

005 PP **THE OCCUPATIONAL THERAPIST, THE DOCTOR, THE RESEARCHER, THE ROBOTICIST, AND THE ARTIST^a**

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Introduction: This presentation illustrated how the occupational therapist, the doctor, the researcher, the roboticist and the artist collaborated to capture meaningful information from people living with impaired mobility, about materials ‘yet-to-be-designed’ to develop ‘yet-to-be-designed’ soft robotic clothing to help people to walk.

Background: In 2014/15, 11.9 m disabled people lived in the UK of whom 57% had mobility impairment¹. Should age-related disability rates remain constant, it is estimated that between 2002 and 2022, those regarded as older disabled people is likely to increase by approximately 40%². This Engineering and Physical Sciences Research Council (EPSRC) funded collaborative study was to determine needs and perceptions of target users for soft robotic trousers and socks for improving mobility in everyday living.

Methods: Two focus groups were held with participants with diverse mobility impairments due to stroke or to decreased mobility due to age related pathologies. Discussions were audio taped and illustrated by the artist.

Discussion: The focus group topic guide was developed by team liaison and included identifying the dis/advantages of existing solutions, the acceptability of wearable soft robotics and what was needed from the materials. The doctor provided insight informed by his clinical work and the Occupational Therapist helped frame questions from knowledge of potential difficulties that people might experience. The researcher ran the group, with engineers explaining the possibilities of the technologies they would be developing. The artist provided a silent ‘running commentary’ and a summary to check that views had been captured. This collaborative working was new to all and was very positively received.

^aWith a nod to Peter Greenaway’s *The Cook, the Thief, His Wife & Her Lover*

References

- 1 Department for Work and Pensions. Family Resources Survey 2012/1. 2014. <https://www.gov.uk/government/collections/family-resources-survey-2>
- 2 Institute for Public Policy Research (IPPR). Disability 2020: Opportunities for the full and equal citizenship of disabled people in Britain in 2020. 2007. <http://www.ippr.org/publications/disability-2020opportunities-for-the-full-and-equal-citizenship-of-disabled-people-in-britain-in-2020>