Project: **Evaluating a 'Minimum Income Guarantee' and modelling major income supplementation policies: A development award**

STUDY PROTOCOL
V2.1

Start date: 01/03/2023
End date: 29/02/2024
Duration: 12 months

Purpose The purpose of the Protocol is to describe the project. Every care has been taken in drafting this protocol; however, corrections or amendments may be necessary.

MRC/CSO Social and Public Health Sciences Unit

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1. Summary

Background and research aim

Economic conditions are well-recognised as key drivers of health and wellbeing inequalities. There is considerable interest in using major income supplementation policies (MISPs) such as Universal Basic Income to reduce such inequalities. Evaluating such interventions is challenging because they give rise to cascades of complex causal, temporal, and spatial effect dynamics. We aim to overcome some of these challenges by applying a systems lens to the problem, building towards two planned future studies: 1) evaluating the introduction of the Scottish Child Payment (SCP), a form of Minimum Income Guarantee (MIG) for families in Scotland; and 2) using policy modelling to explore potential health and health inequalities impacts of a range of MISPs.

Methods

As development work towards this future research, we will complete four work packages (WPs). In WP1 (months 1-6), we will theorise the system surrounding MISPs to generate a set of systems maps, drawing on our prior work and conducting participatory systems mapping workshops with attendees from relevant stakeholder groups (e.g., local and national policymakers, third sector organisations, and those with lived experience of economic/health inequalities). We will focus on the dynamic interdependencies between individual income, economic growth, and health. The systems maps will influence planning of subsequent WPs and the future research. In WP2 (months 1-12), we will apply our pioneering structured approach of evaluability assessment to the SCP, which was first introduced in February 2021 and expanded in November 2022. Through one-to-one interviews and stakeholder evaluability workshops, we will produce a clearly defined and agreed evaluation plan.

In WP3 (months 1-12), we will explore two methodological approaches to MISP modelling. First, we will explore the potential to integrate our Health Equity and its Economic Determinants (HEED) microsimulation model with a computable general equilibrium (CGE) model of the macroeconomy created by the National Institute for Economic & Social Research (NIESR). This would allow MISPs to influence the macroeconomy (e.g., allowing reduced work incentives for individuals to alter employment or interest rates, or increased productivity to influence economic growth) with this then propagating to future health and economic outcomes, incorporating crucial complexities that cannot be included by microsimulation alone. Second, we will explore the potential of using agent-based modelling to evaluate health effects and emergent properties of MISPs, as these allow for interactions between individuals in the computer simulation (which microsimulation typically does not). Finally, in WP4 (months 4-12) we will clearly define preferred MISP scenarios and outcomes for future modelling based on public and stakeholder engagement, including prioritisation workshops and planning for use of deliberative methods in the definitive studies.

Impact and dissemination

Following this development grant, we will be ideally placed to begin work on both an empirical evaluation of the SCP and modelling studies of other MISPs, allowing us to comprehensively evaluate potential effects of such policies on health and health inequalities in the UK. Our co-produced outputs from development work will include scoping reports, systems maps, and an evaluability report for the SCP, all of which will be disseminated to relevant stakeholders.

2. Introduction

2.1 Background and rationale

The economic determinants of health are key drivers of population health and health inequalities.[1-3] Those with high incomes live longer,[4-6] experience less chronic disease,[7] and report better mental health and wellbeing than those who are more disadvantaged.[8] Population health also responds positively and negatively to macroeconomic influences i.e. factors associated with the economy as a whole, such as recessions and inflation. However, impacts can be varied: during recessions, life expectancy may actually improve due to reduced spending on risky health behaviours, but mental health and suicide rates often worsen.[9 10] In such circumstances, government policy responses have been shown to mitigate or modify the extent of health harms, suggesting economic policies substantially impact population health.[11 12] As noted by NIHR in its call for research,[13] there is growing interest among policymakers and public health researchers in the potential role of Universal Basic Income (UBI) and related policies (henceforth 'major income supplementation policies', MISPs) for population health.[13] However, their impact is challenging to both evaluate and explore in modelling studies due to the complex pathways between economic determinants and health.

There is considerable policy and academic interest in the potential role of MISPs to reduce health inequalities in the UK, particularly given the burgeoning cost-of-living crisis and concerning rise in child poverty rates.[14 15] While MISPs represent a radical departure from the status quo in most high-income welfare states, the idea of UBI is fairly simple: a regular fixed payment (which may or may not be at subsistence level) delivered in cash to all individuals in a society, on an entirely unconditional basis.[16 17] A recent review by our team finds that, while there have to date been no evaluations of the health impacts of interventions which meet all the criteria for a UBI, evidence from interventions in high and upper middle-income countries meeting some of the criteria suggests some potential health benefits, particularly for mental and maternal/child health.[18]

The policy landscape surrounding UBI in the UK is rapidly evolving – there has been increasing policy discussion over the last decade, but little tangible progress towards implementation.[19 20] A small targeted trial among young care leavers in Wales is due to begin in 2023.[21 22] A more comprehensive pilot planned for Scotland was unable to proceed in 2020 due to the requirement for implementation of some aspects at a UK level.[23] More recent policy conversations in Scotland have therefore moved towards alternative MISPs utilising devolved social security policies. Scottish Government (SG) has now committed to explore

provision of a Minimum Income Guarantee (MIG), where individuals are prevented from falling below a defined income threshold deemed sufficient to live with dignity.[24] While SG policy development of a population-wide MIG is in its early stages, the novel Scotland-only SCP can be thought of as a smaller scale MIG for families. Our team is well placed to co-develop evaluation plans for the SCP, having ongoing membership of the Scottish Basic Income (BI) feasibility group and the MIG steering group (with one of our team co-chairing the SG MIG evaluation subgroup being formed in autumn 2022), and past involvement in the planning and implementation of the Welsh Basic Income pilot for care-leavers in a partnership between the National Institute of Economic and Social Research (NIESR) and University of Cardiff. We are also ideally placed to develop policy modelling, building on ongoing microsimulation modelling of the health impacts of incremental income and social security changes.

At the individual level, there are multiple mechanisms through which income may directly and indirectly influence health.[25] It typically provides the practical resources needed to live a healthy life (e.g., by enabling people to access housing or buy food) but it can also act indirectly through psychological or biological pathways; for example, the stress of living on a very low income can influence biological stress markers that increase the risk of poor physical health. Health-related behaviours may also be impacted by income changes, with some healthful behaviours such as healthy eating requiring money, while coping mechanisms and differences in time-preferences may result in increased consumption of unhealthy products such as tobacco.[26 27] In general, income is non-linearly associated with health, with income increases carrying greater health gains for the poorest,[28 29] and transitions across a poverty threshold appearing particularly impactful.[30]

Income does not act in isolation in influencing health, operating as part of a wider system; there are interactions between the effects of income and other economic determinants such as employment status. Unemployment substantially affects health,[31 32] as does job quality and security,[33] but since at least some of this employment effect on health will be mediated via income it is difficult to assess their effects in isolation.[34] A further layer of complexity lies in understanding the ways in which features of social security and macroeconomic policies (such as targeting and conditionality i.e. imposing conditions that must be met prior to receipt of benefits) may themselves influence population health, independent of their effects on income or labour market decisions.[35 36] Finally, feedback loops between different elements of the system may lead to emergent properties or spillover effects, which could have unanticipated consequences for population health; for example, any macroeconomic consequences of introducing a MIG may themselves influence health in

ways that either amplify or diminish direct health impacts of the income provided.[37] A systems perspective specifically acknowledges these complex interactions and seeks to understand how diverse pathways may bring about counter-intuitive outcomes. Incorporating such a perspective into our planned evaluation of the SCP and our planned simulation modelling will therefore help provide a fuller understanding of the economic determinants of health and health inequalities, though challenges remain.[38 39]

Building on our expertise and drawing on the theory and policy landscape outlined above, we wish to explore the potential for MISPs such as UBI or MIG to influence population health, applying a systems lens and focusing on the implications for health inequalities. To achieve this, there is first a requirement to explicitly theorise and map the policy system surrounding hypothetical or proposed MISPs, incorporating the views and experiences of stakeholders, including those with lived experience and the public as a whole. We therefore propose key development work for two complementary approaches to study MISPs: an evaluation of the SCP policy package in Scotland; and the creation of a set of comprehensive policy modelling tools drawing on existing data that are capable of simulating diverse individuals, their behaviours, and their relationships with both others and their environment.

2.2 Aims/Objectives/Research questions

Our ultimate aim is to model and evaluate population health impacts of innovative MISPs in a UK context, working with policymakers, the public, and other stakeholders. In the four work packages (WPs) in this development award, we will carry out development work which will make this aim achievable in future applications.

Our specific research questions for this development award are:

1. How do the economic determinants of health interact with Major Income Supplementation Policies (MISPs) to shape population health and health inequalities?

2. Using an evaluability assessment approach, what are the evaluation options for studying the Scottish Child Payment (SCP), and what are their relative strengths and limitations?

3. What policy simulation approaches are best for exploring MISPs and how can they be implemented?

4. Which policy scenarios and impacts are of most interest to policymakers, the public, and other stakeholders?

3 Study Design/Methods

3.1 Study Design

Work package 1: Theorising the system (Months 1-6)

Policies such as MISPs are implemented in a complex political system with many competing priorities, where policy choices in one sector (e.g., an income guarantee) can have large, cascading effects elsewhere (e.g., labour market, welfare system, housing, child poverty, inflation, voter approval). There is often no "correct" solution, because compromises between different outcomes require value judgements. This means that to assess the true benefits and costs of a policy in relation to health outcomes, policy effects and their interdependencies should be evaluated transparently and across a wide range of possible effect pathways and outcomes. However, no policymaker, evaluator or topic expert has knowledge of the whole system. In WP1, we will draw on our existing networks and systems mapping expertise (e.g., as part of the UKPRP Systems Science in Public Health and Health Economics Research (SIPHER) Consortium) to bring together approximately 20-30key stakeholders from diverse backgrounds in 2-3 participatory workshops. These will be face-to-face if possible, but online methods have also been developed.

First, initial system maps will be produced by the investigators, building on the SIPHER Inclusive Economy system maps and refined using published evidence specifically on MISPs (**months 1-2**). Key stakeholders will then work with trained facilitators from the MRC/CSO Social and Public Health Sciences Unit's systems science team to iteratively co-create system maps of the hypothesised causal pathways between changes in income and the macroeconomy and changes in (the distribution of) physical and mental health (**months 3-5**). Attendees will be selected to provide representation from Scottish Government, local government, the Department for Work & Pensions (DWP), Public Health Scotland (PHS), and relevant third sector organisations (e.g., Joseph Rowntree Foundation). We will hold a separate workshop with the public, drawing from established public engagement groups (comprising diverse socioeconomic groups, including people with lived experience of economic and health inequalities) run by the Poverty Alliance. Workshop objectives will be to consider: 1) the key components of the income & health system for a MISP evaluation; 2) the causal mechanisms, pathways, and temporal dynamics linking income and health changes; and 3) effect cascades and feedback loops within the system considered particularly influential in terms of effect size and political importance. We anticipate

separate systems maps for different policies, though there may be core aspects which are shared. Maps will be finalised in **month 6**.

Work package 2: Evaluability assessment of the Scottish Child Payment (Months 1-12)

In contrast to UBI, there is much less agreement about what criteria require to be met to constitute a MIG scheme. Key principles are that the policy should ensure all relevant parts of the population have the minimum income necessary to pursue a healthy life (including participation in social activities and other norms), recognise that some population subgroups may require a higher income floor to achieve this (e.g. people with disabilities), that those groups who are eligible will take up the MIG, and that such an income should be unconditional.[40] It differs from UBI in that it is means-tested, and achieving the minimum income can occur through work and other income sources (rents, savings, dividends, etc.). In Scotland, additional devolved powers allow the establishment of new social security policies or additional payments to existing schemes, thereby providing the opportunity to develop many aspects of a MIG – either for the whole population or for specific population subgroups (e.g. parents and children). After failed attempts at implementing a UBI pilot in Scotland, a MIG of some form is now being actively developed by SG, though its exact nature is yet to be defined. Based on our understanding of current policy discussions, it is possible that a population-wide MIG would consist of a suite of policies rather than one single payment, of which the SCP is likely to be one element.

In our team's previous work with SG, PHS, and local authorities (including under the NIHR PHIRST scheme), we have demonstrated the utility of evaluability assessment in the UK.[41] This process provides a structured approach to developing evaluation plans through engaging with relevant stakeholders to: 1) define the intervention; 2) develop a systems map or logic model; 3) identify key outcomes of interest; 4) prioritise potential research questions of interest; 5) explore evaluation options, including scoping existing data sources and potential data collection; and 6) discuss and agree evaluation plans.

During **months 1-4** we will analyse data from the British Household Panel Survey to assess characteristics associated with take-up of a MIG for pensioners which was enacted between 1999-2002.[42] This will help us understand who may not engage and allow policymakers to consider how addressing non-take up can be incorporated into development of future proposed MIG(s), while acknowledging that the transferability of such evidence may be questioned. During **months 7-12**, we will plan for and conduct 4-6 one-to-one interviews (with similar stakeholders as for WP1 workshops) to help understand the current policy landscape surrounding

the SCP, including key concerns of policymakers, the anticipated intended or potential unintended outcomes, and any other key priority policies which should be researched. We will also concurrently organise two evaluability workshops to address the above steps and produce a clearly defined evaluation plan (**months 7-12**).

Work package 3: Methodological options for policy modelling (Months 1-12)

Modelling the potential implications of MISPs is highly challenging and has not previously considered health outcomes. A major challenge is that MISPs may have substantial macroeconomic consequences. For example, a MISP could potentially lead to labour shortages in certain sectors and parts of the country if it impacted on people's willingness to work and wages, therefore bringing about increasing interest rates or triggering a recession (which in turn might reduce potential for government expenditure on a MISP). In contrast, a MISP could lead to health improvements which increase labour market participation and thereby increase economic growth. Such macroeconomic consequences should therefore be incorporated into policy modelling since they can substantially enhance or reverse health impacts. In addition, the relationship between income and health is bidirectional e.g., health improvements might improve income, in addition to increased income improving health. There are also non-income pathways through which such policies may influence health (e.g., effects on job insecurity, psychosocial stress, conditionality of policies), which it may be difficult to model directly. Creating informative policy models therefore requires substantial development work, which will be achieved through a series of joint meetings between the co-investigators to incorporate this complexity. We plan to explore two potentially complementary approaches to allow modelling of the health effects of MISPs in future work.

First, we will explore the feasibility of integrating an existing computable general equilibrium (CGE) model of the macroeconomy created by the National Institute for Economic & Social Research (NIESR) with a dynamic microsimulation model of income, employment, and health being created as part of our ongoing European Research Council-funded Health Equity and its Economic Determinants (HEED) project.[43] HEED uses information on predicted changes following a policy change from UKMOD (a static tax-benefit microsimulation model), in combination with a discrete choice random utility maximisation labour market module, to simulate changes in household income and employment and predict how these may impact population health. Predictions are based on relationships between income, employment, and health (including mental health and mortality) estimated using causally-informed epidemiological approaches such as g-

methods, harnessing the UK Household Longitudinal Survey,[44 45] and through systematic reviews.[30] However, at present the HEED model cannot incorporate macroeconomic relationships and does not consider child health outcomes, which are likely to be of fundamental importance for the potential long-term health impacts of MISPs. In this development award, we will therefore explore the feasibility of developing a process for the micro and macro models to be integrated. We will also define what additional health (e.g. child health) and other outcomes should be added into the model, and what assumptions can be reasonably made within the modelling based on existing evidence, stakeholder views, and PPI (WP4).

Second, we will create plans for developing a new agent-based model (ABM), an approach which allows for interactions between individual agents (people) within a computer-based simulation. ABMs are well suited to exploring potential unanticipated impacts that may arise (likely particularly important for MISPs), but are typically less able to estimate effects of specific policies than microsimulation.[46] Our team will develop model structures for both approaches over the twelve months, including 1) identifying data sources, 2) defining epidemiological parameters required for future modelling (drawing on the systems maps), 3) considering which assumptions may be required and exploring their appropriateness (with input from PPI), and 4) conducting scoping reviews to inform model development. WP outputs will include an understanding of the feasibility and necessity of each modelling approach, specific plans for how to implement future models, and how to robustly validate them.

Work package 4: Defining policy scenarios (Months 4-12)

The decisions around which policy scenarios should be prioritised for our planned future research must be based on both their amenability to being tested and, as crucially, their relevance to the policy landscape. Similarly, outcomes must be selected based on those prioritised by stakeholders and most likely to be sensitive to the selected policies. Building on our previous review,[18] we will conduct a new scoping review of relevant academic and grey literature (e.g. political manifestos, think tank reports) to create a typology of existing or planned MISPs (**months 4-7)**. Our initial selection of policy scenarios will also be informed by our integration into the SG MIG evaluation subgroup and the Scottish Citizens' BI Feasibility Study Steering Group, allowing us to select meaningful and realistic options.

Stakeholder engagement and PPI are critical components of this WP. Given MISPs typically affect the whole population, during the development award period we will have two aims: to develop a provisional shortlist of policy scenarios and outcomes through initial PPI, and to lay the groundwork for systematically collecting public input through future

deliberative qualitative research. Deliberative approaches to public engagement and research typically involve recruiting a random sample of the public (appropriate given acceptability to the whole population is important) and presenting them with evidence from a diverse range of experts. Often termed 'mini-publics', we intend to integrate a range of deliberative techniques in our definitive research, with the aim of co-producing and clearly defining policy scenarios and outcomes to be investigated (e.g., wellbeing, career progression, greenhouse gas emissions). To prepare for delivery of this, during **months 4-10** of the development award we will review the literature on public preferences in relation to MISPs, determine which deliberative approaches are most appropriate for our planned research, identify relevant experts, and develop joint plans with the Poverty Alliance for recruiting a representative cross-section of the public for the future deliberative work. Additionally, in **months 8-12** we will generate a preliminary list of proposed policy scenarios and outcomes for discussion with stakeholders in two prioritisation workshops. To incorporate the views of members of the public into the development of our provisional shortlist in advance of undergoing the more comprehensive deliberative research, we will also conduct three focus groups facilitated by the Poverty Alliance, aiming to cover multiples axes of potential inequality in our sampling e.g., socioeconomic position, gender, disability, age. This WP's outputs will include a prioritised shortlist of policy scenarios to be explored within future modelling studies, as well as the key outcomes to be considered.

3.2 Study Procedures

3.2.1 Recruitment

Recruitment of participants in workshops and/or interviews for WPs 1 and 2 will begin from the project start date. Two Research Associates (RAs; 0.4FTE and 0.35FTE) have been recruited to lead this process, and are responsible for approaching participants and liaising with relevant WP Leads. Recruitment of participants for the focus groups and prioritisation workshops in WP4 will commence in month 3, and be led by an RA and the WP4 Leads.

Participants will receive an information sheet and consent form via email in advance of the workshop/interview. These will be prepared and disseminated by the relevant RA for the WP. Selection of the participants to be approached will be guided by existing knowledge of the Co-I group and the Poverty Alliance, input from the MIG Steering Group, and snowballing from those who agree to participate.

3.2.2 Data Collection

Data collection with participants will be either face-to-face or virtual (e.g. via Zoom), though workshops will be preferably face-to-face if possible. The workshops sessions will not be recorded; notes will be taken contemporaneously. The interviews and focus groups will be recorded. A provisional topic guide for the one-to-one interviews in WP2 is attached in Appendix B.

Systems mapping (WP1): Two systems mapping workshops will be conducted between May and July 2023, each with 10-12 participants. One workshop with policymakers and other stakeholders will be hosted by the University of Glasgow, and one with members of the public will be hosted by the Poverty Alliance. Both workshops will be coordinated by an RA who will also be responsible for delivering the output from the workshops (completed systems maps) and circulating these to participants to ensure consensus has been reached.

Evaluability assessment (WP2): 4-6 one-to-one interviews will be conducted between November 2023 and February 2024, drawing from a pool of potential participants involved in all aspects of the project. Two evaluability workshops will be conducted in November and December 2023, each with 10-12 participants. The workshops and interviews will be delivered by separate RAs, with each being responsible for recruitment and production of the written outputs from the process.

Modelling (WP3): Four preferably in-person day-long meetings will be hosted by the University of Glasgow for all Investigators across the study period in April 2023, July 2023, October 2023, and January 2024, with two additional virtual meetings of two hours before and after the last meeting. The WP Leads will be responsible for delivery of the written outputs summarising the discussions and planned research.

Deliberative research (WP4): Three focus groups with members of the public will be conducted in September to November 2023, organised and delivered by the Poverty Alliance. Two prioritisation workshops with policymakers and other stakeholders will be conducted between November 2023 and January 2024, each with 10-12 participants (likely to be some overlap with participants in WPs 1 and 2). An RA will be responsible for delivery of the written outputs from the workshops.

3.3 Data Analysis

Systems maps will be produced iteratively as part of the workshop process, as described in section 3.1. Qualitative data from other workshops and interviews will be analysed thematically by an RA, with key themes and viewpoints drawn out to produce a written summary of the sessions to inform future research.

4. Research Governance and Regulatory Issues

4.1 Ethical issues

The project was discussed with the University Ethics Committee for the College of Medical, Veterinary and Life Sciences. As all activity involved in this project is intended to inform the design of future research, they therefore felt that it fell within the remit of PPIE, and did not believe that ethical approval was required as per NIHR guidance. A copy of the communication has been submitted to NIHR.

4.2 Data Management

As this project consists of development work that solely involves PPIE or Investigator meetings, a formal Data Management Plan has not been prepared. Any data generated as part of the project will be stored and retained as per University of Glasgow regulations.

5 Project Management

5.1 Project Manager

The Project Manager with responsibility for the day-to-day management of the project is: S Vittal Katikireddi.

5.2 Project Management Group

The Project Management Group will consist of the PIs, Co-Investigators, and other Project Team members.

The Project Team consists of the following members:

Name	Division/Organisation
S Vittal Katikireddi	PI
Rachel M Thomson	PI
Stephen Currie	Project Co-ordinator
Arnab Bhattacharjee	Co-I
Heather Brown	Co-I
Peter Craig	Co-I
Gillian Fergie	Co-I
Marcia Gibson	Co-I

Name	Division/Organisation
Alison Heppenstall	Co-I
Gerry McCartney	Co-I
Fiona McHardy	Co-I
Petra Meirier	Co-I
Luke Munford	Co-I
Anna Pearce	Co-I
Matteo Richiardi	Co-I
Eric Silverman	Co-I
Matthew Sutton	Co-I
Olivia Hamilton	RA (0.4 FTE)
Michal Shimonovich	RA (0.35 FTE)

The Project Management Group will meet monthly (virtually).

Minutes of PMG meetings will be taken on the SPHSU template and a Decision Log will be created and maintained by the Project Manager.

5.3 Advisory Group / Steering Committee

The project Advisory Group will meet quarterly to provide guidance and oversight of the project. Membership details are still to be finalised, but the group will include independent researchers, third sector organisations, and relevant policymakers.

5.4 Project Filing Structure

Electronic project files will be kept on a shared folder and managed by the Project Manager, following the SPHSU unit templates.

6. Dissemination

6.1 Intended outputs

We anticipate pursuing two future research projects. Our success criteria for progressing to an application to evaluate the SCP are: 1) evaluation methods, including key health and other outcomes, defined; and 2) data are available and accessible, or primary data can be collected, to allow robust evaluation. Our success criteria for pursuing future modelling are: 1) modelling approaches which produce policy-relevant outputs have been agreed and feasible plans developed; 2) model structures have been created and data required for parameterisation defined; and 3) policy,

public, and other stakeholders keen for ongoing co-production on modelling.

We intend our future research to create highly policy-relevant findings which will be co-produced with key policy stakeholders we are currently working with where this is appropriate, including the SG, PHS, the Office for Health Improvement & Disparities (OHID), DWP/DHSC Work & Health Unit, and the Joseph Rowntree Foundation – see letters of support. Empirical findings about the SCP's impact will inform consideration of future economic policies by the UK and devolved governments, as well as helping SG refine its implementation. Our research will also ultimately create an openly accessible suite of policy models which can be used by policymakers and other researchers – all microsimulation or agent-based models produced will be open access, and we will explore the extent to which any CGE models produced could be made open access. Intellectual property (IP) agreements for modelling from any future applications will be formally agreed within the time frame of this award; it is anticipated that background IP for existing models which are only modified or improved for new purposes in these applications will be retained by their originators, whereas IP for any newly-generated models would be held by the University of Glasgow.

6.2 Public Engagement and Knowledge Exchange

PPI is embedded throughout the life of this project, and the future planned definitive studies which it will facilitate. In Work Package 1, where we aim to map the system surrounding MISPs, we will incorporate structured systems mapping workshops with participants from the public and other key stakeholder groups (such as policymakers and third sector organisations). Our sample from the public will be drawn from the Poverty Alliance's existing public panels, including through its Get Heard Scotland groups. Workshops will include a short training session on the process of systems mapping to ensure that all participants are equally able to contribute regardless of previous experience. The workshops will be collaborative and primarily participant-led, with the aim of developing a systems map which is truly representative of the views of those present. The outputs of the workshops will then be fed back to the attendees to ensure that the final drafted map(s) reflect the system as they see it. As described in the Research Plan, these maps will heavily inform and shape the remainder of the research project.

In Work Package 2, our evaluability assessment of the SCP, there are two stages of PPI. We will conduct a set of one-to-one interviews with a smaller number of key stakeholders (drawn from third sector and policy stakeholder groups) to develop our thinking on the policy landscape and anticipated mechanisms of the SCP, and the population subgroups to

whom we should pay specific attention in our evaluation. For the second element of the work package, a series of evaluability workshops, the groups invited to attend will include overlaps with those identified previously, but we will also specifically build in the learning from the interviews and other WPs to ensure that all important population subgroups identified as potentially affected by the SCP are represented.

Finally, Work Package 4 includes PPI and stakeholder engagement on the most appropriate policies and outcomes to include in our definitive studies, and also involves preparation for the use of deliberative methods (thought of as a hybrid between involvement and research) to build on this and further inform our thinking during the future study period. Following a review of the existing literature, the former will include a series of stakeholder prioritisation workshops and three focus groups with a diverse range of public members in the closing months of the project, likely with the same or similar attendees as the systems mapping workshops. For the latter, we will liaise with relevant experts and begin the planning process for running a form of deliberative research that we and our PPI input judge to be most appropriate (e.g., citizens juries) within the definitive studies, as this can take considerable time to plan effectively. Together, these two elements should ensure that we meaningfully co-produce the policy scenarios included in our final research with the public, both during the development award period and the period in which we undertake our definitive research.

7. Project Milestones / Timelines

- Mar 2023: Advisory Group invitations issued; membership finalised Apr
- Apr 2023: Participants for WP 1 identified and invited
- Jun 2023: Case study of pensioner MIG completed (WP2)
- Jul 2023: Mapping workshops (WP1) completed
- Aug 2023: Systems maps finalised
- Sep 2023: Scoping review of MISPs completed (WP4)
- Oct 2023: Participants for WP4 identified and invited
- Dec 2023: Evaluability workshops completed (WP2)
- Jan 2024: Stakeholder interviews (WP2), prioritisation workshops and focus groups completed (WP4)
- Feb 2024: Evaluation plan and future research plans finalised

A Gantt chart (project plan) and a visual project overview are included in Appendix A.

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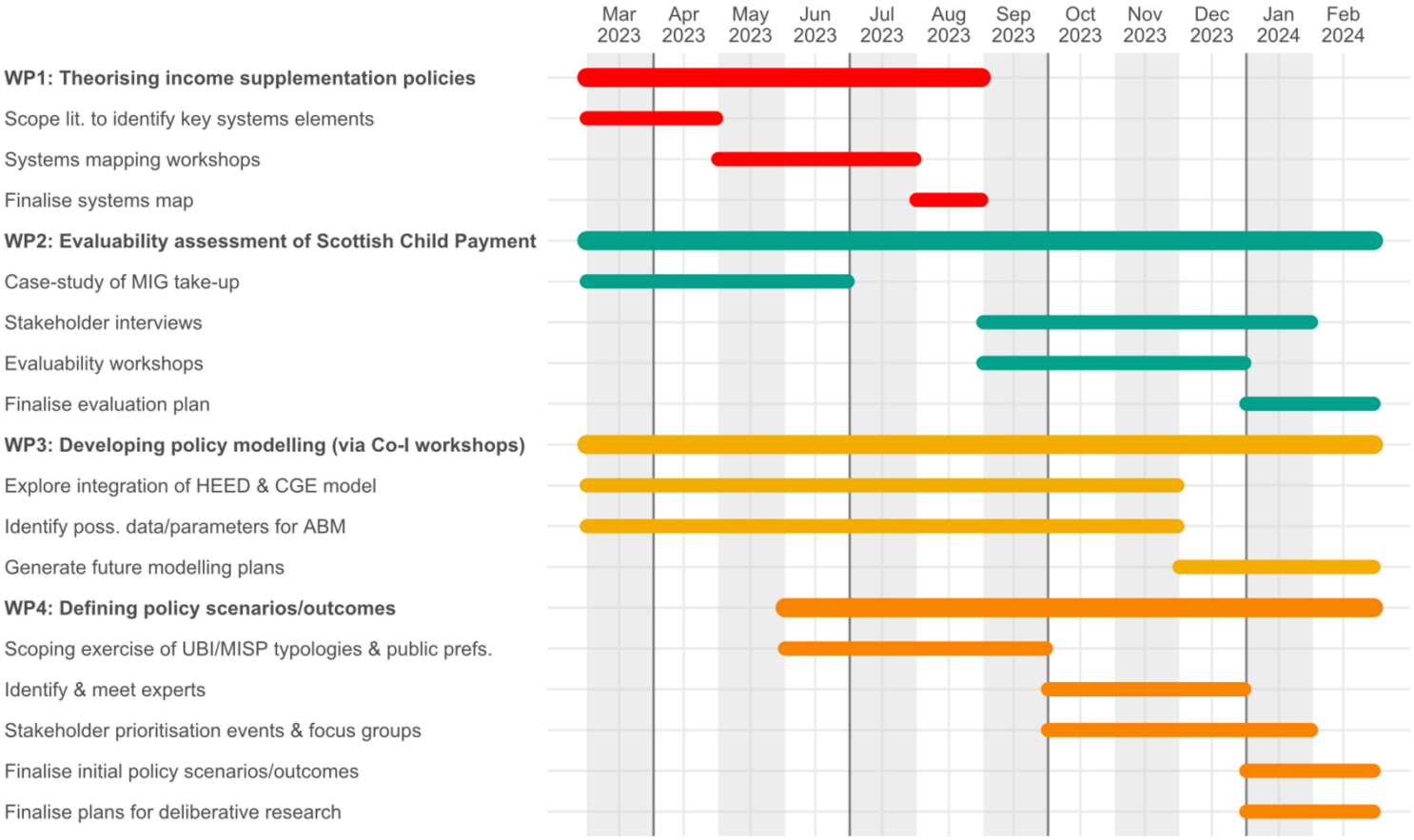
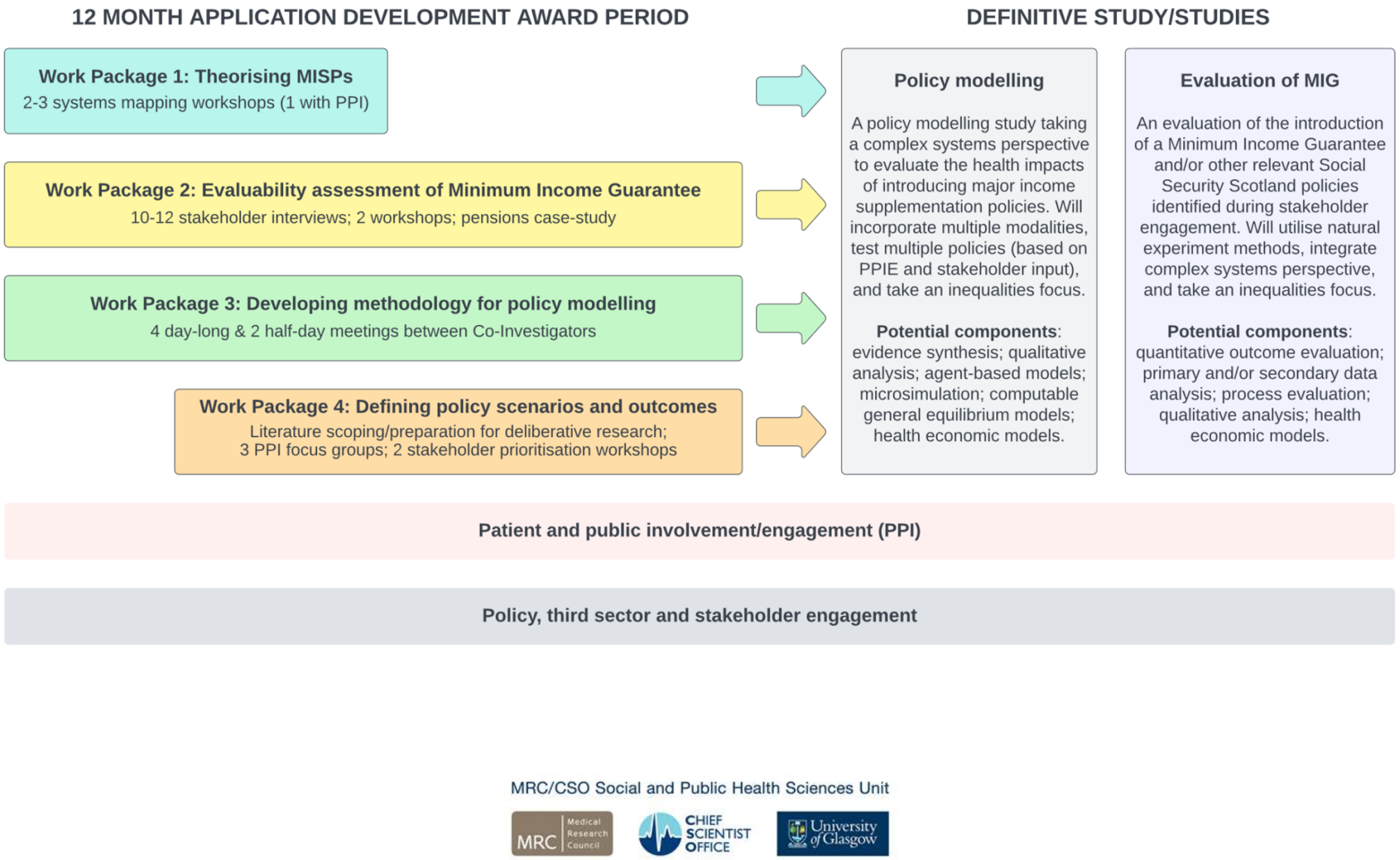
9. Version Control Table

V1.0	Original approved version
V2.0	Updated to include amendments to research design to complete an Evaluability Assessment on the Scottish Child Payment, rather than Minimum Income Guarantee (Work Package 2)
V2.1	Version control table added

Appendix A: Project Timeline




12 MONTH APPLICATION DEVELOPMENT AWARD PERIOD
DEFINITIVE STUDY/STUDIES
Work Package 1: Theorising MISPs
2-3 systems mapping workshops (1 with PPI)
Work Package 2: Evaluability assessment of Minimum Income Guarantee
10-12 stakeholder interviews; 2 workshops; pensions case-study
Work Package 3: Developing methodology for policy modelling
4 day-long & 2 half-day meetings between Co-Investigators
Work Package 4: Defining policy scenarios and outcomes
Literature scoping/preparation for deliberative research;
3 PPI focus groups; 2 stakeholder prioritisation workshops
Policy modelling
A policy modelling study taking a complex systems perspective to evaluate the health impacts of introducing major income supplementation policies. Will incorporate multiple modalities, test multiple policies (based on PPIE and stakeholder input), and take an inequalities focus.
Potential components: evidence synthesis; qualitative analysis; agent-based models; microsimulation; computable general equilibrium models; health economic models.
Evaluation of MIG
An evaluation of the introduction of a Minimum Income Guarantee and/or other relevant Social Security Scotland policies identified during stakeholder engagement. Will utilise natural experiment methods, integrate complex systems perspective, and take an inequalities focus.
Potential components: quantitative outcome evaluation; primary and/or secondary data analysis; process evaluation; qualitative analysis; health economic models.
Patient and public involvement/engagement (PPI)
Policy, third sector and stakeholder engagement

Appendix B: Provisional Interview Topic Guide

To be added