Co-Motion: Data Management Plan

Design for Wellbeing: Ageing and Mobility in the Built Environment

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Project overview The Co-Motion Project is led by Dr Mark Bevan at the Centre for Housing Policy at the University of York. The project is collaboration with staff from other departments at the university and three other universities. The project is working with about 100 older people and about 45 local and national stakeholders. The data collected through work package 5 provides new knowledge on the impact of key transitions on mobility and wellbeing and how they co-relate, adapt over time, and vary between individuals. Other key elements of fieldwork with participatory workshops and co-design (Work packages 6-9) aim to have direct impact on participants, and to produce useful and directly implementable tools, which can assist stakeholders and advance older people's mobility and well-being.

Introduction The Co-Motion Data Management Plan draws upon guidance from the Centre for Housing Policy's Data Management Policy. The Plan has also drawn on the advice from the Digital Curation Centre (DCC), EPSRC's expectations on research data management and the University of York's Research Data Management Policy
https://www.york.ac.uk/about/departments/support-and-admin/information-services/information-policy/index/research-data-management-policy/

Who will benefit from the research and how National and local research partners will be the most immediate beneficiaries of the research. Other routes to impact will include the development of practical tools and extensive dissemination activity (Work packages 4, 10 and 11).

Assessing existing data The research team will interrogate all relevant publicly available datasets, and with the support of the Centre for Reviews & Dissemination (University of York) will examine existing publications in order to capture any insights that may be gained. Much existing data on mobility and wellbeing does not have a longitudinal element; the key English Longitudinal Survey of Ageing (ELSA) has little data on mobility. One conceptual development from this work will be a series of case studies or typologies of 'mobility journeys over time'. The research will also provide insights into the role of context and interventions in shaping these 'journeys'. It will provide additional insights into variations between older individuals, including those experiencing the same transitions, building upon our understanding developed by AUNT-SUE (Evans, 2009). Improved evidence on the correlative relationships between mobility and wellbeing, will fill gaps in knowledge, and may open up new concepts for both the study of mobility and the study of wellbeing. This evidence will be of particular value to those working on gerontology, medicine, care and psychology and social policy. As another example, research to date has highlighted potential conflicts in the mobility interests of different groups, including groups of older people, but has not explored these in detail or considered the extent to which there may be opportunities for consensus.

Information on new data The types of data collected are listed in the Meta data tables on pages 8 to 11. As large amounts of qualitative data will be generated, the project will produce a data coding process and adapt as necessary on a collaborative basis so as to maximise analytical consistency between team members and across data relating to the different participant groups. A QSR Nvivo software package will be used to assist this process.

Quality Assurance The project PI is Dr Mark Bevan and the Co-Motion project team draws members from the Departments of Computer Science and Health Sciences, the Stockholm Environment Institute, and the Centre for Housing Policy, all at the University of York, the Institute for Transport Studies, University of Leeds; the School of Architecture, Planning and Landscape, Newcastle University; and the Department of Psychology, Northumbria University. The project CIs are Prof Petrie, Drs Cinderby, McInnes and Edwards, Ms Gilroy and Hodgson and Mr Matthews. Other staff include Karen Croucher, Katia Attuyer, David Swallow, Liz Andrews, Howard Cambridge and computer science technicians. This project is multi-institutional and multi-disciplinary; it also combines social science approaches to ageing with technical aspects and will involve developing new software and mobile device apps.

All have extensive experience of conducting research with vulnerable groups and managing sensitive data. The collaborating universities each have policies and procedures governing quality of research funded from external sources. For this project all collaborating universities are working towards York University's Centre for Housing Policy Data Management Plan, its Management of Personal and Sensitive Data Policy and its Safety on Fieldwork Policy and the University of York's Research Data Management Policy.

Assurance prior to data collection Project team members have extensive experience in interview techniques, including interviewing older age groups as covered by this project. The interview questions will be carefully devised and refined and shaped by project supporters and advisors. These measures will help to ensure the quality and efficacy of the data collected through the interviews. With respect to the longitudinal collection of data from older people (2 face to face interviews during the project and several telephone interview catch ups), measures will be put in place to ensure the continuing participation of these respondents (e.g. as part of consent discussions, via the use of gift vouchers as incentives and the feedback of project progress through interim reports and invitations to take part in optional workshops).

Quality Assurance to be addressed at the time of data collection In line with the Centre for Housing Policy's Management of Personal and Sensitive Data Policy, all recording instruments will be encrypted and interviews downloaded onto the university's secure file store within 5 working days of the recording. Interviews will then be deleted from the hand-held recorder. All participants will be referred to by their Unique ID rather than their full name.

Quality Assurance during data entry and data checking All face to face interviews will be transcribed and notes written by the researchers prior to transcribing. Given the volume of transcribing and its centrality to the research, the transcription will be undertaken by a professional transcription company, closely overseen by the team. Best practice for transcribing interviews will be respected including adopting a standardised interview transcript format with researcher and anonymised participant referencing, (Managing and Sharing Data: Best Practice for Researchers, 2011) and appropriate file naming conventions.

Backup and security All data handling will be compliant with the provisions of the Data Protection Act 1998 and associated statutory provisions, with all digital and paper based data securely stored. We intend to put several security procedures in place when the data is "at rest" to ensure its safety and integrity is maintained, including:

Data will be stored on secure university networks only accessible to team members and will be password protected. Data is only transferred by researchers connecting to a secure repository;

All individual computers will require a username and password, which need to be re-entered after five minutes of inactivity;

We will use encrypted equipment – including voice recorders and laptops to ensure that data collected in the field is secured in the most secure way possible.

All data will be secured in secure university offices or if away on fieldwork the researcher will adopt the University of York 's Centre for Housing Policy two-lock system (encrypted voice recorder locked in the researcher's home). All hard data (including

paper based, most notably consent forms, screening questionnaires) will be stored in a locked filing cabinet at the university offices and interview transcripts and analysis files will not contain personal details of research participants.

All digital data will be backed up and stored in secure central file storage at the university and partner universities, which is backed up centrally.

Ethical Issues The research project has gained approval for the University of York's Research Ethics Committee and the project complies with the Research Councils UK Code of Conduct. Two principles underpin the fieldwork: informed consent and anonymity. The negotiation of consent will be ongoing through the study - participants will be asked to give their consent at the beginning of the study, at the beginning of the photo study (if they volunteer to take part in this), and at each telephone phase and at the beginning of work packages 6 to 9. All participants will receive information sheets about the project and they will be offered the opportunity to ask further questions and ultimately decline the interview and / or withdraw from the study at any stage.

As explained, all participants will be asked to sign consent sheets (including data archiving) and will be assured of anonymity in subsequent transcripts and outputs. With the longitudinal element of the research strategies to maintain anonymity will include secure storage, restricted access to data and removal of personal details. Assurances will also be given that any personally identifiable data will be stored in a secure, password protected, environment in accordance with data protection regulations. Repeat interviews and contact in workshops require renewed informed consent. The process for gaining renewed consent will be outlined by Work Package team leaders in their individual work package ethics approval application. It is possible that some participants' vulnerability and ability to give informed consent or to participate may change over the course of the work. The research team will follow specific and established procedures to comply with the Mental Capacity Act. Participants will be assured that all information will be treated anonymously and used for the purpose of research only.

The research team will be mindful of any potential discomfort to participants that this project might generate and take reasonable steps to minimise this. Where vulnerable individuals ask for specific help/advice we will direct them to appropriate support services. The research team will be sensitive to the cultural, religious and socio-economic backgrounds of research participants, with translators provided if necessary. It is also our policy to ensure that as many participants as appropriate are given the opportunity to enable participants, where possible, to comment on draft research outputs.

Expected difficulties in data sharing We anticipate particular difficulties with sharing the qualitative material due to it's personal and sensitive nature in part borne out through the longitudinal element of the study, but we embrace the importance of open data where possible. We plan to archive the quantitative data from the research and the participants will be fully informed as to the potential reuse and reanalysis of this data so that the consent they provide is fully informed. We will inform all participants about how data will be processed and stored, shared or archived, and give them the opportunity to consent or dissent to this, although no major problems with obtaining such consent are envisaged. One of the main vehicles for data sharing will be the traditional route of peer-reviewed publications in open access journals. To broaden public access, the accepted manuscripts will be submitted to open access repositories which allow full public access to their contents insofar as individual journal copyright law allows. Data will be archived in the UK Data Service's "ReShare" repository. http://www.data-archive.ac.uk/home

In addition, key outputs will be made available on the study website, insofar as individual journal copyright law allows.

Copyright Intellectual Property Rights Under the Copyright, Designs and Patents Act (1988) two separate copyrights are created when a recorded interview takes place: 1) the words spoken 2) the recording. The words spoken by a respondent in an interview remain the intellectual property of that respondent even though the recording itself is the property of the institution in which the interviewer is employed. Therefore, in order for the content of recordings to be textually reproduced in any analysis or subsequent publication the project team will ensure that the respondents assign copyright over to the University of

York. This will be undertaken as part of the process of gaining informed consent. It is anticipated that copyright and all other rights in the resulting intellectual property created solely by a partner will be owned by that partner responsible for generating it but that where necessary for the purpose of the project, that the intellectual property will be made available to any other partner who can show that they need to utilise it to further develop their own work on the project. In instances where more than one partner works to generate the same piece of intellectual property, the partners will agree to jointly own the resultant intellectual property and to mutually agree the terms of its further use and exploitation as appropriate. A collaboration agreement will be set up between the partners to define the key terms.

Responsibilities The PI, Dr Mark Bevan (University of York) will assume overall responsibility and co-ordinate the data management responsibilities of the three collaborating universities. Data Management issues will be a regular agenda item at Co-Motion Team Meetings held on a quarterly basis and this plan will be available online to researchers through our secure repository as well as on the Co-Motion website www.york.ac.uk/co-motion/

Preparation of data for sharing and archiving We will work closely with the digital data repository, UK Data Service's "ReShare" repository: http://www.data-archive.ac.uk/home to ensure that all quantitative data is appropriately prepared for sharing and archiving. The data will be fully documented following UK Data Archive (UKDA) guidelines and will be archived for a period of 10 years.   Available data will include data collection plans, methodology description, interview schedules, details of equipment use, a detailed data list and Quantitative Research Data.

Due to ethical concerns the Qualitative Research Data will not be openly accessible but will be stored for a period of 10 years within archives at the University of York.

In order to ensure research data is 'open' published research papers will include a short statement describing how and on what terms any supporting data may be accessed and any constraints that may apply. The links will be as a URL or Digital Object Identifier.

Insofar as copyright law allows, information on Co-Motion will be accessible via:

1. RESEARCH METHODOLOGY

- the Co-Motion website www.york.ac.uk/co-motion;

2. OUTPUTS (engagement, activities, reports etc.,)

- the York Research Database https://pure.york.ac.uk/portal/en/

- the Co-Motion website www.york.ac.uk/co-motion;

3. JOURNALS

- the York Research Database https://pure.york.ac.uk/portal/en/

4. RESEARCH DATA

- Quantitative data will be cleaned to remove sensitive / personal data. This data will be available, subject to registration, via the UK Data Archive Service's "ReShare" repository. http://www.data-archive.ac.uk/home

  Sensitive data will not be openly accessible but will be held for 10 years within the archives at the University of York.

5. DATA MANAGEMENT PLAN AND METADATA

- the York Research Database https://pure.york.ac.uk/portal/en/

- the Co-Motion website www.york.ac.uk/co-motion/

Resources.

All data will be cleaned prior to uploading onto the UK Data Archive Service's "ReShare repository and before depositing within the University of York Archives. Dr Mark Bevan will be responsible for ensuring this is carried out by the end of November 2016.