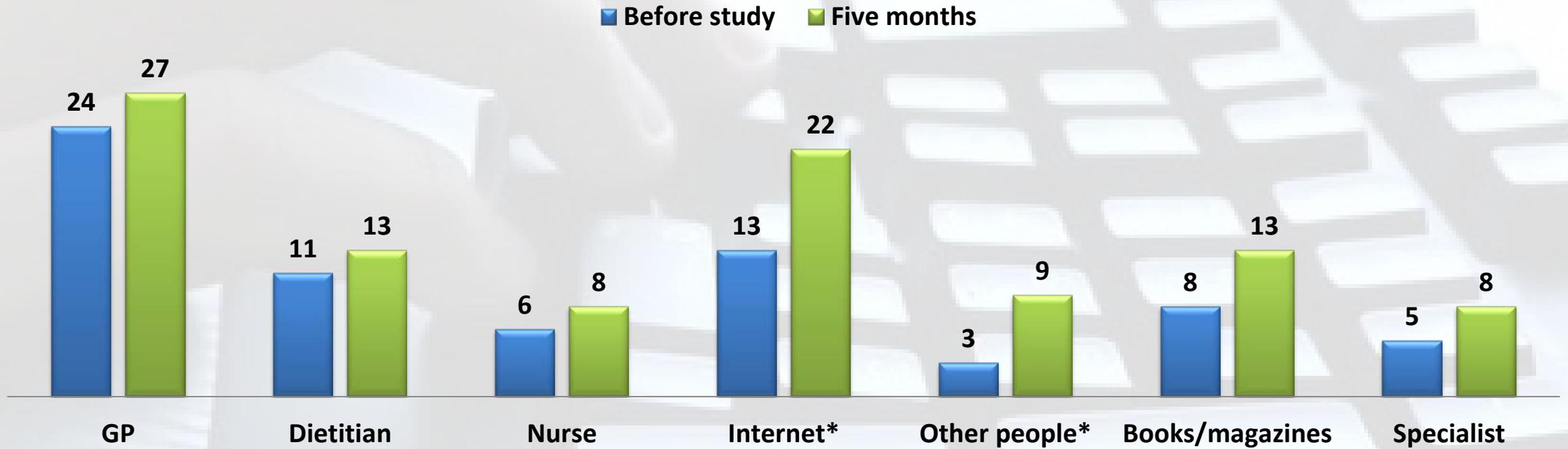
“easier access to information” (Jackson, Parker, and Emily),
“convenient tracking or recording” (Zayne, Ruth, Rachel, Keith, Raymond, Madelyn, and Tristan),
“managing food intake” (Ryder, Zayne, and Ken),
“weight control” (Ryan, Anna, and Todd)



10 out of 22 used their iPad during GP consultation

At five months

Information about managing diabetes



*p<0.01

Linking information

“It has helped me come to grips with my diabetes by helping me to understand more about the disease” (Emily)

- Broader and deeper **knowledge**
- Knowledge yielded a greater **understanding and acceptance** of the disease
- Enabled **behavioural change**

“I also used it to research different types of diabetes and found that Latent Autoimmune Diabetes of Adults (LADA) symptoms are very similar to my symptoms so I took my iPad to the doctor and showed her and she then tested me for this rare type of diabetes. Unfortunately it appears my research is correct because the blood tests have returned positive for this type of diabetes. If I didn't have this iPad I probably wouldn't have researched to the depths I did” (Rachel)

good management (Anna)



Value of mHealth

Similar among male and female GPs, younger more positive

■ Male ■ Female



■ under 40 ■ 40s ■ 50s ■ 60 or above



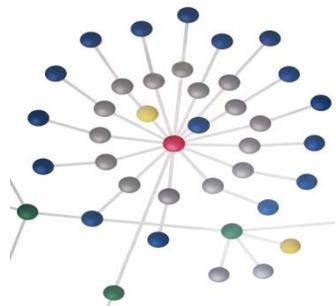
1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

*p<0.01, **p<0.05, ***p<0.1

Some key findings

- Strong need for an mHealth program that integrates digital literacy training
- mHealth must be embedded in the patients' everyday lives, as well as in the broader healthcare context
- Different types of users need different programs
- Practitioners are in general supportive and positive of the technological changes

Q&A



NEWS & MEDIA
RESEARCH CENTRE

The Team

Dr **Sora Park** (Project Leader) is an Associate Professor in Communication at the News & Media Research Centre, University of Canberra.

Dr **Sally Burford** is an Associate Professor in Knowledge and Information Studies at the News & Media Research Centre, University of Canberra.

Dr **Leif Hanlen** is the Technology and eHealth Business Team Director at the National Information Communication Technology Australia (NICTA).

Dr **Paul Dugdale** is an Associate Professor of Public Health at the Australian National University's (ANU) Medical school, Director of the ANU Centre for Health Stewardship and Director of Chronic Disease Management for ACT Health.

Dr **Chris Nolan** is the Director of the ACT Diabetes Services based at Canberra Hospital, and a Professor of Endocrinology at the ANU Medical School.

Dr **Paresh Dawda** is a General Practitioner, Visiting Fellow at the Australian Primary Health Care Research Institute (APHCRI) and ACT Medical Director at Ochre Health and Adjunct Associate Professor, University of Canberra.

John Burns is the Chief Executive Officer at Ochre Health and an Adjunct Professor of the University of Canberra.

Digital Trainer : **Adrian Constance**

Research Associate: **Morris Carpenter**