Evidencing the Social Return on Investment of Age-Friendly Community Initiatives

STUDY PROTOCOL

Cambridge Public Health
University of Cambridge
30 November 2020

In accordance with the instructions from the NHS Health Research Authority (HRA) qualitative research protocol template, this protocol has regard for the HRA guidance.

For this study protocol, we have adapted the NHS HRA qualitative research protocol template. This study is mixed methods and contains both qualitative and quantitative elements. It therefore does not fit easily into either the qualitative research protocol or the Protocol guidance and template for use in a Clinical Trial of an Investigational Medicinal Product (CTIMP) but is closer in study design and concept to the qualitative template. The complexity of the study - in that it comprises six work packages - also necessitated making changes to the layout of the existing template. All the essential elements are nevertheless captured.

FULL/LONG TITLE OF THE STUDY

Evidencing the Social Return on Investment of Age-Friendly Community Initiatives

SHORT STUDY TITLE / ACRONYM

Social Return on Investment of Age-Friendly Communities

PROTOCOL VERSION NUMBER AND DATE

Version 1.0, 30th November 2020

RESEARCH REFERENCE NUMBERS

IRAS Number:	NA – Seeking Institutional Ethics Approval
SPONSORS Number:	NA
FUNDERS Number:	NIHR131061

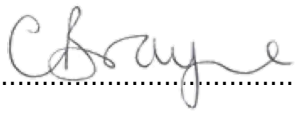
SIGNATURE PAGE

The undersigned confirm that the following protocol has been agreed and accepted and that the Chief Investigator agrees to conduct the study in compliance with the approved protocol and will adhere to the principles outlined in the Declaration of Helsinki, the Sponsor's SOPs, and other regulatory requirement.

I agree to ensure that the confidential information contained in this document will not be used for any other purpose other than the evaluation or conduct of the investigation without the prior written consent of the Sponsor

I also confirm that I will make the findings of the study publicly available through publication or other dissemination tools without any unnecessary delay and that an honest accurate and transparent account of the study will be given; and that any discrepancies from the study as planned in this protocol will be explained.

For and on behalf of the Study Sponsor:

Signature:  Date: 30/11/2020

Name (please print): Carol Brayne

Position: Co-Chair Cambridge Public Health

Chief Investigator:

Signature:  Date: 30/11/2020

Name (please print): Dr Louise Lafortune

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KEY STUDY CONTACTS

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Study Co-ordinator	As above.
Sponsor	Professor Carol Brayne on behalf of The Chancellor, Masters and Scholars of the University of Cambridge Cambridge Public Health University of Cambridge East Forvie Building Cambridge Biomedical Campus Cambridge CB2 0SR carolbraynepa@medschl.cam.ac.uk 01223 330321
Joint-sponsor(s)/co-sponsor(s)	N/A
Funder(s)	National Institute for Health Research Public Health Research Programme
Key Protocol Contributors	Dr Louise Lafortune, Dr Stefanie Buckner and Dr Calum Mattocks Contact details as above (Chief Investigator)
Committees	Study Advisory Group and PPI Group Contact details as above (Chief Investigator)

STUDY SUMMARY

Study Title	Evidencing the Social Return on Investment of Age-Friendly Community Initiatives
Internal ref. no. (or short title)	Social Return on Investment of Age-Friendly Communities
Study Design	Mixed methods
Study Participants	• Older adults living in urban, rural and coastal areas in England. In defining 'older adults', we will adopt the respective definitions used in our research sites. Where a clear lower age limit is required, this will be 55+ years as a commonly used figure in ageing research. • Policy and practice professionals, volunteers, and wider community will be interviewed.
Planned Size of Sample (if applicable)	Sample for the relevant WPs are as follows:

	WP2 & WP4: 50 interviews across research sites; 2 workshops with approximately 15 participants per site, for WP2 and WP4 respectively. Delphi panel size n=48. WP3: DCE N=400 older adults for panel, plus 40 frail older adults
Follow up duration (if applicable)	NA
Planned Study Period	30 months
Research Question/Aim(s)	1. What are the preferred health-related outcomes of AFCC interventions and their social value? 2. What are the resource requirements for effective and sustainable AFCC interventions? 3. Are some approaches to age-friendliness more likely to generate more social value than others? 4. What should a practice-friendly toolkit for assessing the SROI of AFCC interventions look like?

FUNDING AND SUPPORT IN KIND

FUNDER(S) (Names and contact details of ALL organisations providing funding and/or support in kind for this study)	**FINANCIAL AND NON FINANCIAL SUPPORT GIVEN**
NIHR Public Health Research Programme	£564,200.00
Four study sites: <u>Buckden (village in Cambridgeshire):</u> Buckden Parish council Buckden Village Hall Burberry Road PE19 5UY 01480 819407 clerk@buckdenparishcouncil.org.uk <u>County of Suffolk:</u> Sharon O'Callaghan Endeavour House, 8 Russell Road, Ipswich, Suffolk IP1 2BX 01473 260502 sharon.ocallaghan@suffolk.gov.uk <u>Liverpool:</u> Gemma Black Liverpool City Council Cunard Building, Water Street, Liverpool, L3 1AH 0151 233 0798 / 07793946945 gemma.black@liverpool.gov.uk	Each study site will variously contribute assistance in providing documentary evidence for analyses, time in identifying local advisors and, depending on local agreements, meeting rooms in kind for conducting local meetings, focus groups and interviews.

Kelsall (village in Cheshire): Kelsall Parish Council Mrs N. Read 8 The Wynd Kelsall Cheshire CW6 0PX 01829 751352 clerk@kelsall-pc.org.uk	

ROLE OF STUDY SPONSOR AND FUNDER

The study is sponsored and insured by the University of Cambridge and will be managed by that institution (specifically by the Cambridge Public Health Interdisciplinary Research Centre) in accordance with relevant current School of Clinical Medicine policies and standard operating procedures including those pertaining to informed consent, indemnity, data protection and data storage. The study will be managed in collaboration with co-investigators from the University of East Anglia, London School of Economics, Liverpool City Council, and practice partners from our four study sites (Liverpool; Suffolk, Kelsall; Buckden). The study sponsor will have no influence over the study design, conduct, data analysis and interpretation, manuscript writing, or dissemination of results.

The study is funded by the NIHR Public Health Research Programme (NIHR131061). The funder will have no influence over the study design, conduct, data analysis and interpretation, manuscript writing, and dissemination of results. It is a contractual requirement that NIHR-funded researchers provide notification and final copies of all of their research outputs to the NIHR at least 28 days before they enter the public domain. Research outputs include research papers and press releases.

Research outputs will appropriately acknowledge all NIHR funding and support received for the research and include the NIHR disclaimer. Outputs may display the 'Funded by NIHR' logo, where appropriate.

ROLES AND RESPONSIBILITIES OF STUDY MANAGEMENT COMMITEES/GROUPS & INDIVIDUALS

Advisory Group

A study Advisory Group will be convened. This will be chaired by the PI and will meet six-monthly (face-to-face/n=2; teleconference/n=3). It will advise on the project's strategic direction. We will also draw on the members' experience and on their networks for the dissemination of research findings. In addition to the PI, 2 rotating members of the research team and input (and where needed representation) from each research site (n=4), it will comprise 7 members with relevant expertise and lived experience: 3 policy- and practice-based professionals, 2 members of the public, and 2 colleagues from academia.

Patient and Public Involvement

Patient and Public Involvement (PPI) will take two strands. First, the Cambridge Positive Ageing Patient and Public Involvement (PAPPI) group (approx. 12 older adults with an interest in health and wellbeing issues concerning older people) will be consulted at three key milestones throughout the life of the project (see GANTT). In the first meeting (month 2), feedback will be sought on the information provided to participants about the research, recruitment methods, and data collection and analysis. The second meeting (month 14) will focus on gathering feedback on emerging findings, and on potential methodological adjustments. In the third meeting (month 27), we will concentrate on outputs from the research to ensure accessibility, as well as dissemination, including reaching non-professional audiences.

In addition, we will have further PPI input at approximately the same three key time points as the PAPPI meetings from PPI contributors in two rotating research sites at each time point. This will ensure input that is informed by particular local contexts.

If changing Covid-19 regulations mean that face-to-face meetings cannot take place, we will identify suitable alternatives based on NIHR and other emerging guidance on PPI during the Covid pandemic, and the views of PPI contributors (which will be sought via email and telephone). We currently envisage virtual meetings and individual consultations via telephone or email as potentially suitable alternatives.

PROTOCOL CONTRIBUTORS

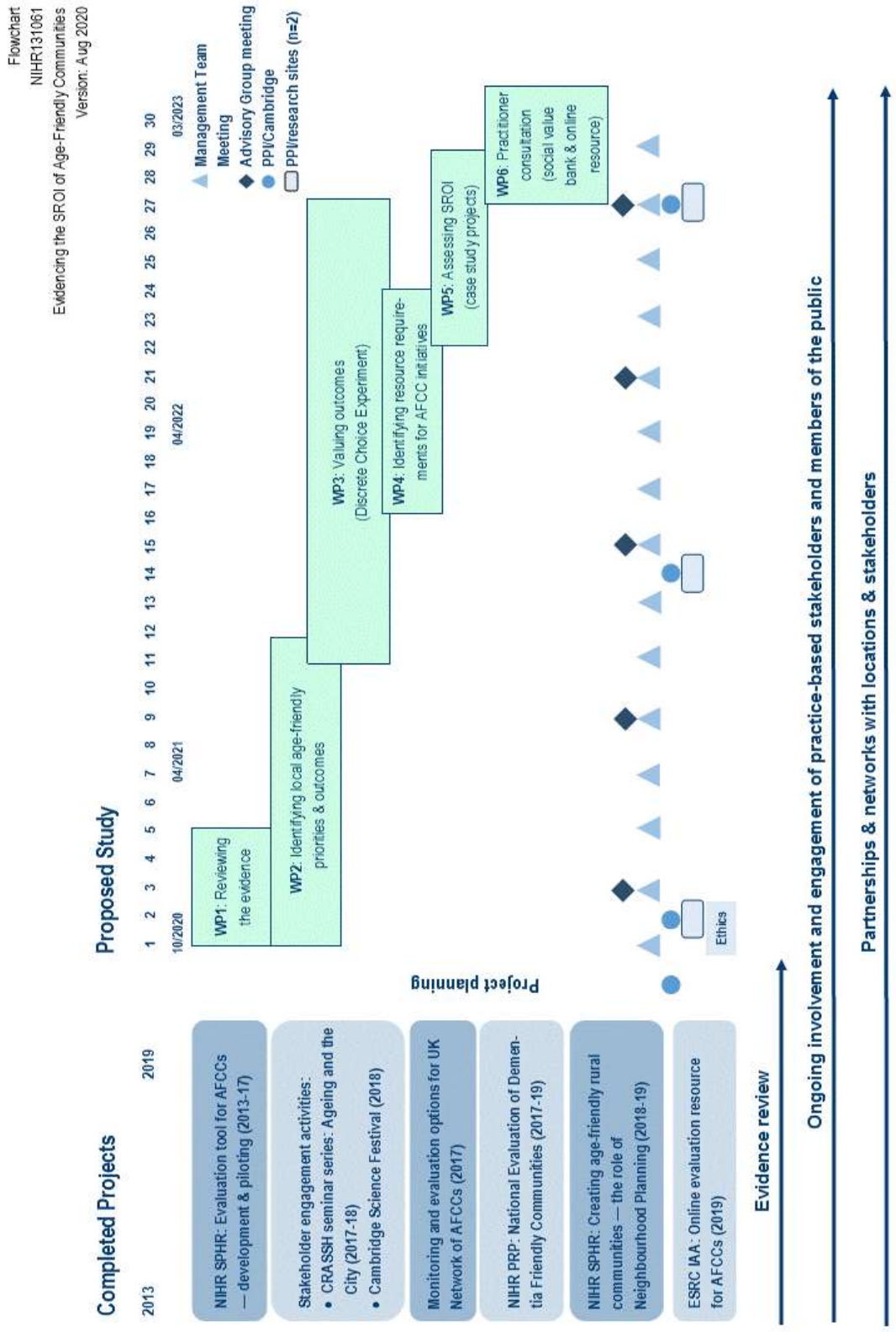
The protocol has been developed by all members of the research team - see study contact information table above.

Input from PPI contributors was obtained at different stages in the project development process. The characteristics of the PPI contributors ensured that diverse perspectives informed the project proposal from which this protocol is derived. The contributors lived in locations with and without AFCC initiatives that differed socioeconomically. As older adults, all were potential beneficiaries of the research.

The PPI contributions during the development of the funding application confirmed the importance of a study that will further the understanding of the social value of AFCC initiatives, and calculate their SROI. They highlighted that the SROI approach needs to be accessible to members of the public, and underscored the importance of context, including the impact of the Covid-19 pandemic on priorities and public views. PPI contributors also indicated key subjects of importance to them and which could be the focus for detailed study. They also contributed to writing the plain English summary. PPI contributors will be actively involved through the duration of the project.

KEY WORDS: Ageing, social return on investment, age-friendly cities, age-friendly communities, social value, discrete choice experiment

STUDY FLOW CHART



STUDY PROTOCOL

Evidencing the Social Return on Investment of Age-Friendly Community Initiatives

1 BACKGROUND

People are living longer. Yet for many, the opportunities afforded by a longer life – to themselves and society – are lost due to poor health and difficulty remaining involved in society. This is exacerbated by socioeconomic disadvantage (1), and associated with increasing social and economic costs. The balance between the 'burden' and the benefits of an ageing population can thus be tipped either way. One promising approach is to reshape ageing communities by creating enabling 'age-friendly' environments that support people to live well and continue to participate in their communities and society as they age.

Age-Friendly City and Community (AFCC) initiatives are complex interventions (2) that commonly entail a variety of individual interventions in different areas of work (e.g. improvements to public transport; making outdoor environments and housing options more suitable to the needs of older adults; social activities; etc.) to improve health-related outcomes for individuals and communities. They have the potential to improve a range of health-related outcomes and reduce health inequalities. The notion of AFCCs builds on an extensive body of research concerned with how health is socially and physically shaped in and by place (3). WHO defines AFCCs as encouraging active ageing by optimising opportunities for health, participation and security in order to enhance quality of life as people age (4). This aligns with initiatives such as liveable communities and lifetime neighbourhoods (5, 6). It also underpins many local authority strategic priorities for their ageing population (e.g. 7). Here, we use the term AFCC to capture initiatives compatible with age-friendly principles, regardless of whether they have officially aligned themselves with WHO's AFCC programme and Global Network for AFCCs (4, 8).

Growing support for the age-friendliness movement has led to innovative models and networks worldwide – the UK Network of Age-Friendly Communities comprised 41 AFCCs at the time of writing. Yet, little is known about the resources mobilised by AFCCs or their health-related outcomes for individuals and communities. This evidence gap reflects a lack of capacity to evaluate these complex interventions, and challenges measuring resources and outcomes (9). Still, investment by the public and private sector – and communities themselves – to develop AFCCs makes it imperative to understand whether they are effective, and the value they can generate.

To address this gap and enable routine evaluation, this project will robustly trial the Social Return on Investment (SROI) methodology in four carefully selected case study sites in England. SROI uses the concept of 'social value' – it measures a wide range of social, environmental and economic costs and outcomes to capture the collective investment in, and benefit from, complex interventions (10, 11). It is a derivative of Cost Benefit Analysis (CBA) that emphasises stakeholder involvement. SROI is suited to assessing AFCC initiatives, which are driven by population need, political motivation and resource constraints rather than scientific considerations. As such, these complex system-level 'natural experiments' are not easily accommodated by a framework that describes a phased, theory-based approach to the development and evaluation of interventions (2, 12). Their pathway to impact is context sensitive, and evaluation cannot be reduced to isolated health-related outcomes. This does not mean AFCC initiatives are not amenable to robust evaluation. We can draw on realist evaluation (13) to examine how these initiatives work in their "context-mechanism-outcome" configurations. We propose to measure how well AFCC interventions work in case study contexts, using the concept of social value

to produce evidence that can inform the delivery of such public health interventions nationally in an equitable way.

Supporting evidence

Cities and communities working towards greater age-friendliness rely on robust evidence, yet there is a "relative lack of evaluations" (14). A recent review of AFCCs (15) identified narrative overviews; studies exploring the links between age-friendly features and outcomes (e.g. self-rated health, quality of life); and the degree of cities' and communities' age-friendliness. There are also studies of factors fostering/hindering age-friendly urban and rural environments, and of the effectiveness of healthy community approaches that embed age-friendly components. Still, in a context of increasingly scarce resources, a critical evidence gap remains about the resources needed to develop and sustain AFCCs, and about the economic as well as social and environmental value of these complex interventions.

In an ongoing systematic review of studies assessing the social value of age-friendly initiatives (16), we have identified only three peer-reviewed papers (17-19). Each focuses on discrete interventions with age-friendly objectives, without embedding them in a wider AFCC perspective or a wider system perspective. All three report on interventions whose social value exceeds their costs. There is currently no evidence documenting the actual or potential cost-effectiveness, cost benefit, social value or SROI of AFCC initiatives.

A systematic review of SROI studies of public health interventions found that of 40 included papers, only 10% were peer reviewed (20). A more recent review focusing on the use of SROI to evaluate health and social care interventions (21) found that relevant studies are mostly reported in the grey literature, or not in the public domain at all. The authors, as well as critical reviews of SROI (e.g. 22, 23) stress the need for academics to adopt SROI, building on the research pedigree of CBA methodology to improve the robustness of the approach.

SROI has been described as an extension of CBA to incorporate broader socio-economic and environmental outcomes (20) and shown to relate well to public health in a review comparing guidance on methodologies for economic evaluation of public health interventions (24). In SROI, social value is estimated by the allocation of financial proxy values to outcomes identified in an intervention's logic model (i.e. the Theory of Change (ToC)), which in turn are compared against the level of investment. SROI is expressed as a ratio of the adjusted value of outcomes divided by total investment.

Described in several reviews (20-23), the strengths of SROI include: engagement with stakeholders, the identifying and valuing of outcomes that may be unique but considered valuable to stakeholders and members of the public; how the process reinforces mission and can lead to organisational learning; and the generation of a simple ratio which is easily comprehended. Weaknesses include difficulties in valuing community level outcomes as well as outcomes experienced at the societal level; identifying the counter-factual; and aggregating outcomes into a single figure, which has also been problematic in terms of interpretability and comparability of SROI ratios across interventions. Yet, of the wide range of social impact valuation approaches currently used across social enterprise and public sector in assessing whether funding is maximising social impact, only a few aim to place a value on impact and, of these, SROI is the most developed (25). SROI may not yet have the pedigree of CBA (32), but it can draw on

CBA methodology; the method has been advocated by the UK Cabinet Office (10); and interesting examples are emerging of the social cost-benefit analysis of public projects with a potential to improve population health. Our choice of a truly mixed-design approach will address many of the criticisms of SROI by analysing and presenting a full account of the AFCC outcomes and values brought to the conversation; from various perspectives; and in a fully disaggregated narrative and quantitative way to communicate the full story of creating value.

This study will address the evidence gap on the social value of AFCCs' health-related outcomes, and in the process make a significant methodological contribution to social valuation of public health interventions. It will also add to the toolbox of practice-based evaluators and build capacity for routine evaluation.

2 RATIONALE

AFCCs aim to support people to age actively and healthily by building and maintaining their physical, mental, and psychosocial capacities (intrinsic capacity), and enable people with varying levels of capacity to do what they value (14). Relevant actions include improving the physical environment, transport and housing; increasing respect, social inclusion and community participation; and investing in public services. When actions tackle social exclusion and barriers to opportunity, AFCCs can also serve to overcome inequities between groups of older adults (14). While AFCCs are a promising approach, major gaps remain in our understanding of i) their effect on health-related outcomes; ii) the resources needed to sustain them; iii) their social value. This study will provide these building blocks for monitoring and evaluation (M&E) of place-based AFCC initiatives, enabling them to deliver optimal and equitable health-related benefits.

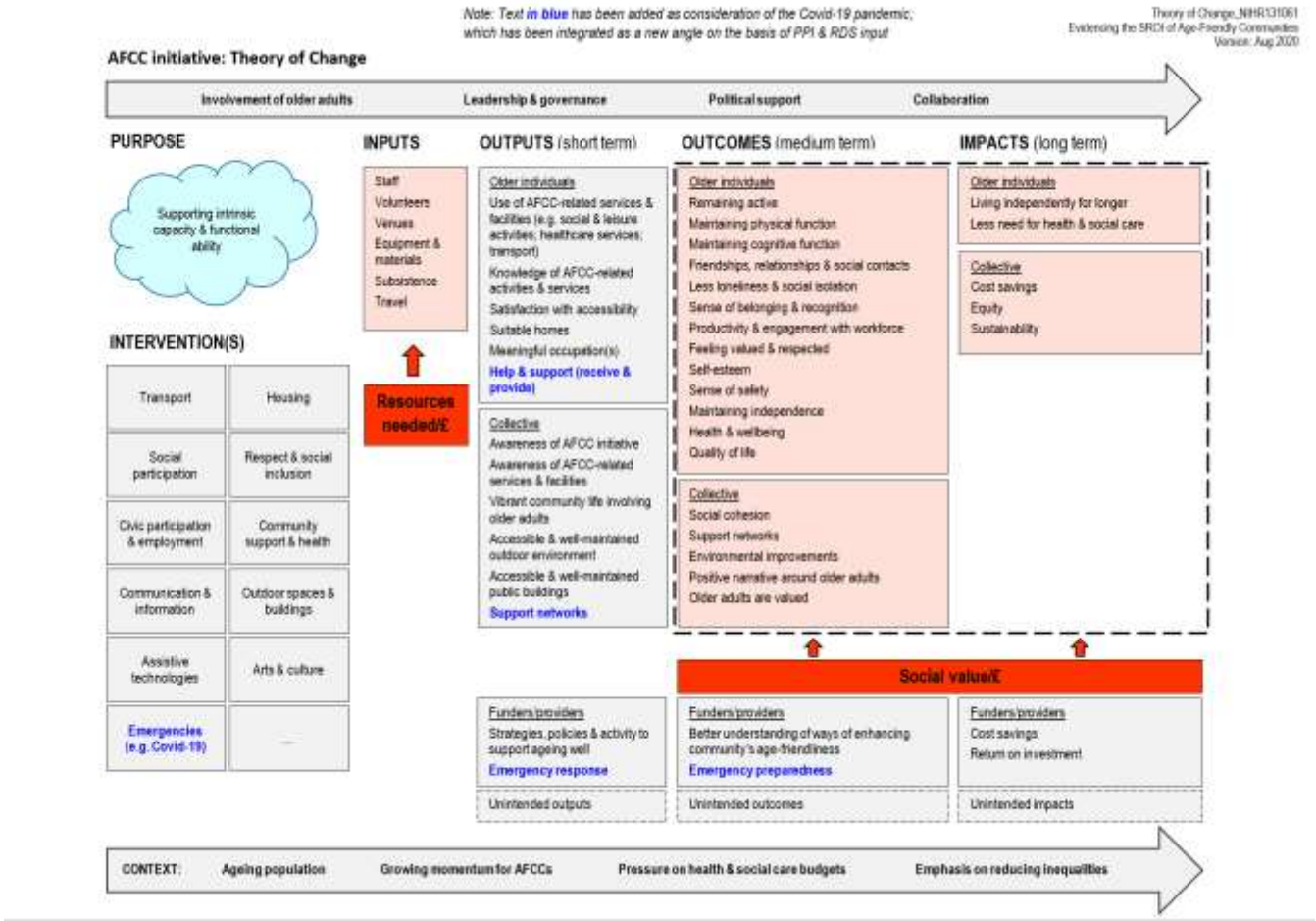
Our focus on people and place aligns with current public health research priorities (26) and local strategies. The wellbeing of older adults is shaped by their living environments. AFCC initiatives vary widely and most have focused on urban settings. However, rural and coastal communities have experienced greater population ageing – the 10 local authorities in England with the highest proportion of over 65s are all coastal (27). These communities face specific challenges, but many aspects of the physical and social environment that are important for older adults (e.g. accessing buildings or public transport) are as much an urban as they are a rural issue. Our research will focus on different administrative geographies to capture a range of environments that shape older people's lives. This is necessary to ensure the generalisability and transferability of our findings across differing geographies.

To maximise the benefits AFCCs can provide, robust evaluation is imperative. This, and development of appropriate tools, has not kept pace with the proliferation of AFCC initiatives. Our prior work showed that members of the UK Network of Age-Friendly Communities regard M&E of the impact of AFCC initiatives as critical (9). However, they lack accessible guidance, tools and indicators. This is echoed by our collaborators and advisors from different sectors (see support letters) as well as UK and European city partners (in Belfast/NI, Udine & Trieste/Italy and Louvain/Belgium) with whom we have developed the core features of an online resource for M&E of AFCCs. Consultation with older members of the public in different communities in England has confirmed the importance of assessing what difference AFCC initiatives make to the lives of older adults, and whether they are worth investing in.

We are mindful that M&E evidence rooted in local contexts needs to have wider applicability. The proposed approach is aligned with the Public Services (Social Value) Act 2012, which has placed social value firmly on UK public agendas (28). In addition to site specific/case study evaluations, it will support the impact-evidencing activities of AFCCs nationally by providing an evidence-based list of health-related outcomes and their social value as well as the types of resources needed to sustain AFCCs.

3 THEORETICAL FRAMEWORK

On the basis of the literature and our prior research, we have developed an initial Theory of Change (ToC) to capture in a simplified way how AFCC interventions are developed, the context in which they operate, investments required, and ways in which they might generate impact. This framework captures the resources required to set up and sustain AFCC initiatives, which are calculated in the study (see below), in an 'inputs' component. It presents the social value generated by AFCC initiatives, and which the study will assess (see below), as medium term 'outcomes' and long term 'impacts'. The resources required and the social value generated form the basis for calculating the SROI of AFCC initiatives. While the ToC in its initial version presents key concepts of the study, the details of its content (e.g. specific inputs, outputs, outcomes and impacts) will be revised in an iterative way as findings become available throughout the study.



4 RESEARCH QUESTION/AIM(S)

4.1 Aim

To evidence the health-related outcomes of AFCC interventions and their social value for older adults, and the resources needed to sustain these complex interventions at different geographical scales.

4.2 Research questions

1. What are the preferred health-related outcomes of AFCC interventions and their social value?
2. What are the resource requirements for effective and sustainable AFCC interventions?
3. Are some approaches to age-friendliness more likely to generate more social value than others?
4. What should a practice-friendly toolkit for assessing the SROI of AFCC interventions look like?

4.3 Objectives

1. Synthesise existing evidence of the social value of AFCCs
2. Develop a list of prioritised AFCC outcomes through engagement with practice-based stakeholders and members of the public
3. Attribute monetary values to outcomes using preference-based valuation with older adults
4. Characterise and quantify the resources involved in developing and sustaining AFCCs
5. Assess the SROI of case study age-friendly interventions
6. Develop a social value bank for age-friendly interventions that can be used in practice at different geographical scales

4.4 Outcomes

The study will:

- provide evidence of the health-related outcomes and social value of AFCC initiatives, taking into account the prioritised outcomes of practice-based stakeholders and members of the public.
- produce a validated social value bank for age-friendly interventions that can be used in practice at different geographical scales.
- deliver context specific evaluations of the SROI of selected AFCC interventions in four case study sites.
- produce a systematic review that synthesises existing evidence of the social value of AFCCs
- make a robust methodological contribution to evidencing the social value of AFCC initiatives, as well as public health interventions generally.
- provide case study examples of how members of the public and practice-based stakeholders can and do shape AFCC initiatives, not only through frontline work but also through engagement with our research, where the views of the public are essential.
- provide the basis for an application for funding to integrate an SROI component within the online AFCC evaluation resource.

5 STUDY DESIGN and METHODS of DATA COLLECTION AND DATA ANALYIS

5.1 Project plan outline

This 30-month project uses a mixed-methods design and comprises six complementary work packages (WP) that are aligned with the main steps of SROI evaluations (11): a succinct evidence synthesis (WP1); primary qualitative and quantitative data collection on intervention outcomes, costs, and social value (WP2-4); estimation of SROI (WP5); and consultation on practice use of study outputs, and on the blueprint of an online social value bank (WP6). As the study comprises complementary WPs, methods, analyses and study population vary between WPs therefore these are described specific to each WP, where appropriate.

The population in focus, i.e. target population of AFCC interventions, is current and future older adults living in urban, rural and coastal areas in England. 'Stakeholders' indicate policy and practice professionals, volunteers, and wider community, affected by AFCC. Selection of stakeholders and members of the public is critically important for equity reasons, given the weight of their value judgement in the SROI analysis.

For qualitative components we will work with key contacts and use purposive sampling and snowballing to recruit representative samples. For quantitative components we will recruit a representative panel of older adults with support from a specialised survey agency, combined with working with key contacts in our case study sites. The outcomes of interest are individual and community level health related outcomes (see ToC). The intervention will be the AFCC initiatives in the case study sites (n=4) with a specific focus on local priority areas of age-friendly work (e.g. housing, transport, arts & leisure; see WP 2 below), out of which 2-3 highly specific age-friendly projects (e.g. an age-friendly housing development) will be chosen from across the 4 sites (see WPs 4 & 5 below).

5.2 WP1 – Reviewing the evidence (months 1-4)

We will synthesise existing evidence of the social value of AFCCs (Objective 1) as the initial building block to address our first research question: What are the preferred health-related outcomes of AFCC interventions and their social value? We will describe and summarise: i) the extent to which SROI methods are being used to evaluate age-friendly initiatives; ii) the outcomes being assessed and the results of the analyses; iii) the quality of existing studies. The PROSPERO registered protocol (16) is summarised below. We will follow guidance for systematic review of economic evaluations for the design and will follow PRISMA for reporting.

Participants/population: Older adults, living in the community or an institution. Definitions of "older adults" vary; we will adopt those used by individual studies and describe diversity and representativeness of participants.

Intervention/exposure: Any place-based intervention designed to achieve outcomes in relation to ageing well that has been assessed using SROI analysis.

Comparator(s)/control: Studies with any type of comparators/controls (including those where no comparator groups are presented) will be included.

Outcomes: All outcomes relating to ageing well, measured at individual or community levels. They will include, but not be restricted to, healthy ageing, wellbeing and health in later life, active ageing, quality of life, social isolation, loneliness, independence.

Searches: Publication period from 1996 until present using key search terms related to 'Social Return on Investment', such as 'SROI' or 'social value', and a comprehensive list of age-related terms. For the scientific literature, standard databases will be searched, i.e. MEDLINE, Web of Science, Scopus, PsycINFO, Embase, CINAHL and the Cochrane Library. Following Banke-Thomas et al. (20), SROI studies in the grey literature will be identified via review of titles, abstracts or executive summaries or full text of articles found through web search (Google), or from SROI focused databases (e.g. SROI Network; New Economics Foundation; evidence.nhs.uk). We will consult our network of topic experts to identify further resources.

Data extraction & Quality assessment: Search results will be imported into EndNote and two reviewers will screen titles and abstracts to determine in-/exclusion. Any conflicts will be resolved in discussion with a third reviewer. Studies will be excluded if they meet one or more of the following criteria: i) they do not refer to clearly defined older population(s); ii) They do not refer to clearly identified intervention/programme(s); iii) They do not present clearly identified outcomes in relation to ageing well.

The following data will be extracted by one reviewer and checked by another after pilot testing of the data extraction instruments on a subset of the most "comprehensive" studies: year of publication; location (country) and setting of the intervention; details of the study design; aim of intervention or programme and period over which it was delivered; stakeholders included in the study (i.e. older residents, wider community, volunteers, professionals in policy and practice that are affected by the intervention/programme); source and method of data collection for prioritisation and measurement of outcomes and costs/resources; approach used for the attribution of change and valuation of outcomes; method of analysis (including sensitivity analysis) and estimation of SROI ratio; discussed strengths and limitations.

Quality will be assessed independently by two reviewers using the SROI quality framework assessment tool developed by Hutchinson et al. (21), supplemented by Krlev et al. (22). Disagreements will be resolved by a third reviewer.

Strategy for data synthesis: A narrative synthesis will also be developed in accordance with the guidelines developed by Popay et al. (29), following the research question for the review. Preliminary searches indicate that it is unlikely that there will be enough studies and/or homogeneity for any quantitative analyses.

5.3 WP2 – Identifying local priorities & outcomes (months 1-12)

The objective of this WP is to develop a list of prioritised outcomes of AFCC interventions through engagement with practice-based stakeholders and members of the public. As with WP1, this specifically relates to our first research question and constitutes a core building block for the next phase (WP3).

Site selection: The fieldwork will be carried out in four research sites: Suffolk (coastal), Liverpool (urban), Kelsall/Cheshire (rural) and Buckden/Cambridgeshire (rural). Sites were chosen to reflect a sample that

was diverse in terms of location, rural/urban classification, administrative geographies (county/city/town/parishes); population numbers, demographic make-up (ethnic groups), age distribution, and socio-economic characteristics/Index of Multiple Deprivation (IMD).

Liverpool and Cheshire (where Kelsall is located) are both operating within a context where WHO's AFCC framework has been explicitly adopted. In contrast, Buckden and Suffolk are not part of explicit WHO-based AFCC initiatives. Rather, they have embedded age-friendly principles in their strategic directions and operational priorities. Across all sites, we will work with relevant authorities, taking account of the policies and practices of health commissioners, providers and other public bodies, to capture context.

We will map age-friendly work in the four sites through documentary analyses and local interviews to understand context, inputs, outputs, and actual and expected outcomes and longer-term impacts. This will inform site-specific ToCs. The latter will be locally specific versions of the overall AFCC ToC (see Section 3), an evidence-informed framework based on previous work of the Cambridge team on AFCCs (30-32) and the wider AFCC literature. It will be revised on an ongoing basis as findings from this study become available.

We will identify priority age-friendly themes (e.g. housing; transport; see ToC, Section 3) in each site. This will involve carrying out local community surveys. The survey has already been completed in Liverpool. In this instance, it was commissioned by the City Council, and it had been directly informed by the research team in light of the proposed study's objectives and data requirements. A detailed report of findings is available (33). Building on the surveys' findings, we will run local stakeholder workshops to reduce the priority themes identified to a maximum of three priority age-friendly themes in each site, guided by both scientific and pragmatic criteria (e.g. availability or collectability of outcomes data for each theme; wider relevance beyond the research site). These three site-specific priority themes will be the focus of WP3-WP5.

Identifying priority outcomes: Findings from WP1, analysis of local documentary evidence, survey data (see above), and interviews with local practice-based stakeholders and older residents will serve to develop an initial long list of health-related outcomes for the three priority themes in each site. Guided by the principles and approach of the Core Outcome Measure in Effectiveness Trials (COMET) initiative (http://www.comet-initiative.org/), we will produce a reduced list ('shortlist') of prioritised health-related outcomes for the valuation exercise using nominal group consensus methods. We will start with local stakeholders (n=6-8 participants/group), followed by validation using a 2-round Delphi panel including national stakeholders. The validation with national stakeholders is to ensure that selected outcomes are ones that are considered priorities beyond specific local contexts.

There is no standard method for establishing Delphi panel size (34, 35). Given the scope and resources of the study, a panel size of n=48 seems appropriate. This will include one representative respectively for 75% of the 32 members of the Network of AFCs in England (n=24), the group most directly affected and with direct experience of AFCC initiatives. Its number of panel members (n=24) will be matched by members (n=24) from the following groups: organisations working with older people (e.g. Age UK); organisations working with local/rural communities on realising their priorities (e.g. Action with Rural

Communities (ACRE)); health and social care sector (e.g. community nurses; carers); experts in social value (e.g. HACT); researchers in ageing.

Identifying interventions: The interventions will be the AFCC initiatives in the case study sites (n=4), with a specific focus on respective local priority areas of age-friendly work (e.g. housing, transport, arts & leisure) and consideration of inequalities. Consulting with stakeholders and members of the public across the research sites, we will select a total of 2-3 highly specific age-friendly projects per site within the priority areas of work (e.g. an age-friendly housing development) for later assessment (see WPs 4 & 5).

With input from the local stakeholders, we will identify existing data sources for the priority health-related outcomes and we will seek stakeholders' advice on additional data to be collected, and how we can best do this in efficient yet robust, locally appropriate and inclusive ways. Consultations to evidence outcomes (in particular for outcomes for which there is no routine monitoring) will take place later in the project (WP5) to give the research team time to analyse and integrate findings from WP1 and WP2 - a necessary step before evidencing outcomes.

5.4 WP3 – Valuing outcomes (social value bank) (months 11-26)

This WP will address our third objective, i.e. to attribute monetary values to outcomes using preference-based valuation with older adults. It will allow us to describe what the preferred health-related outcomes of AFCC interventions are and their social value (our first research question).

In the Discrete Choice Experiment (DCE) (36), we will ask a representative national panel of older adults (55+yrs) to state their preferences for different combinations of outcomes on the short list developed in WP2. The outcomes will be valued using willingness to pay (WTP) methods via the inclusion of a payment vehicle (e.g. additional council tax payment per month) as an attribute in the DCE.

DCE Design: DCE is a quantitative technique for eliciting individual preferences. It allows researchers to uncover how respondents value selected characteristics (in this case, outcomes) of a programme, product or service by asking them to state their preferences over hypothetical alternatives (36). Each alternative is defined by several characteristics, known as attributes with multiple levels, and the responses are used to determine whether preferences are significantly influenced by the attributes and also their relative importance. DCEs are grounded in theories which assume that i) alternatives can be described by their attributes, ii) an individual's valuation depends upon the levels of these attributes, and iii) choices are based on a latent utility function (37). The relative importance of the attribute's levels in driving choice and trade-offs individual make when choosing one alternative over another are estimated through regression analysis of the choice data (38).

DCE Survey: The choice of attributes and levels for the survey will be based on the extensive qualitative work with residents and professional stakeholders carried out in WP2, and combined using an orthogonal or D-efficient statistical design to optimise the precision of the preferences estimates (38). This will be informed by the findings of WP1 and the WHO core AFCC indicators (39), before validation by our case study sites' stakeholders and contacts within the UK Network of Age-Friendly Communities. The survey will present pairs of hypothetical communities with varied age-friendly characteristics.

The process in WP2 for reducing item numbers to a prioritised list will consider the likely independence of outcomes when grouping them into themes and deciding which prioritised outcomes to take forward as attributes into the DCE. For the DCE survey, respondents will be asked to indicate their preferred alternative between a number of different outcomes (with consideration of COVID impact), i.e. a discrete choice between attributes such as access to transport; safety at home; opportunities for employment; reduced risks, healthy behaviours, sense of belonging, etc. From this choice data, we will estimate their WTP for improvements in different outcomes, i.e. bespoke social values for the outcomes. When undertaking the statistical design for the DCE, we will consider whether attributes are likely to be interdependent (based either on evidence gathered in WPs1-2 or on underlying theory). We will consider including interaction effects between attributes in addition to the main effects for each attribute in both the statistical design and analysis, for any attributes for which we anticipate a likely dependent relationship.

The survey will be administered online (with phone assistance where needed) or face-to-face with a paper-based option to accommodate varying capabilities. The survey will comprise background information about the project and ethics approval, followed by an informed consent page, then questions on respondents' demographic characteristics, health, functional ability, and quality of life. Subsequently, respondents will be shown instructions about the task and a warm up task before answering the survey. At the piloting phase, following Mulhern (40), multiple choice questions about the difficulty of the tasks will be included along with a free-text question to understand respondents' opinions of the survey questions and the content in general. These questions provide data relating to the difficulty of the choice sets and the functioning of the survey.

Recruitment of respondents*:* A population panel representative of the older adult population in England (by age, gender, urban/rural divide) will be selected through a panel company (e.g. SurveyEngine,) to determine average preferences. Sampling theory does not provide definitive guidance on the minimum sample size required for a DCE. To ensure precise (statistically significant) estimates are obtained from the DCE, the minimum sample size depends on a number of criteria including choice task complexity, attribute and level number, and the desire to conduct subgroup analysis. The sample size (estimate n=400) will be based on the commonly applied rule of thumb (41) once the number of levels and attributes are known. Simulation studies suggest little if any improvement in precision is achieved for sample sizes beyond 300 participants (42) when the study aim is to estimate "average" utility weights for a representative sample. Based on approximately 17,1M adults aged 55+yrs in England (43), for a ±5% margin of error at a 95% confidence level, a minimum sample of 376 would be required (making the most conservative assumption of equal preferences for a dichotomous choice). Therefore, we target a sample size of 400 for the DCE public sample.

We will also aim to recruit a separate sub-sample of frail older adults (estimate n=40) via our case study site contacts and PPI contributors to determine if there is consistency in preference in this sub-group whose ability to benefit from AFCC interventions (i.e. in terms of health and well-being benefit) is crucial to minimise the potential for intervention generated inequalities (44). Frail older adults and others with specific needs will be invited to draw on the support of a carer, e.g. to help them set up a phone conversation. The DCE is planned mostly as an online survey, with phone supported completion of either online or paper-based versions. We will monitor how the situation evolves and adjust options for completing the survey (late 2021) in accordance with participants' capacities and preferences.

WTP estimates will be based on data derived from the DCE survey, i.e. we will estimate 'average' WTP estimate for the representative sample of older adults; we will not adjust for ability to pay. However, we will describe the sample according to socio-demographic factors (including household income), and explore whether preferences differ by wealth or income (we would expect those with higher income to be WTP more). We will also explore other equity measures, using relevant tools and guidance.

The choice data collected from the DCE will be analysed using multinomial logit regression with preference heterogeneity explored using its more generalised forms (e.g. mixed logit or latent class analysis). This will enable an estimate of the trade-off participants are willing to make between different community attributes (i.e. outcomes) and also their WTP for improvements in different outcomes.

Assessing stability of preferences: It is likely that the preferences identified in the DCE (Nov '21 – Feb '22) will be affected by the status of the COVID-19 pandemic at the time of data collection, i.e. whether the situation is stable or not (e.g. if a "new normal" has set in with regard to social distancing rules and risks; or if a vaccine is available). To address this uncertain situation, we will explore the feasibility of repeating the DCE on the same sample 6-8 months later, acknowledging there will be non-random drop out due to the sample characteristics (i.e. many of whom will be frail(er) and some will have died). We will also draw on our PPI contributors to help us ascertain the stability of preferences for those groups most likely to be affected by the pandemic situation.

5.4 WP4 – Identifying resource requirements (months 16-23)

This WP will characterise and quantify the resources involved in developing and sustaining AFCCs (Obj. 4) and address our third research question: What are the resource requirements for effective and sustainable AFCC interventions?

Design: We will work within the proposed SROI framework to describe the incremental resource use and costs associated with the 2-3 age-friendly projects per site selected in WP2 from the priority areas of work. The local ToCs developed in WP2 will guide our collection of data on 'inputs', or investments by stakeholders (Stage 1). We will follow established procedures for costing health and social care interventions (45, 46) using a combination of bottom-up and top-down approaches. This typically involves describing the elements of the interventions in order to identify material inputs to production (including in-kind and non-monetised resources e.g. free or peppercorn rent for venues, volunteer time), establishing relevant units for each project (per person, per session, per episode, etc.), collecting financial data and calculating the costs of each intervention.

Costing: Unit costs (e.g. for weighting inputs to the production of the interventions) will be drawn from nationally representative sources such as the PSSRU Unit Costs (47), the NHS Reference Costs (48) and other published sources and some locally relevant valuations (such as local market rents and public transport fare prices). Annual equivalent costs of capital assets (office equipment, furniture, assistive equipment etc.) will be calculated where necessary. Costs of non-monetised resources such as volunteer time and participants' time will be valued at the opportunity cost (relevant opportunity costs to be determined, but time could for instance be valued at national minimum wage or at national average wage).

Input costs data collection: Initial descriptive data on initiatives/projects will be collected via interviews with project leads and in-depth information sought through the use of a proforma (covering expenditure, budget and activity data) and telephone and written correspondence as required with project managers/staff. Depending on the stakeholders identified, other data collection, such as questionnaires for older people participating in the initiatives, may take place.

Analysis: The work will include sensitivity analyses to investigate the impact on results of varying key assumptions underpinning the costing exercise. For instance, we may consider the impacts of important variations between sites/project such as geographical variations in labour costs, scope and scale of projects and capacity, and alternative valuations of non-monetised resources.

The choice of stakeholders, inputs and valuation sources will be tabulated and issues arising in making these choices will be discussed in order to present the calculation of the SROI ratio as transparently as possible.

5.5 WP5 – Assessing SROI of specific interventions (months 22-28)

The SROI ratio is calculated by dividing the overall value of the outcomes by the cost of the AFCC intervention [(positive benefits – negative benefits)/costs] to represent the value created. The value of the benefits will be derived from WTP in WP3 and the costs of interventions will be derived in WP4. Although the idea of 'cashable and non-cashable' value is not in the spirit of SROI, direct monetary benefits (where available) will be described in a fully disaggregated way alongside accrued social value for relevant outcomes. Alternative financial proxies will be examined through sensitivity analysis.

In order to evidence outcomes, we will draw on existing data sources identified in the study sites, external reports and government statistics (WP2). We expect to have quantitative data for some of the outcomes, but in their absence, we will collect additional data using interviews and tailored nominal group consensus exercises with local stakeholders and members of the public to determine the quantity of outcomes accrued using subjective assessment. Short of being able to implement a randomised/quasi-experimental design, a predominantly qualitative approach will serve to identify, for each outcome, the proportion of observed change accounting for factors such as attribution, deadweight, displacement, drop-off/attrition to minimize the risk of over claiming benefits. Attribution is the proportion of the observed change that is due to taking part in or accessing the AFCC intervention. Deadweight is the proportion of change that people would experience over time, regardless of taking part in the intervention. Displacement is the proportion of change that is being displaced, for example, the council cancelling or rearranging other activities to make way for an arts group for older adults. In SROI, drop-off/attrition refers to the proportion of effects that drop off after the first year, rather than being the attrition rate of people taking part in the intervention (49). The SROI process explicitly addresses the duration of expected benefits of initiatives with stakeholders. To adjust for time preference, we will adopt NICE's latest guidance for conducting public health economic evaluations by an annual discount rate of 1.5% on both costs and health effects (sensitivity analyses will include discount rates used by other parts of NICE, and the HM Treasury Green Book 3.5% discount rate). Further sensitivity checks will include the observed/estimated change for the outcomes, financial proxies used, estimates of deadweight and attribution, value of inputs for production.

5.6 WP6 – Practitioner consultation (months 27-30)

The final work package is dedicated to engagement and consultation with national practice-based stakeholders from communities with an age-friendly agenda beyond the research sites. This will take place through an end-of-project event, and it will be supplemented by presentations/workshops at national or regional practitioner-focused events, such as the annual conference of the UK Network of Age-Friendly Communities, and the Public Health England annual conference.

Beyond sharing the research findings, discussions with practitioners will focus on how the list of priority outcomes and their social value can be used in practice, and what a user-friendly and sustainable online resource for SROI should look like. This practice-focused output – our 'social value bank' – will ensure wider applicability and help us to further develop the blueprint of a user-friendly online resource for SROI. This engagement will prepare the ground for a further funding bid to develop such an online resource. For this, we will be drawing on relevant previous experience and our networks (i.e. Advisory Board, NIHR SPHR, PHE East of England Research Engagement Hub & Evaluation Network). The Cambridge team have been working with WHO Regional Office for Europe and three European city partners on an online resource for evaluating AFCCs for practitioner use. The prototype for this has been developed, and we will be able to integrate a practice-orientated SROI resource within the forthcoming live version.

6 SAMPLE AND RECRUITMENT

6.1 Eligibility Criteria

We will recruit the following study participants in the research sites: older adults (aged 55+), policy and practice professionals; volunteers, and other community members affected by AFCC initiatives. For the Delph exercise (WP2), we will recruit a sample of national stakeholders (mostly from practice-based and academic backgrounds). For the DCE (WP3), a national sample representative of older adults across England will be recruited by a panel research company.

6.1.1 Inclusion criteria

Any adult with experience relevant to the study who is able to provide written consent to participate.

6.1.2 Exclusion criteria

Anyone aged <18 years, or unable to provide written consent.

6.2 Sampling

See Section 5 for details on sampling for the different WPs.

6.2.1 Size of sample

See Section 5 for sample sizes and their justification. Unless otherwise specified, and in particular with regards to qualitative data collection, sampling will be guided be the principle of saturation – within the scope of the study resources, we will continue sampling until saturation is reached.

6.2.2 Sampling technique

Selection of stakeholders and members of the public is critically important for equity reasons, given the weight of their value judgement in the SROI analysis. For qualitative components we will work with key contacts and use purposive sampling and snowballing to recruit relevant and, where appropriate, representative samples. Practice-based stakeholders and volunteers will be recruited on the basis of their roles and their relevance to the study.

For quantitative components/DCE we will recruit a representative panel of older adults with support from a specialised survey agency, combined with working with key contacts in our case study sites for recruitment for local data collection.

6.3 Recruitment

For qualitative data collection, participant eligibility will be ascertained in personal communication prior to data collection. Where recruitment occurs through a third party, clear eligibility criteria will be provided to the recruiter. In the quantitative data collection exercises, eligibility will be double checked through targeted survey questions.

6.3.1 Sample identification

See sections above for sample identification. Participants will not be paid for their participation.

6.3.2 Consent

Informed consent: all research participants will be fully informed as to the nature and purpose of the study, and their involvement. They will receive a Participant Information Sheet in accessible language and with contact details should they have questions or wish to make a complaint, and they will have the opportunity to ask questions before participating. The participants will be given this sufficiently in advance of their participation insofar as this is possible. Informed consent will be obtained in writing on a Consent Form, and online for the DCE (WP3). Participants will be given a copy of the Consent Form to keep, encourage to save a copy for the DCE (WP3). Only participants able to consent will be included in the study, and consent can only be provided by the participant themselves. Participation will be voluntary. Participants will be informed of their right to terminate their involvement at any point without giving a reason and at no disadvantage to themselves, and their right not to answer any questions. Confidentiality and anonymity will be guaranteed.

7 ETHICAL AND REGULATORY CONSIDERATIONS

The proposed study does not need approval via HRA NRES. It adheres to the UK policy framework for health and social care research (50), and it will comply with the ESRC research ethics framework (51).

Ethical approval will be sought from the Cambridge School of the Humanities and Social Sciences Research Ethics Committee, which has approved the team's AFCC work before. In subsequent applications, the respective ethics boards of the collaborators' institutions will be asked to accede. Ethical approval processes in effect in the study sites (if applicable) will also be adhered to, and approval will be sought from relevant local bodies where appropriate.

Key considerations:

- All researchers who will be involved in fieldwork have recent DBS checks. They are familiar with the requirements for ethical conduct of research, and they have relevant experience and training.
- Data collection with research participants, some of whom might be vulnerable adults (e.g. older adults): all researchers involved have experience of conducting fieldwork with groups that might include vulnerable adults. They will work in line with the aforementioned ethical guidelines and frameworks, their institutional policies, and best practices.
- Informed consent: See section 6.3.2 above.
- Data protection: personal data will be anonymised at the earliest possible opportunity by the researchers who have collected them. Unique identifiers will be used for participants, and potentially identifying information will be edited. The system of unique identifiers and any potentially identifying information will only be accessible to those directly involved in the research. Primary data will be stored on password-protected electronic files on secure servers in the respective researchers' institutions, all of which have strict security procedures in place. Some data for DCE survey will be collected and stored on third party research company servers initially. Hard copies with identifiable data will be stored in locked filing cabinets in secure offices in the researchers' institutions. All audio recorded data will be transferred to secure computers at the earliest possible opportunity, and recording devices will be wiped clear. The recordings will be transcribed by a professional transcriber who will be bound by a confidentiality agreement.

7.1 Assessment and management of risk

The research is considered low risk, and we do not anticipate any problems or adverse effects. No discomfort or inconvenience to any of the participants is anticipated. The anticipated procedures involving participants are data collection in the form of individual interviews, group discussions, and surveys. None of these are expected to be physically stressful or impinge on the safety of participants. We recognise that key informants may be required to consult with their line managers where financial and budgetary information regarding the AFCC interventions is released and will need to be assured of confidentiality for any information collected by the research team.

It is not expected that any of the procedures will be psychologically stressful to participants. Participants will not be required to discuss sensitive information, and they will be reminded that they do not have to answer any questions that they do not want to, and that they can opt out of the study at any time and without giving a reason. However, participants might choose to discuss challenging and stressful matters. If participants do become upset, the researcher will stop the procedure and only resume once the issue has been resolved to the satisfaction of the participant.

We are mindful that some older participants might struggle with technology employed for the study (e.g. use of iPads; virtual communication platforms), whose use was either envisaged in the original application, or might be necessitated by Covid. There will be no pressure on participants to engage with such technologies if they do not feel comfortable with them. We will provide practical support as appropriate, and reassure participants that they are welcome to ask questions and request help.

It is unlikely that participants will need support after taking part in this study. However, they will be given details on the Participant Information Sheet of whom to contact if they experience distress and require support. In addition to the PI, a contact who is not a member of the research team will be provided.

Participants will be made aware that if they disclose information on activities that are illegal, or which suggests that they might harm themselves or others, this will need to be declared in the first instance to a Sponsor representative, and it might need to be escalated.

7.2 Research Ethics Committee (REC) and other Regulatory review & reports

The proposed study does not need approval via HRA NRES. It adheres to the UK policy framework for health and social care research (50), and it will comply with the ESRC research ethics framework (51).

Ethical approval will be sought from the Cambridge School of the Humanities and Social Sciences Research Ethics Committee, which has approved the team's AFCC work before. In subsequent applications, the respective ethics boards of the collaborators' institutions will be asked to accede. Ethical approval processes in effect in the study sites (if applicable) will also be adhered to, and approval will be sought from relevant local bodies where appropriate.

Regulatory Review & Compliance & Amendments

Approvals from appropriate organisations in the four study sites for participation in the research are in place. Approval for any substantial amendments to the study will be sought from the Cambridge School of the Humanities and Social Sciences Research Ethics Committee by written application. Upon approval, the relevant ethics committees of the collaborating institutions will be asked to accede. We will keep detailed records of all amendments and their approval.

7.3 Peer review

The protocol for this study underwent a rigorous 2-round peer review process through the NIHR Public Health Research Programme. The applicants addressed all issues raised by the reviewers. The protocol also benefited from substantial PPI input at different stages in the application and review process.

The conduct and progress of the study will be reviewed throughout by an expert Advisory Group, and PPI input will be sought at several points. Interim reports to the funders will be provided as required.

7.4 Patient & Public Involvement

Public involvement has shaped the outline for this project during each stage of the submission process. We will continue to draw upon PPI advice regularly throughout the life of the project. Historically, members of the public have been extensively involved and had real influence on the Cambridge-led AFCC research preceding the proposed project (Flowchart) through consultation on research priorities, feedback on findings, and Advisory Group membership.

The Stage 1 proposal was informed by discussions with the Cambridge Positive Ageing Patient and Public Involvement (PAPPI) group, (approx. 12 older adults with an interest in health and wellbeing

issues concerning older people), and the AFCC stakeholder group in Liverpool, which brings together older adults and practice-based stakeholders in the city's AFCC initiative.

For the Stage 2 proposal, plans for PPI group discussions in the remaining three research sites were adjusted due to the Covid-19 situation. We recruited 1 older Kelsall resident, and 4 older adults through personal and professional networks. They were emailed the Plain English summary. In individual phone conversations with a researcher, they were given more detailed information and had the opportunity to ask questions before sharing their view on the planned study.

We will consult PAPPI at three key milestones throughout the life of the project (see GANTT). In the first meeting (month 2), we will seek feedback on the information provided to participants about the research, recruitment methods, and data collection and analysis. The second meeting (month 14) will focus on gathering feedback on emerging findings, and on potential methodological adjustments. In the third meeting (month 27), we will concentrate on outputs from the research to ensure accessibility, as well as dissemination, including reaching non-professional audiences.

We will seek further PPI input at approximately the same three key time points as the PAPPI meetings from PPI contributors in two rotating research sites at each time point. This will ensure input that is informed by particular local contexts.

Members of the public will be invited to events hosted in relation to the study, including a final dissemination event. PPI contributors will be given the opportunity to co-present findings and co-author publications where appropriate.

7.5 Protocol compliance

The study research team, led by the study lead will assume compliance with the study protocol. It will be the responsibility of each team member to adhere to the protocol and this will be checked at the regular team meetings. The regular Advisory Group meetings will serve as opportunities to check protocol compliance and ensure that accidental deviations are detected early and minimised.

7.6 Data protection and patient confidentiality

Data will be collected by the university-based researchers and potentially to a smaller extent by GB (Liverpool City Council). As well as non-participant data (e.g. documentary evidence), we will collect participant data through face-to-face and remote interviews, focus groups and surveys (self-complete paper copies and online).

Subject to participant consent, interviews and focus groups will be audio recorded. If participants do not consent to being audio recorded, subject to consent, written notes will be taken. Recording devices will be cleared immediately after downloading the files onto a secure password protected computer. Audio-recordings will be transcribed by a transcriber bound by a confidentiality agreement.

Personal data will be anonymised at the earliest possible opportunity by the researchers who have collected them. Participants' names will be replaced by a coded identifier. Information by which they could be identified will be removed or edited. The system of coded identifiers will be saved in a

password-protected file. Only members of the research team will have access to the system of coded identifiers and to the raw data.

All data will be collated by the Cambridge team. Data in paper format will be transferred to Cambridge securely by post or, where possible, in person by researchers from the collaborating institutions. Electronic files will be transferred via a secure file sharing system approved by the researchers' respective institutions. Data on costings for SROI analyses will also be accessed by the LSE researcher. Access to LSE resources is governed by an Access Control Policy (https://info.lse.ac.uk/staff/services/Policies-and-procedures/Assets/Documents/accConPol.pdf) and a Remote Access Policy (https://info.lse.ac.uk/staff/services/Policies-and-procedures/Assets/Documents/remAccPol.pdf).

DCE data from the survey panel will be stored initially by the third party survey provider in their online servers and then provided (likely in excel) to the research team. The survey panel provider chosen will be GDPR compliant (or at a similar/equivalent standard should a change to GDPR rules occur following Brexit). DCE data from the additional (n=40) subgroup will be collected and stored either via the processes outlined above, or via the electronic survey (with data initially held by the survey panel company).

Any paper documents from which participants might be identifiable will be stored in a locked filing cabinet in a secure office in Cambridge as soon as this is reasonably possible. All electronically held information will be stored on secure password protected computers. When the data are no longer needed (and at the latest ten years after completion of the project) they will be destroyed.

Paper questionnaires will be returned by the respondents to Cambridge via self-addressed return envelopes. Respondents will only be asked to provide personal details should they agree to be contacted again for further data collection as part of this study, or information relating to the study. Contact details will be collected on a separate page that will be detached upon receipt. They will be stored separately from the completed questionnaires in a locked filing cabinet in a secure Cambridge office.

The above paragraphs on data storage apply to a context where working in an office environment is not constrained. In a context of changing Covid rules, we will make every effort to adhere as closely as possible to the above. Particularly with regards to data in hard copy format, we will aim to collect and store these in our Cambridge offices at the earliest possible opportunity. Depending on the changing Covid rules, there might be times when it is not possible to access our offices, and data in hard copy format will have to be stored temporarily in the home working environment of the research team members. We will seek to avoid or at least minimise this as far as possible. If there are occasions where we cannot avoid this, we will ensure that hard copy data are stored securely and in locked storage facilities.

Survey data will be entered into and analysed in SPSS or similar. Qualitative data will be managed and analysed using NVivo (V12). The respective files will be shared among the research team members via a secure and institutionally approved file sharing system. Data analysis will be conducted by experienced research team members, and standard checks (e.g. double coding) will be integrated to ensure consistency and reliability.

7.7 Indemnity

All co-researchers have institutional affiliations. Their respective institutions provide public indemnity insurance.

7.8 Access to the final study dataset

All research team members will have access to the full study dataset.

8 DISSEMINIATION POLICY

8.1 Dissemination policy

Academic outputs – We will publish the final report in the NIHR PHR Journal, and author a minimum of 3 peer-reviewed open access publications in public health, ageing and health economics journals. We envisage a first publication for the scoping review (WP1; Year 1; ageing focused journal; costed); a second one for the findings of the DCE (WP3; Year 3; Health Economics journal; costed), and a third for the SROI findings (WP2 & WP3 & WP5; beyond the project end date; Public Health journal; funded from another source).

We will also present the findings at 2 academic conferences, e.g. the International Federation of Ageing (IFA) Conference, which has prioritised AFCC as a strategic theme, and which will host the age-friendly global village; and the European Health Economics Association conference, where we expect the methodological contribution of our work on SROI methodology will be well received.

Practitioner-focused outputs – A key output will be a validated social value bank for the shortlist of AFCC outcomes. This will be available in a user-friendly format in the first instance, and further developed to be hosted alongside an online evaluation resource for AFCCs in development by the Cambridge team, and be accessible to practitioners and decision makers. Recorded webinars (e.g. via IFA, WHO) will also provide general guidance for users. We will seek written consent and contact details from participants who want to remain informed of the findings.

We will consider publishing a paper in a practitioner journal (e.g. National Health Executive, where we have published on AFCC (30); Bulletin of the WHO). Other practitioner-focused outputs will include study site reports; practice briefings; press releases for national and international print and broadcast media (including the WHO Global Network for AFCCs (8)), regular blogs (every three months) and social media posts; a video drawing on previous experience linked to our award-winning paper (31, 52) (detailed in section 5.2). We will also hold an end-of-project event, ideally to coincide with the annual conference of the UK Network of Age-Friendly Communities (Yr3); present the findings at the PHE annual conference (Yr2 & Yr3) and regional practitioner-focused events conferences.

Study participants will be asked if they would like to be updated on forthcoming publications, and a note will be made of their responses.

8.2 Authorship eligibility guidelines and any intended use of professional writers

All research team members will be co-authors on the final report and any peer reviewed publications (provided they have contributed to the expected extent that is now commonly specified by scientific journals). PPI contributors will also be offered authorship where they have met the contribution criteria. The contributions of members of the Advisory Group will be acknowledged in any publications.

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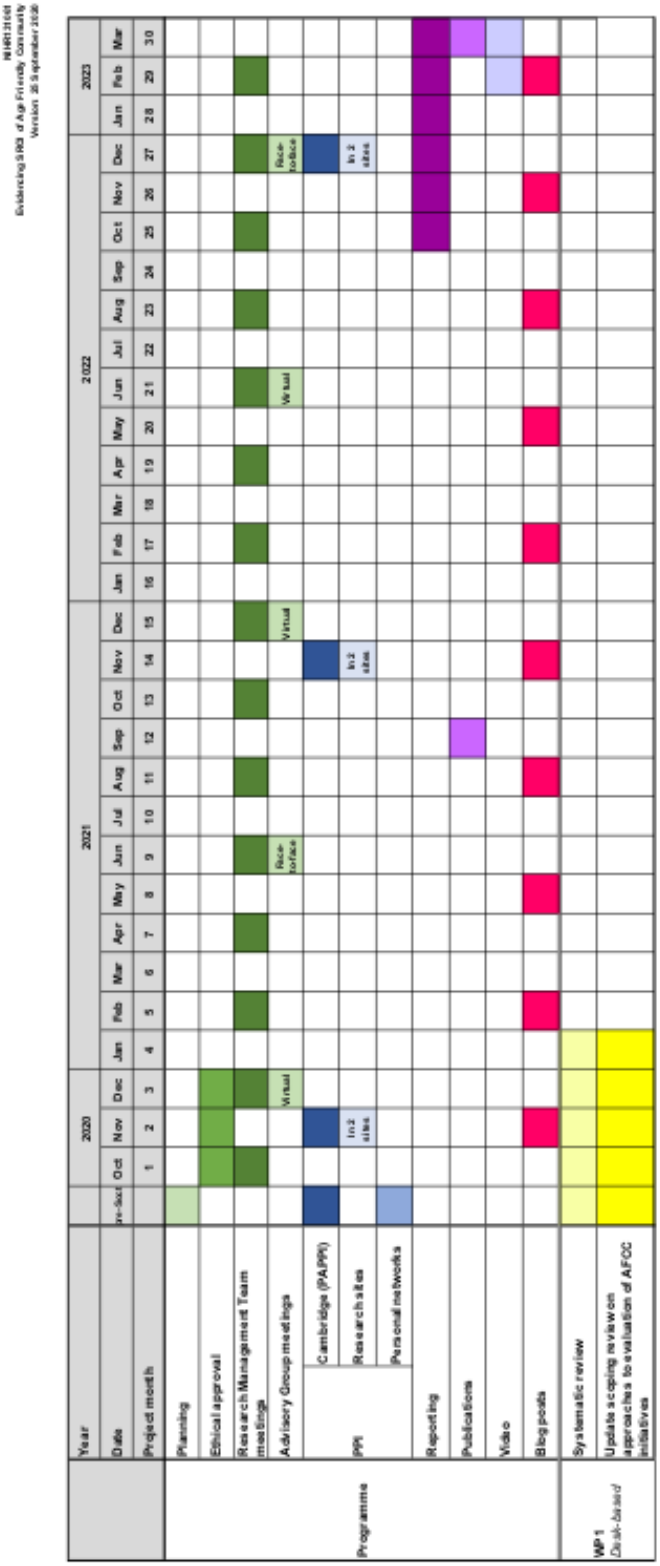
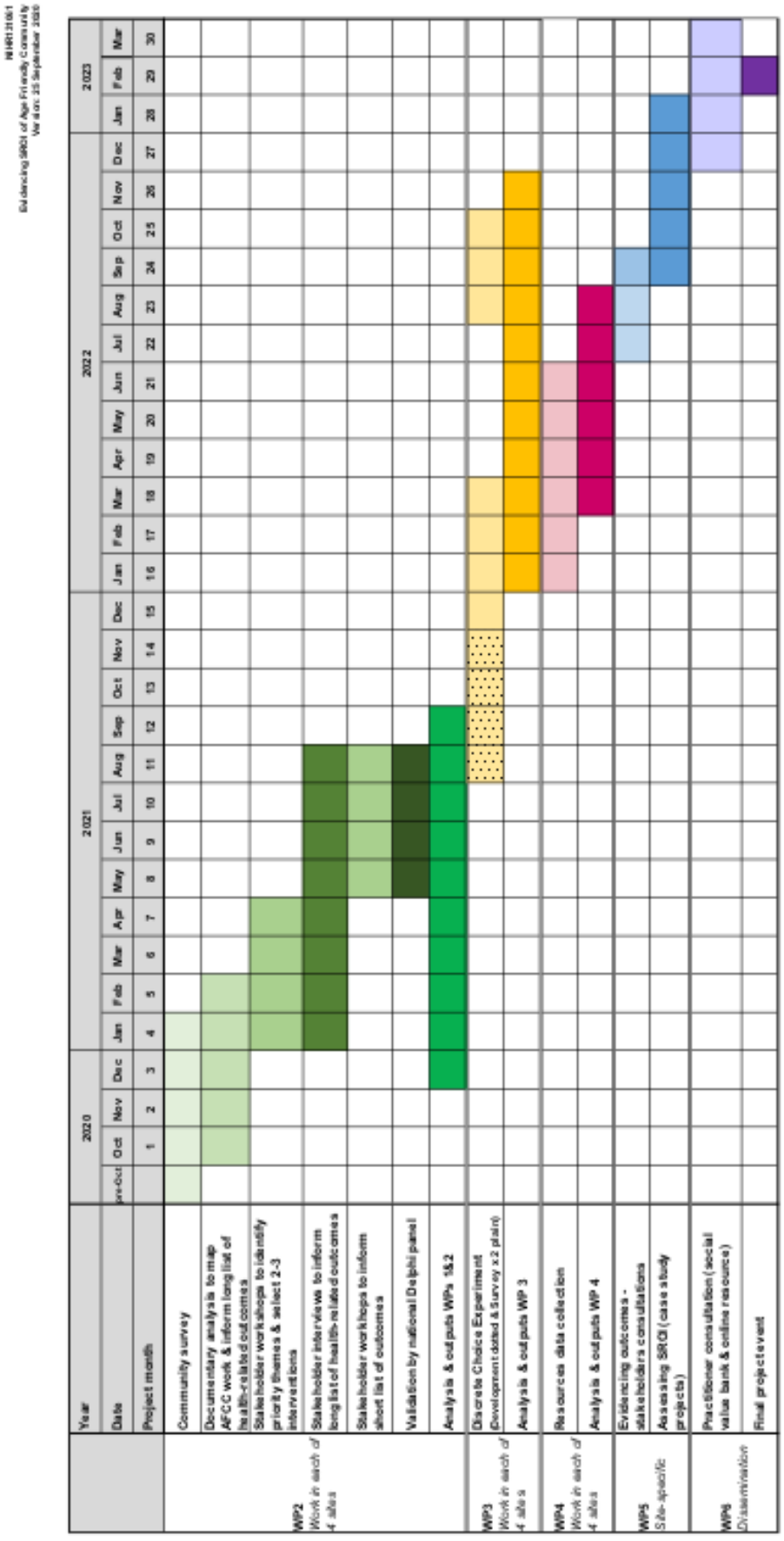
10. APPENDICIES

10.1 Appendix 1 – Schedule of Procedures




NIHR131061
Evidencing SROI of Age Friendly Communities
Version: 15 September 2020
Year
2020
2021
2022
2023
Date
pre-Oct
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Project month
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
WP2 Work in each of 4 sites
Community survey
Documentary analysis to map AFCC work & inform longlist of health-related outcomes
Stakeholder workshops to identify priority themes & select 2-3 interventions
Stakeholder interviews to inform longlist of health-related outcomes
Stakeholder workhops to inform short list of outcomes
Validation by national Delphi panel
Analysis & outputs WPs 1&2
WP3 Work in each of 4 sites
Discrete Choice Experiment Development/pilot & Survey x 2 pilots
Analysis & outputs WP 3
WP4 Work in each of 4 sites
Resources data collection
Analysis & outputs WP 4
WP5 Site-specific
Evidencing outcomes - stakeholders consultations
Assessing SROI (case study projects)
WP6 Dissemination
Practitioner consultation (social value bank & online resource)
Final project event

10.2 Appendix 2 – Amendment History

Amendment No.	Protocol version no.	Date issued	Author(s) of changes	Details of changes made