

DEMONSTRATING THE VALUE OF **CO-DESIGN**: A MOBILE APPLICATION FOR PERSONS WITH DEMENTIA AND THEIR CARERS

MANCHESTER
1824

The University of Manchester

Siobhán O'Connor^{1,2}, Matt-Mouley Bouamrane³, Catherine A O'Donnell², Frances S Mair²

1 School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK; 2 General Practice and Primary Care, University of Glasgow, Glasgow, UK; 3 School of Computer and Information Sciences, University of Strathclyde, Glasgow, UK.

THE CHALLENGE

- ◆ Dementia is becoming a public health priority with the numbers of people suffering the debilitating, chronic condition set to triple by 2050 (WHO, 2012).
- ◆ The UK Department of Health have set out a national strategy to create a range of services that meet the needs of people with dementia and their carers (DoH, 2009).
- ◆ The 'House of Memories' app was created in Liverpool by people with dementia and their carers to allow them to share memories together.

AIMS

- ◆ To explore the impact of the co-design process and the resultant mobile app on participants so as to demonstrate its value for people living with dementia and their families.



METHODS

An exploratory case study design was used.

↓
A focus group with ten people involved in co-producing the 'House of Memories' app as held in March 2015.

↓
Follow up interviews with the project manager, software engineer and two of the four dementia patient-carer dyads were conducted.

↓
Data was thematically analysed using the framework approach (Ritchie & Spencer, 2002)

RESULTS

Benefits of the co-design process

- Sense of pride in creating a personalised app that will help others
- Learned how to use tablet devices
- Made new personal connections and friends

"So you know that's the greatest sense of pride that we get that we've developed something that is going to help other people, it wasn't just a fun thing for us to do."

(Person with dementia, focus group, March 2015)

"For me the best of this was X [person with dementia] using this tablet. I never thought he would be able to do it all and he amazed me and now he's good with it"

(Carer, focus group, March 2015)



RESULTS

Benefits of the mobile app

- Facilitated communication between persons with dementia, their carers and wider family
- Helped stimulated memory
- Form of entertainment which provided a level of normalcy to people living with dementia

"I'm confident that in the future you know when I'm inevitably going to lose more of my memory I'm sure that I'll use it even more with the device with my family and that that will help me"

(Person with dementia, interview, September 2015)

"now they have put music in because music to people with dementia is the greatest thing ever, because it just brings us alive, it makes us comes alive, we feel great"

(Person with dementia, focus group, March 2015)

LESSONS LEARNED

- ▶ Many digital health applications are generic and co-design offers one way to create tailored technological solutions to meet the needs of people living with long-term debilitating conditions such as dementia.
- ▶ It is hoped the mobile app will be used as a form of reminiscence therapy and help improve mood, cognition and functional ability as well as reduce caregiver strain over time.
- ▶ More research into designing digital products and services with patients and carers should be done to uncover the complexities involved and help create robust co-production methodologies that are theoretically grounded

ACKNOWLEDGEMENTS

We would like to acknowledge the support of the National Museum of Liverpool, Damibu Ltd and Mossley Hill Hospital towards this research study and funding received from Innovate UK.

Innovate UK
Technology Strategy Board

REFERENCES

- World Health Organisation. Dementia: a public health priority. Geneva, Switzerland. http://www.who.int/mental_health/publications/dementia_report_2012/en/
- Department of Health. Living well with dementia: a national dementia strategy. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/168220/dh_094051.pdf
- Ritchie R and Spencer L. Qualitative data analysis for applied policy research. In: M. Huberman M and Miles M. *The qualitative researcher's companion*. 2002. Thousand Oaks, California: Sage Publications

CONTACT

Siobhán O'Connor, Lecturer, School of Nursing, Midwifery & Social Work, University of Manchester, UK
siobhan.oconnor@manchester.ac.uk
@shivoconnor

MANCHESTER
1824
The University of Manchester