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**Working with older adults to develop NANA: Novel assessment of nutrition and ageing.** *Gerontechnology* 2012;11(2):396; doi:10.4017/gt.2012.11.02.423.00 **Purpose** In older adults malnutrition is closely linked to physical frailty and may arise due to a range of factors including cognitive difficulties such as dementia or other neurological conditions; mental health factors such as depression or social isolation, and impaired physical function, such as problems with chewing and swallowing or reduced mobility<sup>2</sup>. These multiple factors are compounded by the difficulty in collecting accurate information over time about the nutritional and hydration status of older adults and lack of capacity to monitor interventions to support good nutrition. The purpose of this study was to work closely with older adults, nutritionists, and health and social care professionals to develop NANA (novel assessment of nutrition and ageing) – a novel technology for collecting information on dietary intake, cognitive function, mood and physical activity from older adults in their own homes. **Method** Over a 36-month period more than 360 older adults aged between 65 and 92 years of age participated in a programme of activities designed to contribute to the development of NANA. They variously took part in three focus groups about their attitudes to technology and assessment both in and out of the home; three nutrition experiments examining food categories and portion size estimation; three cognition and mood experiments to develop novel sensitive assessments that could be used on a daily basis; and three validation studies to compare the nutrition and other data collected by NANA with those collected using currently available pen and paper gold standard measures. These were held in a variety of settings including people's own homes, university research laboratories and clinical research centres. At each stage of the process data were collected on the accessibility of the system that was being developed and its acceptability to older adults. In order to validate the data collected by NANA, the participants also completed standardised measures of diet (food diary), cognition (cognitive battery), mood<sup>3</sup> and physical activity<sup>4</sup>. **Results & Discussion** Over the past three years we have worked closely with a wide range of older adults to develop a novel technology intended for use by them and their peers in their own homes. From the initial focus groups through to the experiments carried out in developing the individual aspects of the system, up to the final validation study conducted over 15 weeks in people's own homes, we have had extensive interaction and collaboration with older adults. Their input has been invaluable in achieving our aim of developing a new means of collecting data from older adults using touchscreen technology to reduce participant burden. Feedback from the participants suggests that NANA is both easy to use and highly acceptable to older adults as a novel technology to have in their own homes. The aim of this presentation is to share our experiences of working collaboratively with older adults to develop novel technology to support independence and maintenance of health and well-being and to demonstrate the NANA-system. This presentation is offered as a companion to a separate submission on the technical development and evaluation of NANA.

### References

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**Keywords:** nutrition, touch screen, technology acceptance

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**Full paper:** No