

## Cognition, Dementia, and Intervention

A.J. ASTELL, E. DOVE, C. MORLAND, S. DONOVAN. *DataDay: Digital daily support for people living with dementia*. *Gerontechnology* 2018;17(Suppl):68s; <https://doi.org/10.4017/gt.2018.17.s.068.00> **Purpose** Co-creation with intended users of technology is crucial for successful adoption and diffusion but can be challenging when the users have cognitive impairment. Dementia is a progressive neurological disorder for which there are currently no disease-modifying therapies<sup>1</sup>. The DataDay project is co-creating a user-friendly application (app), to delay decline and dependency through proactive support of daily activity and self-management, to enhance the quality of life of people with dementia and reduce or delay demands on services (*Figure 1*). **Method** People with dementia are participating in co-creation workshops developing a mobile prototype. This includes assessing usability of different mobile devices using interactive methods developed to support older adults as experts in their technology decision-making<sup>2</sup>. They are also reviewing and providing feedback on the app prototype. This feedback is being used to iteratively refine the DataDay app. Video-recording during the workshops is capturing detailed information of the modes of interaction with both the app and the mobile device, which are critical features of designing with people who have dementia<sup>3</sup>. The System Usability Scale (SUS)<sup>4</sup> is being used to rate the app's ongoing usability combined with a post-interaction interview to capture detailed feedback related to the app. **Results & Discussion** Video recordings of participants interacting with the DataDay app are being analysed for usability and functional features. Transcripts of post-session interviews are being analyzed to identify emerging themes in relation to acceptability and adoption. SUS scores are being compared throughout the app development to inform design decisions and the interview data will help develop an implementation strategy for DataDay. Interactive approaches can enable people with dementia to co-create technology intended for them to use and participate as equals in the technology development, evaluation and adoption process.

### References

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*Figure 1. Co-creating DataDay*