An Evaluation of the Social Navigator Project - Improving the financial, health and social wellbeing of financially excluded individuals and their dependents through social navigators in South Tyneside

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Abstract: This protocol sets out our PHIRST team's methodological approach to the evaluation of the Social Navigators project in South Tyneside. We opted for a theory-informed approach combined with an economic evaluation. The evaluation design is premised on outcomes and research questions identified through the Evaluability Assessment (EA). The findings of the evaluation will provide South Tyneside commissioners with an understanding of how Social Navigators impact on financial stability and the health and social wellbeing of clients accessing the service, to inform the future development and recommissioning of the service.

This project is funded by the National Institute for Health and Care Research (NIHR) [Public Health Research Programme (NIHR133202/PHIRST)]. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Project Title	An Evaluation of the Social Navigator Project - Improving the financial, health and social wellbeing of financially excluded individuals and their dependents through social navigators in South Tyneside
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Aim	To explore and quantify the health and wellbeing impact of the Social Navigator project in South Tyneside on clients to inform recommissioning and future development of the service
Project No.	NIHR134419
Ethics Application Submission	Under review, submitted 5/6/2023 to NU HLS ethics committee (Reference: 2023-4058-3003)
Project Start	1 June 2023
Project Completion	31 May 2023
Final Report Submission	31 May 2023
Protocol Version No.	Version 2

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1. Overview of the intervention to be evaluated and contextual information

1.1 Context

South Tyneside includes the towns of South Shields, Hebburn and Jarrow and the villages of Boldon, Cleadon and Whitburn in the North-East of England. South Tyneside has a geographical area of 64.43 km2 (24.88 sq mi) and a population of 151,133. It is bordered to the west by Gateshead, to the east by the North Sea, to the north by the River Tyne, and to the south by Sunderland. In their 2021 Joint Strategic Needs and Assets Assessment, South Tyneside ranked 3rd for employment, 13th for income, and 15th for health in term of most deprived areas out of 326 authorities).

Financial difficulties are a common cause of stress and anxiety and drastically reduces recovery rates for common mental health conditions. The impact of people's mental and physical health can be particularly severe if they resort to cutting back on essentials, such as heating and eating, and there is a strong link between problem debt and suicide. Stigma around debt can also mean that people struggle to ask for help and may become isolated (Money and Mental Health Policy Institute 2021). The South Tyneside Homes Welfare Support Team are an impartial advice team that serve all residents of the borough of South Tyneside regardless of their tenure. They also administer the Local Welfare Provision service in the borough on behalf of South Tyneside Council.

The welfare support team noticed people returning multiple times for support from the crisis team, community funds and foodbanks. Despite repeated access to these services, their financial circumstances were not improving, and they were still financially dependent and not reaching financial stability. Service users who repeatedly used the crisis and welfare support services mentioned that they had complex additional health and social needs, which continuously impacted on their ability to be financially secure and stable. These wide-ranging needs were not just housing or tenancy issues but included social isolation, communication difficulties, fuel poverty, benefit, debt and employment services, access to washing/hygiene facilitates, access to health and welfare services (mental and physical health), lack of skills (including cooking, home hygiene and selfcare). These wide-ranging needs also significantly impacted on people's ability to access services to get help for these needs, which in itself became a key factor in the cycle of re-occurring financial difficulties and this was reflected in the 2019 Indices for Multiple Deprivation where access to housing and services in South Tyneside was ranked as 266th out of 317 (where higher rank relate to higher levels of deprivation) (JSNAA 2021).

1.2 Intervention

To address these issues, South Tyneside Homes (STH), in collaboration and funded by South Tyneside Council (STC), established in 2021 the role of three Social Navigators (SN) to work inclusively and in a person-centred way with service users who presented most often to our welfare services. SN have an outreach role, meeting people on a 1:1 basis wherever they feel most comfortable in community settings. SN and service users work together for as long as needed, which can be up to six months or longer depending on circumstances. The SN work with service users to identify and address the underlying causes of the repeating cycle

of wider issues which lead to frequent financial hardship and instability. The service aims to improve confidence and skills of service users to seek appropriate and timely assistance, increase access to advice, health, employment and financial services, which will reduce health inequalities and reduce financial exclusion and dependency on crisis intervention.

The Social Navigator role is crucial in "knitting" services together and have well established links to at least 34 different organisations in South Tyneside, as well as internal links across the council. SN have direct access to specialist welfare benefit and debt advisors within the welfare support team, as well as direct access to the Local Welfare Provision Scheme and its decision makers. This greatly improves communication between all parties and the speed in which a successful intervention can take place. Not only do the SN refer into these services, but they also receive referrals from other services and organisations. The SN reach out to those who have actively disengaged from other services, such as households where children are affected by frequently re-occurring financial hardship.

The Social Navigator role complements but differs from social prescribers in South Tyneside, as this new role focuses on addressing and reducing the impact and underlying inequalities of financial insecurity of people and their dependents, rather than starting from a health perspective with social prescribers' clients being referred by GPs. SN build a relationship with their client and 'stick to them like glue' until they get to a point where they can start to encourage the client to start doing things independently or for the client to start doing his themselves, while social prescription programmes are often time-limited (e.g. 12 weeks).

STH and STC are keen explore with the PHIRST Fusion team the impact of the SN role on service users, e.g. in what ways any changes in their financial stability have helped them with the health and wellbeing to inform a more robust monitoring and evaluation framework for the service in the future and collect data on longer term impact.

2. Review of existing evidence

We conducted a rapid scoping review of the literature on the use of SN schemes in the context of public health. The primary aim was to identify the evidence and outcomes from such schemes alongside their impacts. The overarching question guiding the literature scoping was 'What can be learnt from previous/existing schemes which address financial stability and health and wellbeing?'

A number of papers and reports purposively selected by the project group provided the initial focus of the literature scoping. These papers were reviewed, and data was extracted in response to the key thematic areas (Brief overview of paper/report; Overview of scheme; What did the scheme consist of?; How have client outcomes changed as a result?; Detail of any evaluation conducted on scheme; Impact of the scheme; How is impact shown – short/medium/long term critical success factors; Training and development).

Following the review of purposively selected papers, a developmental approach to literature searching was used based on key terms emerging from the initial papers and sourcing relevant reference lists of included papers, along with forward citation tracking.

2.1 Existing research on social navigators

There is an extremely limited literature that is applicable to this area of research. In total 4 papers and 2 systematic/ scoping reviews were identified. Most studies have been conducted in a clinical context and are therefore less applicable to the context in South Tyneside.

A systematic review conducted by Gormley et al. (2021) examined the role of peer navigators in substance use disorder treatment. The study found inconclusive evidence of SN, including peers, recovery coaches, and sponsors helping individuals with substance use disorders navigate the challenges of treatment and maintain long-term recovery. However, a more recent scoping review by Krulic et al. (2022), which examined the role of social navigation as a support intervention for people living with HIV, did find that SN, including peer mentors and community health workers, were effective in providing guidance and support in areas such as medication adherence, HIV disclosure, and accessing healthcare services.

Individual papers have focused on non-clinical context, such as community health and social workers but provide low quality of evidence in the form of commentaries or untested toolkits. For example, Wells et al. (2021) explored in their commentary the role of community health workers and non-clinical patient navigators in responding to the COVID-19 pandemic. The authors argue that these workers, who are often trusted members of the community they serve, can play a crucial role in addressing health disparities and improving health outcomes during the pandemic. The article also provides examples of successful programs that have utilized community health workers and patient navigators to address COVID-19-related challenges, such as vaccine hesitancy and access to care. The authors suggest that investing in these types of workers can have significant benefits for both public health and healthcare systems.

Another commentary by Darnell in 2013 discusses the important roles of social workers in implementing the Affordable Care Act (ACA) through the Navigator and Assister programs. The Navigator program aims to provide guidance and support to individuals and families enrolling in health insurance plans through the ACA, while the Assister program focuses on helping individuals access health care services. The article highlights the skills and competencies that social workers bring to these roles, including case management, advocacy, and cultural competence. The author argues that social workers can play a critical role in ensuring that vulnerable populations have access to health care services under the ACA, and that the Navigator and Assister programs offer opportunities for social workers to engage in this work.

Gautam et al. (2022) focus on health students instead of social workers and describe in their article a curriculum toolkit for training student volunteers to serve as community resource navigators, who can help address patients' social needs. The authors argue that addressing social determinants of health is an important aspect of healthcare, and student volunteers can play a vital role in this effort. The toolkit provides guidance on how to train volunteers in key skills such as communication, problem-solving, and resource navigation, and also includes case examples to help students apply these skills in real-world scenarios.

The only primary study on social navigator roles we found in our review is more than 10 years old and limited to a clinical context and focuses on the role of health literacy and

social navigation in cancer communication. Davis et al. (2002) found that individuals with low health literacy face challenges in accessing and understanding cancer information and that SN, including healthcare providers and family members, can help address these challenges by providing personalized guidance and support.

2.2 Health and wellbeing outcomes

Therefore, these studies provide limited insights for the evaluation of the Social Navigator project in South Tyneside. To identify relevant health and wellbeing outcomes that the evaluation could focus on, we scoped additional literature that members of the research team were aware of themselves or through their colleagues.

Despite being part of UK government and NHS policy for a while now, the evidence supporting social prescribing remains weak. For example, Chng was part of an evaluation team (Mercer et al. 2019) that assessed the effect of a primary care–based community-links practitioner (CLP) intervention on patients' quality of life and well-being in socioeconomically deprived areas of Glasgow using a quasi-experimental cluster-randomized controlled trial. They were unable to prove the effectiveness of referral to CLPs for improving patient outcomes. Future efforts to boost uptake and engagement could improve overall outcomes, although the apparent improvements in those who regularly saw the CLPs may be due to reverse causality.

Studies employing other kinds of research designs however, especially qualitative approaches, have found more potentially useful information. For example, Fuse researchers (Cheetham et al. 2018) evaluated an integrated wellness service in Gateshead using a novel embedded researcher design that combined existing questionnaires, such as the Shortened Warwick Edinburgh Mental Wellbeing Scale, with new qualitative data collected from interview with service users on self-efficacy, self-esteem, social isolation and relationships with link workers and social interactions with other people. The qualitive data provided specific information on lifestyle changes made by participants, and explored factors reported to facilitate progress towards intended goals; however, the collected quantitative data was patchy with questionnaires not being administered to every service user and follow-up measures often not being reported.

In additional, a recent NIHR evidence brief on social prescribing identified existing scales on social capital (Tierney et al. 2020) that have been using to measure how navigators give patients the confidence, motivation, connections, knowledge and skills to manage their own well-being, thereby reducing their reliance on GPs. This study also employed a patient activation measure Hibbard et al., 2004, used in Tierney et al. 2020) to gauge how motivated and able someone is to manage their health. The authors found that people identified as activated on this measure appeared more likely to adopt healthy behaviours (e.g. diet and exercise) and to have less hospital use.

Most of the evidence in this brief relates to primary care settings, with a scoping review of navigators or navigation programmes in Canada, the United States, the United Kingdom, Australia, New Zealand, and Western Europe (papers published between January 1990 and June 2013) that linked patients to primary care services, specialist care, and community-based health and social services. The scoping review identified various patient outcomes that could be relevant for service users of the Social Navigator project in South Tyneside:

- Improvements in general health and wellness such as, reduced unmet needs, improved mental health, and reduced co-morbidities
- Improved self-efficacy, self-management or empowerment
- Increased patient satisfaction with services
- Increased access to care or better follow up care
- Patient encounters and communication with primary care (increased visits, improved communication, more reviews, check-ins and/or goal setting conducted and links made to other providers)
- Increased employment, reduced financial stresses, improved insurance coverage.

2.3 Health economic evaluation

Very limited examples exist of study attempting to measure the economic benefits of social navigator roles. An exception is an evaluation conducted in 2020 by Fuse researchers (Visram et al.) of lay health workers in Durham, which applied a 'ready reckoner'/ economic model (Lister, 2010; updated in 2016 using 2014/15 values) to estimate health gains for service users in quality-adjusted life years (QALYs) by using behaviour change outcomes (i.e. whether client goals in relation to diet, physical activity, smoking or other behaviours, had been achieved) that were recorded in online reporting system by the service in Durham.

Their model assessed health trainer performance in relation to service objectives and compare this to costs, based on assumptions drawn from published evidence of the short- and long-term impacts of behaviour change. Other activities, such as asset mapping (identifying the existing strengths and resources within target communities) and signposting (referring clients to other services or activities), were valued by comparing the costs and outcomes with broadly similar primary care interventions. The estimates were then adjusted to take into account impact on health inequalities by applying a factor derived from the Health England Leading Prioritisation (HELP) review, to reflect the value of targeting disadvantaged groups (Health England, 2009). While, this example provides a ready reckoner'/ economic model, it requires data on behaviour change outcomes that are currently not available within the South Tyneside monitoring system.

An alternative health economic approach is suggested Cheetham et al. (2018) in their evaluation of the integrated wellness service in Gateshead. Although the authors have not been able to use this approach (HACT Wellbeing values) in their research, it might provide a feasible option for valuing the health and wellbeing outcomes of service users in South Tyneside. The HACT approach (http://hact.org.uk/publications/) uses regression analysis to estimate the relationships between subjective wellbeing and the various outcome variables included in the HACT value bank. This analysis is followed by a wellbeing valuation method, which relies on a comparison between the change in wellbeing from the outcome to be valued with the change in wellbeing from income. The value of the outcome is then calculated as the marginal rate of substitution (MRS) between income and the outcome itself, expressed in monetary terms.

The benefit of this approach is that is allows for flexibility in the use of health and wellbeing measures tailored to local context that are then used to estimate a economic value using existing data.

3. Evaluation Aim and Objectives

Building on the insights of the scoping review and distilled from the Evaluability Assessment Workshops (EAW; see section 5.2), we propose the following overarching aim and research questions for the evaluation.

Aim: to explore and quantify the health and wellbeing impact of the Social Navigator project in South Tyneside on clients to inform recommissioning and future development of the service.

Research questions

Primary question:

1. How do SN in South Tyneside improve the confidence & motivation, mental wellbeing and reduce loneliness & social isolation for their clients?

Secondary questions:

2. What is the relationship between financial gains, increased opportunities and health and wellbeing outcomes for service users of the Social Navigator project in South Tyneside?
3. How does the service help other services and organisations in South Tyneside to support their clients and can this be expressed in terms of a financial gain?

4. Data

Available data for the evaluation, suggested by EAW participants, include local monitoring data and anecdotal evidence collected by SN.

Since September 2021, SN have worked with 143 people who have not engaged previously in benefits advice. For each of these service users, SN have gathered baseline, mid-point and end point data on eight key indicators (ability to ask for help, access to advice, health and financial services, ability to budget income, digital social and employment skills). This information is captured through a digital advice system, which the PHIRST team will have access to. In addition, SN have gathered information on the additional outcomes and impact of the service on improving people's financial stability, including benefits being backdated and keeping families together.

5. Methods

5.1: Co-production activity

We used evaluability assessment methods to develop the evaluation design (Leviton, Khan et al. 2010, Craig and Campbell 2015). Evaluability Assessment (EA) is a rapid, systematic, and collaborative way of deciding whether and how a programme or policy can be evaluated, and at what potential cost. We conducted two workshops with SN stakeholders, including three public members, to ascertain their understanding of how the SN was intended to work, how it might lead to health outcomes and how it may be evaluated.

Workshop participants included staff from South Tyneside Council, South Tyneside Homes, local third sector organisations, and public members who have engaged with the social navigators. We allowed the workshop format to evolve to take account of feedback from the preceding workshop, and to enable stakeholders to shape the approach to evaluation.

Table 1 Summary of workshop dates & agenda

Workshop	Date	Agenda
1	19 January 2023	Theory of Change development; understanding the SN project
2	6 March 2023	Prioritisation of health and wellbeing related outcomes, development of evaluation questions, data considerations and evaluation options

5.1.1 Workshop 1

The first SN EA workshop aimed to provide the evaluation team with an overview of the SN programme and aim, how SN was expected to bring about change, and what success would look like. A Theory of Change approach was used to clarify the intervention aims and desired outcomes. This was important to establish as SN carried out many different activities to support a wide range of needs. While initially focused on finance-related outcomes, the project noted that a wide variety of outcomes not previously anticipated were also being addressed. Stakeholders established that they were keen for the evaluation to show that SN had impacted on health and wellbeing outcomes for service users even though SN was not explicitly designed for changes in users in terms of health and wellbeing, stakeholders also expressed an interest in an economic evaluation of the project.

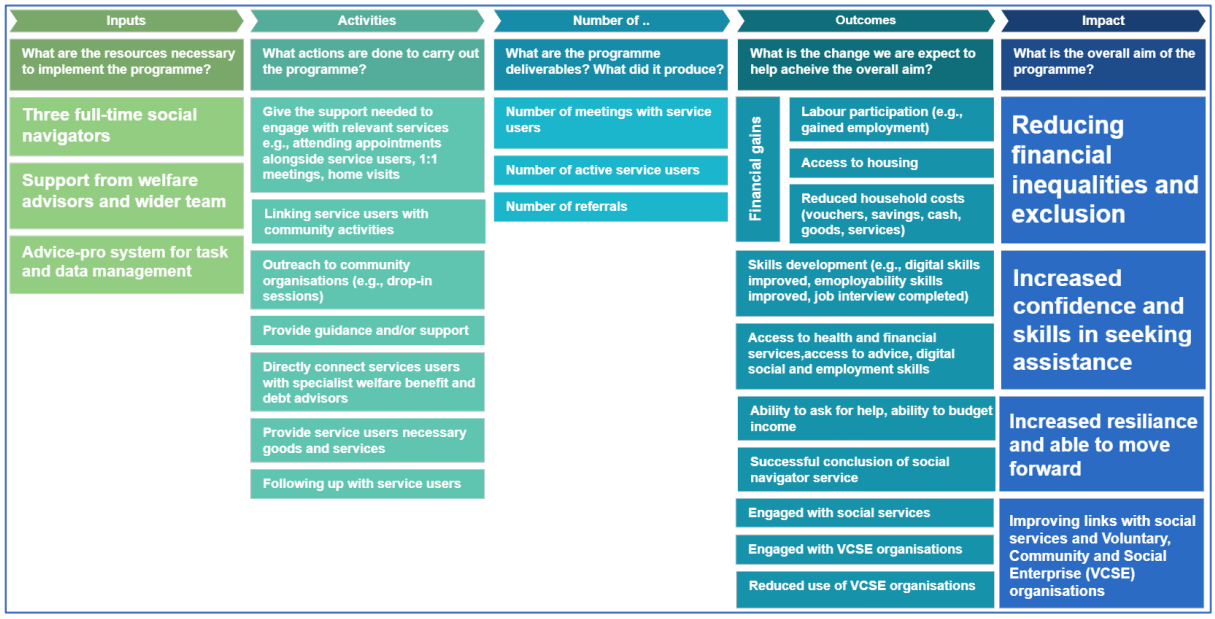
5.1.2 Workshop 2

The second EA workshop focused on getting the Theory of Change signed off (Figure 1). Since SN was not initially intended to impact on service users health and wellbeing, a range of health and related outcomes extracted from the relevant literature was ranked and the results discussed. These were inserted into the signed-off Theory of Change so that they Theory of Change could be used to understand unintended project health and wellbeing outcomes (Figure 2). Key evaluation questions were then discussed, as well as data issues (like sources and collection methods) in relation to the evaluation design. Health economic evaluation considerations were also discussed by workshops participants as well as possible evaluation design options, as outlined in the Appendix (available upon request) and summarised in paragraph 5.2.

5.1.3 Theory of Change

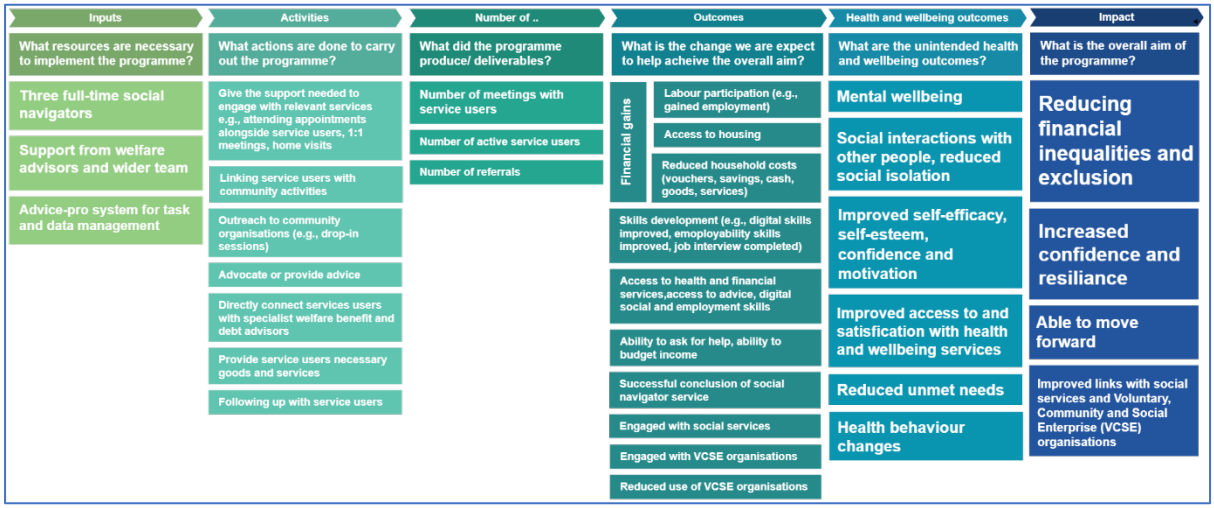
The SN Theory of Change (ToC) was co-developed with workshops participants and signed off in workshop 2. See Figure 1 below.

Figure 1 Social Navigators Theory of Change



A second Theory of Change was also developed in workshop 2 with unintended health and wellbeing outcomes included. See Figure 2 below.

Figure 2 Social Navigators Theory of Change with Health & Wellbeing Outcomes



5.1.4 Knowledge sharing principles

Our approach to evaluability assessment is underpinned by the principle of understanding change from diverse perspectives. This provides opportunities for co-production and knowledge mobilisation, which emerged or were clarified in the evaluability assessment workshops. These opportunities relate to four of the six NIHR School for Public Health Research knowledge-sharing principles (School for Public Health Research, 2018).

Principle 1: clarify purpose and knowledge-sharing goals

During the evaluation, we aim to share knowledge by working towards *co-production* to provide evidence and insight for a range of stakeholders. The evaluation will support work by local commissioners to further develop and recommission the service across South Tyneside. We are working to achieve our knowledge-sharing aim in a number of ways (see below and section 8).

Principle 2: identify knowledge users

Local commissioners/ elected members and Directors of other departments were among those identified by workshop participants as a key audience for the outputs from the evaluation. They will be a key informant group and active participants in the research process. Other key knowledge users identified in the workshops included service users, who will be included in work package 2 (see section 5.3) to ensure their voice is heard in the further development and implementation of the service.

Principle 3: design the research to incorporate the expertise of knowledge users

The research design has been agreed with local stakeholders. During the EA process, local stakeholders pointed to the importance of demonstrating the link between financial outcomes and wider health and wellbeing outcomes for service users, which has informed the design of work packages 2 and 3.

In addition, we propose to bring together an advisory group of senior stakeholders (n=10) across South Tyneside with an interest in the SN project, including representatives from different departments. We will update this group in regular meetings and report on evaluation progress. These meetings will help to sense check emerging findings between work packages.

Principle 4: agree expectations

We are in discussion with local and regional knowledge users about options for increasing the usefulness and accessibility of knowledge co-produced in the project, and to support implementation of findings in the recommissioning of the SN project. The outcome of these discussions will be reflected in a knowledge mobilisation plan, elements of which are outlined in the outputs section below.

5.2 Evaluation approach

In a typical evaluation of the impact of a service or policy, an effectiveness study is adopted to understand to what extent does the intervention produce the intended outcome(s) in

real-world settings. Effectiveness studies focuses on identifying whether or not interventions 'work' based primarily on average estimates of effect. This is not the case of SN. Here, stakeholders have told us in the workshops that they think financial gains by service users may have also led to health and wellbeing outcomes. While there is anecdotal evidence of this, especially from SN themselves, there is little understanding about why and how this happens. This means that an alternative evaluation approach is required.

5.2.1 Theory-based perspective

As recommended by the updated MRC framework for developing and evaluating complex Interventions (Skivington et al 2021), a theory-based evaluation seeks to provide evidence on the processes through which interventions lead to change in outcomes and what prerequisites may be required for this change to take place, thus exploring how and why they bring about change. This considers context, and often explores more than one single theoretical account of how the intervention may work. Such approaches to evaluation aim to broaden the scope of the evaluation to understand how an intervention works and how this may vary across different contexts or for different individuals. Research from this perspective can generate an understanding of how mechanisms and context interact, providing evidence that can be applied in other contexts. Process evaluation designs are most appropriate for theory-based approaches (Moore et al 2015). Examples of appropriate methods within such designs include contribution analysis (Mayne 2001; 2008; 2012) and outcome mapping.

5.2.2 Economic consideration

Stakeholders in the EA workshops also said that they were interested in an economic evaluation of SN to ascertain whether the benefits, including health and wellbeing outcomes, justify the costs of delivering the intervention. There are two approaches to this kind of evaluation.

Cost Benefit Analysis (CBA) measures if the benefits of an intervention in monetary terms exceed the costs of the intervention. Cost Consequence Analysis (CCA) allows the costs and outcomes of the intervention to be presented in a descriptive format leaving the decision maker to form a value judgement on whether benefits justify the costs of delivering the intervention.

5.3 Work packages

The evaluation research will consist of three work packages that interlink.

5.3.1 WP1: secondary data analysis of existing monitoring data

We will analyse existing service monitoring data collected by the SN since the start of the project on the interactions with clients at 12 week intervals (after the initial assessment at 6 weeks). This includes data on clients' engagement with other services, such as welfare

support, adult social care, CAB and the job centre, and data on financial gains for clients (child benefits, council tax rebate, debt relief order, food & utility vouchers).

SN have also recorded anecdotal evidence in the system on increased confidence (completed job interviews), skills acquisition (digital, social and employment) and wellbeing perceptions (keeping families together, mental health), which we will review and include where possible in the analysis.

In addition, SN have gathered baseline, mid-point and end point data since September 2021 on eight outcome indicators (ability to ask for help, access to advice, health and financial services, ability to budget income, digital social and employment skills) using scale questions (1-10) for 143 service users.

Analysing these three types of existing data (interactions, staff assessments, and outcomes), will help to identify the impact of the project on the financial stability of clients and explore available indicators for health and wellbeing impacts. The data will also help to map referral pathways for clients that we can follow-up with referred-to organisations to explore available data within their organisations about the support provided and benefits experienced by referred clients.

Potential gaps and missing data will inform primary data collection in WP2 and suggestions for inclusion of additional indicators related to health and wellbeing in the monitoring system. The rapid literature review has already identified several potential indicators that could be used to measure relevant health and wellbeing outcomes more systematically with clients. These potential indicators will be piloted with a sample of clients in WP2, as outlined below.

5.3.2 WP2: Semi-structured follow up interviews with clients to explore and develop health and wellbeing outcome indicators

We will conduct semi-structured interviews with a purposeful sample of 15 clients to explore in more detail the perceived health and wellbeing benefits of the Social Navigator project. Clients will be sampled from the existing monitoring data to represent different referral pathways, varying lengths of support received from SN and a range of social-economic characteristics (age, gender, marital status, income).

Where feasible, interviews with individual clients will be combined into small focus groups facilitated by SN and staff members of other organisations, who have built up trusting relationships with clients to elicit more meaningful responses. This will improve response rates and build research capacity among staff by providing with an opportunity to develop their focus group skills. This approach will be explored with the embedded researcher in South Tyneside Council once in post and depends on clients' willingness to share their experiences in a group with other clients and staff members' willingness to facilitate focus groups. One of these focus groups will focus on service providers' experiences, including SNs' perceptions of health and wellbeing outcomes.

Potential indicators for health and wellbeing outcomes will be piloted with participants as part of the interviews to test their feasibility in terms of clients' understanding and ability to complete the questions, and how well they feel these questions represent the health and wellbeing outcomes they experienced from the social navigator projects. This includes

questions suggested by the literature review, in particular the NIHR evidence review (see section 2) on mental wellbeing; self-efficacy, enhanced self-esteem, improved confidence and motivation; social isolation and loneliness; sustained relationships with link worker and social interactions with other people. Participants' responses to these questions will be used by the research team to identify and tailor relevant indicator questions, which will inform the health economic modelling of health and wellbeing outcomes in WP3 (see below).

Evaluation procedure and data analysis

Data collected from WPs 1 & 2 will be used to iteratively refine the service's Theory of Change (co-developed with stakeholders during evaluability assessment workshops) by applying Contribution analysis (Mayne, 2001). Steps in the contribution analysis are shown in Table 2 below. Steps 1 & 2 have been completed at the evaluability assessment workshops. Data collection will address step 3. Steps 4-6 will be performed and may be repeated iteratively.

Table 2 Key Steps in Contribution Analysis (Mayne 2001)

Step 1: Set out the cause-effect issue to be addressed

- Acknowledge the causal problem.
- Scope the problem: determine the specific causal question being addressed; determine the level of confidence needed in answering the question
- Explore the nature and extent of the contribution expected
- Determine the other key influencing factors
- Assess the plausibility of the expected contribution given the intervention size and reach

Step 2: Develop the postulated theory of change and risks to it, including rival explanations

- Set out the postulated theory of change of the intervention, including identify the risks and assumptions and links in the theory of change,
- Identify the roles of the other influencing factors and rival explanations
- Determine how contested is the postulated theory of change

Step 3: Gather the existing evidence on the theory of change

- Assess the strengths and weaknesses of the links in the theory of change
- Gather the evidence that exists from previous measurement, past evaluations, and relevant research (1) for the observed results, (2) for each of the links in the results chain, (3) for the other influencing factors, and (4) for rival explanations.

Step 4: Assemble and assess the contribution claim, and challenges to it

- Set out the contribution 'story': the causal claim based on the analysis so far
- Assess the strengths and weaknesses in the postulated theory of change in light of the available evidence, the relevance of the other influencing factors, and the evidence gathered to support rival explanations
- If needed, refine or update the theory of change

Step 5: Seek out additional evidence

- Determine what kind of additional evidence is needed to enhance the credibility of the contribution claim.
- Gather new evidence

Step 6: Revise and strengthen the contribution story

- Build the more credible contribution story
- Reassess its strengths and weaknesses
- Revisit Step 4

5.3.3 WP3: Health economic modelling of health and wellbeing outcomes

Based on insights from WP1 and 2, we will calculate the social value of wellbeing for clients engaged in the SNS' project by applying the HACT Wellbeing values (http://hact.org.uk/publications), suggested by Cheetham et al. (2018). We will perform regression analysis to estimate the relationships between subjective wellbeing and the various outcome variables included in the value bank.

Potential outcome variables that are relevant include questions on employment (Full-; Part-time; Self Employment), health (High confidence; Relief from depression/anxiety; Good overall health; Relief from alcohol problems; Smoking cessation; Can rely on family) and financial inclusion (Afford to keep house well-decorated, Able to save regularly; Relief from being heavily burdened with debt; Able to pay for housing; Financial comfort; Access to internet (via computer); Able to insure home contents; Able to heat household in the winter).

This will be followed by a wellbeing valuation method, which relies on a comparison between the change in wellbeing from the outcome to be valued with the change in wellbeing from income. The value of the outcome is then calculated as the marginal rate of substitution (MRS) between income and the outcome itself, expressed in monetary terms. The three-stage wellbeing valuation approach is adopted – this represents the latest development in wellbeing valuation methodology and is in line with the UK's HM Treasury Green Book recommendations and the OECD's guidance on wellbeing. The strategy involves combining two separate models for wellbeing: one for the impact of income and one for the impact of the outcome considered (HACT, 2022, Methodology Note for Wellbeing Values).

6. Data Management Plan

We are developing a comprehensive data management plan to address the data-sharing and legal issues associated with our research project. This plan will ensure the responsible handling, storage, and sharing of data collected during the evaluation of knowledge mobilisation activities.

Data Sharing Agreements: We will establish formal agreements with all stakeholders involved in the research project to outline the terms and conditions of data sharing. These agreements will specify the purposes, methods, and limitations of data sharing to ensure compliance with relevant regulations and ethical considerations.

Informed Consent: We will obtain informed consent from participants, clearly explaining the purpose of data collection and any potential data sharing that may occur. Participants will have the option to withhold their consent for data sharing if they wish.

Anonymisation and De-identification: Personally identifiable information will be removed or de-identified from the dataset to protect the privacy and confidentiality of participants during data sharing.

Compliance with Data Protection Regulations: We will adhere to all applicable data protection regulations, such as the General Data Protection Regulation (GDPR), to ensure that the collection, storage, and sharing of data are conducted in accordance with legal requirements.

Intellectual Property Rights: We will address any intellectual property rights issues that may arise during the research project, particularly concerning the dissemination and sharing of research findings. Clear guidelines and agreements will be established to protect the rights of all involved stakeholders.

7. Ethics

Ethical approval will be sought from Northumbria University, Faculty of Health and Life Sciences, Department of Nursing, Midwifery and Health Ethics Committee. Relevant participant information sheets and consent forms will be produced to support the ethics applications. In accordance with Northumbria University ethical committee guidelines, the data collected will be archived for a period of seven years in password protected cloud servers hosted by the University.

8. Timeline

Timing of fieldwork will depend on when we obtain ethical approval. The timetable below is based on the assumption that this is no later than 1st July 2023. Key milestones are:

Milestone	**Date**
Ethics approval	1 July 2023
WP1 completed	31 September 2023
WP2 completed	30 December2023
WP3 completed	28 March 2024
Write up of findings/ draft final report	31 April 2024

9. Outputs

The format of outputs will be decided iteratively in consultation with the LA and are envisaged to take the form a full report, a summary of recommendations, and a one-page lay summary, We will continue to work with local stakeholders to ensure outputs reflect their needs. In discussion with stakeholders, we are currently exploring possibilities for mobilising knowledge with different knowledge user groups, including other North East Local Authorities and local communities. An initial knowledge mobilisation plan will be agreed with local stakeholders and will be adapted to reflect changes as the project develops.

Evaluation findings will be made available in accessible briefs, blogs and potentially podcasts, which will be posted on the NIHR PHIRST website. Intermediate outputs will include an interim report on the findings from WP1 to inform recommissioning decisions in August 2023.

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