



SP-EU

**Social Prescribing to promote and improve access to health and care services
for people in vulnerable situations in Europe**

Horizon Europe – 101155873

D5.1 – Co-Creation Report

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Executive Summary

Social Prescribing (SP) aims to address social problems in primary care by linking medical services of General Practitioners (GPs) with social support services in the community. While there is evidence that SP has a positive impact on quality of life and well-being, SP has not been specifically adapted to the needs of people in potentially vulnerable situations. The project SP-EU aims to adapt SP to the needs of three groups:

- a) **lesbian, gay, bisexual, trans, inter (LGBTIQ) persons,**
- b) **first-generation migrants and refugees,** and
- c) **older adults living alone.**

These groups have a higher prevalence of health-related social problems and are at risk of facing barriers regarding access to and use of health and care services.

This report summarizes the results of **Work Package 5 (WP5) “Co-Creation of Social Prescribing Intervention”**. The objective of WP5 was to adapt the intervention to the needs of these three groups by directly involving stakeholders in the development process. The co-creation process was inspired by a three-stage framework developed by Hawkins et al. (2017) that was adapted to our specific setting.

The first phase of the process consisted of a rapid review of existing SP manuals and protocols and a series of workshops with each group of the target demographic. These workshops aimed to develop exemplary case vignettes of persons belonging to the groups.

In the second phase of the co-creation process, the case vignettes were used to discuss necessary adaptations of the core aspects of SP with the stakeholders, focusing on recruitment of patients and GPs, training of GPs and Link Workers (LW), as well as forms of inclusion and equity and outcome measures.

For the third phase of the co-creation process, Local Advisory Boards (LAB) were appointed in the hubs participating in the randomized controlled trial (RCT) to discuss the preliminary adaptation regarding their content and their feasibility in the local context. The feedback from all LABs was clustered, thematically organized, then mapped with the feedback from the second phase to achieve a set of recommendations for the adaptation of the SP intervention from the perspective of the three groups.

The adaptation of the intervention was reviewed, evaluated and approved in a final consensus conference with the sponsor as well as representatives of all participating hubs and of the stakeholders.

List of Abbreviations

| | |
|----------------|---|
| AAU | Aalborg Universitet |
| GP | General Practitioner |
| Charité | Charité – Universitätsmedizin Berlin |
| LAB | Local Advisory Board |
| LGBTIQ | Lesbian, Gay, Bisexual, Trans, Inter, Queer |
| LW | Link Worker |
| RCT | Randomized Control (Clinical) Trial |
| SP | Social Prescribing |
| UBERN | Universität Bern |
| UNL | National School of Public Health, NOVA University of Lisbon |
| UNIL | Université de Lausanne |
| WP5 | Work Package 5 |

1. Background

1.1 SP-EU

The overall aim of the project SP-EU is to assess the potential of SP to promote and improve access to health and care services for people in potentially vulnerable situations. The primary target groups in SP-EU are:

- a) LGBTIQ persons,
- b) first-generation migrants and refugees, and
- c) older adults living alone.

These groups have lower chances of achieving good health due to an increased risk of health-related social problems that can influence the risk of disease, lower quality of life and other impairments of physical, mental and social well-being. While non-clinical support structures and care services within communities exist that could cover these unmet needs, they are often underutilized by people in vulnerable situations.

In most cases, the first point of contact in the healthcare system is the GP, who does not always know about existing non-clinical support and service structures to refer the patients to. SP addresses the gap by linking medical care and social supports and services in the community. If a GP identifies a non-medical health-related social problem in a patient, the GP can refer the patient to an LW, a trained professional with a background in health and social care. The LW provides personal support for the patient, creates an action plan with the patient and facilitates access to community resources.

While current evidence suggests a positive impact of SP on health and well-being [1], it has not been tailored specifically to the needs of LGBTIQ persons, first-generation migrants and refugees, and older adults living alone. SP-EU aims to adapt SP to the needs of the three primary target groups and test the adapted intervention in a pragmatic RCT.

1.2 The Co-Creation Process of SP-EU

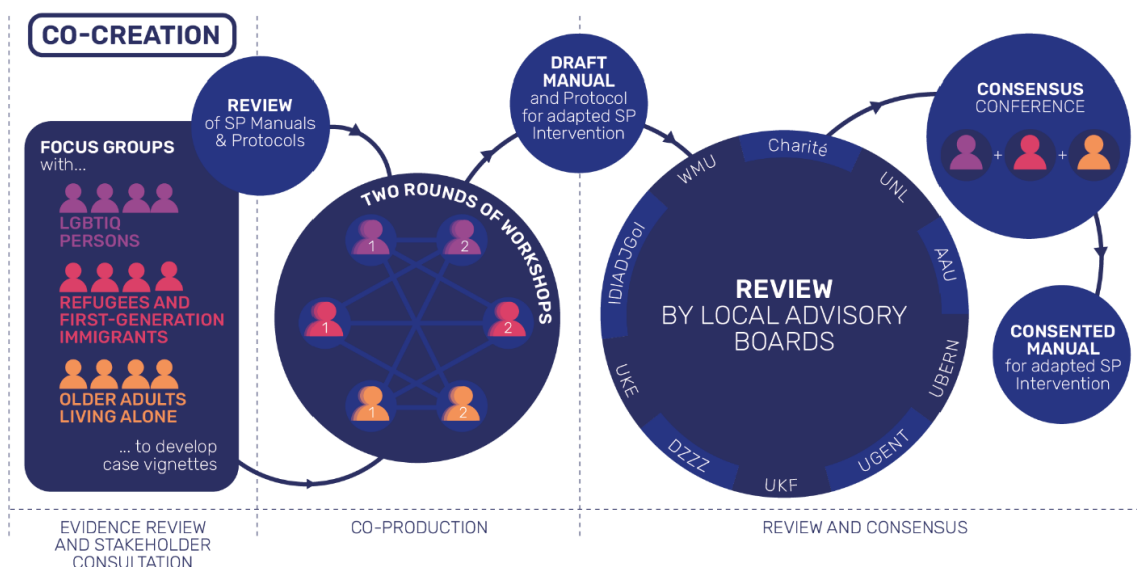


Figure 1: Co-Creation process.

The adaptation of the intervention was planned as a co-creation process. Co-creation refers to a collaborative process that directly involves individuals who are affected by, or have expertise in the research topic as stakeholders, engaging them in the design process, and, in our case, aiming to tailor the SP intervention to their specific needs.

The study design of the co-creation process is illustrated in Figure 1. The co-creation process of SP-EU followed a three-stage framework developed by Hawkins et al. [2], which was adapted to our setting. It was structured into three distinct phases:

1. **Rapid evidence review and stakeholder consultation**
2. **Co-production of intervention adaptations**
3. **Review and consensus building**

A study protocol describing the Co-Creation Process was published prospectively on Open Science Framework [3].

1.3 Objective and Tasks of Work Package 5 “Co-Creation of Social Prescribing Intervention”

Table 2: Objective and Tasks of WP5.

| Objective | | |
|---|-------------|-------------------------------|
| To adapt existing social prescribing interventions to the needs of a) LGBTIQ persons, b) refugees and first-generation migrants and c) older adults living alone (T5.1-T5.5) | | |
| Tasks | Lead | Chapter in Deliverable |
| T5.1 Conduct a review of social prescribing manuals and protocols | UNL | 2.1 |
| T5.2a,b,c Conduct a workshop with each group a) LGBTIQ persons, b) refugees and first-generation immigrants and c) older adults living alone with the aim to develop three case vignettes of persons belonging to these groups who might benefit from social prescribing | AAU | 2.2 |
| T5.3a,b,c Conduct a series of workshops with representatives of a) LGBTIQ persons, b) refugees and first-generation migrants and c) older adults living alone to adapt core components of SP interventions | AAU | 3 |
| T5.4 Discussion of the preliminary adaptations with local advisory boards in all hubs | AAU | 4.1 |
| T5.5 Consensus conference on adapted SP interventions for a) LGBTIQ persons, b) refugees and first-generation migrants and c) older adults living alone | AAU | 4.2 |

2. Phase 1 of the Co-Creation Process: Rapid evidence review and stakeholder consultation

2.1 Rapid Evidence Review

First, National School of Public Health, NOVA University Lisbon (UNL) conducted a Rapid Review of existing SP manuals, guidelines, training programs, protocols, and other supportive tools and materials. The study protocol of the Rapid Review was published on Open Science Framework [4].

Rather than focusing on quality assessment of previous manuals, the objectives of the review were to develop an inventory of current resources and to lay the groundwork for the adaptation of the SP intervention. Materials were eligible for the Rapid Review if they were open-access and either a manual, protocol or other scientific or institutional material that provided guidance on the practical application of SP. Evidence synthesis followed the PCC (population, concept and context) framework [5].

A total of 129 materials were included in the Rapid Review. These materials focused primarily on training for GPs and LWs, recruitment strategies, means of inclusion and equity, and outcome measures. Although the Rapid Review showed that only a small set of resources addressed the needs of people in potentially vulnerable situations, it provides an extensive overview of the existing literature on SP interventions that informed the next steps of the co-creation process.

Detailed results of the Rapid Review will be published in a peer-reviewed research article.

2.2 Stakeholder Consultation for the Creation of Case Vignettes

Parallel to the Rapid Review, the co-creation pioneer hubs Aalborg Universitet (AAU), Universität Bern (UBERN) and Charité – Universitätsmedizin Berlin (Charité) prepared, organized and conducted the first stakeholder workshops. Each hub addressed a different target demographic in the workshops: AAU conducted the workshops focusing on first-generation migrants and refugees, UBERN on older adults living alone and Charité on LGBTIQ persons.

In these workshops, the stakeholders were introduced to the concept of SP, and invited to develop “personas”. A “persona” is a fictional character that is used to represent a specific group of individuals, in our case the three groups that the SP intervention is supposed to be adapted for. For the development of the personas, we used an adapted template of the Experience-Based Co-Design Toolkit (EBCD) provided by the Agency for Clinical Innovation, a state government agency in New South Wales, Australia [6]. These personas were then used to create case vignettes by the respective teams in preparation for the second phase of the co-creation process.

Recruitment in the three hubs followed a purposeful sampling approach. We contacted local NGOs, GPs and social service providers representing the respective groups via email and personal contact. They received the study information as well as an invitation to participate.

In the following, we describe further details of the stakeholder workshops in the respective hubs.

2.2.1 Charité: LGBTIQ persons

The stakeholder workshop was conducted on March 6th, 2025 at the Berlin study site at Charité – Universitätsmedizin Berlin with a total of 26 LGBTIQ participants: of those, 16 were cisgender, four were trans, two were non-binary participants, and four did not provide a gender identity. The participants received food and beverages during the workshops, as well as 75 € as a compensation for their time and expenses. The workshop lasted approximately 180 minutes.

The workshop was structured into two parts. In the first part, the stakeholders were introduced to the participatory research process, and to the general ideas of SP as a potential intervention for social problems addressed in the GP office. We then asked the participants to identify social problems related to LGBTIQ identity, write them down and pin them to a wall. These social problems were thematically clustered into groups.

In the second part of the workshop, the stakeholders were asked to form smaller groups of four to six people. Using the adapted template of the EBCD, they were asked to develop different personas with social problems related to their identity as an LGTBIQ person such as financial issues, single parenting, discrimination, housing problems, and loneliness. Each group presented their persona to the other participants and the workshop facilitators for further discussion and refinement.

In total, six different personas were created: 1) Philly, a genderfluid person with social issues due to chronic condition, 2) Lea, a trans woman in a precarious housing situation, 3) Max, a cisgender gay man with social issues due to loneliness and a high workload, 4) Masuma, a 27-year-old trans woman and migrant with financial issues, 5) Alfred, non-binary single parent with a low-income job, and 6) Astrid, a cisgender lesbian who faces discrimination in a professional environment.

2.2.2 AAU: First-generation migrants and refugees

At AAU, two workshops were held to develop the personas – one for women and one for men. Recruitment of participants from the target groups, refugees and migrants, was carried out utilizing personal contacts to four local recruiters, who were health professionals at a municipal health centre in the Central Denmark Region. Three of the local recruiters spoke Turkish, Somali, and Arabic, respectively. The local recruiters were able to recruit participants for the workshops, as they usually conducted lifestyle courses at the municipal healthcare centre for the target group. Some participants with a migrant or refugee background mainly spoke their native language.

The workshop for women took place on 28 February 2025 with 12 participants in total (eight women with a background as a migrant or refugee; three healthcare professionals and one LW): the workshop was conducted at a municipal health centre, where this group of women usually participated in lifestyle courses. The health centre was conveniently located near most participants' homes. The workshop for men was held on March 6, 2025, with a total of six participants (four men with a background as a migrant or refugee; one volunteer with Danish origin; and one healthcare professional). Both workshops lasted approximately 90 minutes.

The workshop was conducted in an outdoor shelter located in a nearby natural area, where this group of men usually went for a walk once a week. Therefore, both workshop settings were familiar to the participants. During the workshops, the participants were offered catering and drinks as an acknowledgement for their participation. Then, they were introduced to the SP-EU project, the

concept of social prescribing, and the aim of the workshops. Afterwards, the participants were asked to develop case vignettes, describing a fictitious persona with a migrant or refugee background who, in their view, could benefit from a social prescribing intervention. During the women's workshops, participants were divided into two groups – one speaking Turkish and the other Arabic- and their work was facilitated by healthcare professionals who could translate, pose questions, and write down the answers in a template. In the men's workshop, most participants spoke Danish, and these participants translated the questions and answers for those who did not. After working with the case vignette templates, the participants were asked to present their persona for further refinement and to answer any clarifying questions.

The output of the two workshops was a description of three personas belonging to the target group of refugees and migrants: two female personas, based on focus groups with women, and one male persona, based on focus groups with men.

2.2.3 UBERN: Older adults living alone

The stakeholder workshop was held on March 17th, 2025, at the premises of the Schweizerisches Rotes Kreuz, Seeland, in Biel. The location was chosen in collaboration with our institutional partner, who also supported the recruitment of participants. In total, eight older adults living alone took part in the workshop, alongside a GP and two social workers for older adults.

The session lasted approximately 120 minutes and was designed to be both engaging and accessible. Participants were offered food and beverages throughout the workshop, and each received a financial compensation of 100 Swiss Francs. For those requiring travel assistance, suitable transportation was arranged and fully covered to ensure everyone could attend comfortably.

The workshop was structured into two distinct parts. It began with a brief round of introductions, allowing both the study team and participants to get acquainted. This was followed by an overview of the research project, with a particular focus on the concept of social prescribing and the everyday social challenges faced by older adults. Toward the end of this first segment, participants collaboratively identified the three most pressing social issues, which then served as the foundation for the next phase.

In the second part, participants were divided into three small groups, each supported by a facilitator from the study team. Using an adapted EBCD template, each group developed a persona that reflected the lived experiences and challenges of older adults. Facilitators were present to clarify any questions and guide the process as needed. Importantly, the three personas created during this session were directly shaped by the three key social issues identified earlier in the workshop, ensuring that each persona embodied a distinct and relevant perspective on the challenges faced by older adults.

3. Phase 2 of the Co-Creation Process: Co-Production

Prior to the second phase, the respective teams of the co-creation hubs developed case vignettes grounded in the previously created personas. These vignettes served as the basis for collaborative workshops in the second phase, in which stakeholders and representatives from health and social care services were invited to discuss the adaptation of the SP intervention. Using the case vignettes enabled participants to engage with the intervention and the core components identified in the Rapid Review: effective strategies for participant recruitment, training requirements and engagement of GPs and LWs, approaches to promote inclusion and equity, as well as outcome measures that reflect the lived experiences of the target groups.

Based on the workshops, the teams in the respective co-creation hubs developed a set of key findings. These key findings can be found in the respective paragraphs.

3.1 Charité: LGBTIQ persons

In Berlin, the workshops for the second phase were held on June 3rd, 2025 and June 16th, 2025 at the study site at Charité – Universitätsmedizin Berlin. In total, 19 participants took part in two workshops: 10 participants in the first workshop, and nine participants in the second workshop. In the first workshop, four participants were working as GPs, one was a social worker, one did not specify their profession and the others were stakeholders of the LGBTIQ group. In the second workshop, six participants were GPs and one was a nurse/medical assistant, the other two were LGBTIQ stakeholders. Duration of each workshop was approximately 90 minutes. Again, participants received food and beverages during the workshops and a financial compensation of 50 € for their time and expenses.

The participants were presented with the six case vignettes that the research team had previously developed from the personas created in the first phase. Using the case vignettes as a practical example, the participants were divided into small groups of three to four people and were asked the following four questions based on the different themes of the Rapid Review (see 2.1): a) which social problems they identify in the case vignettes and how the identified social problems could be addressed during the conversation between the patient and the GP; b) how LGBTIQ patients can be identified in the practice, and how to make it easier for LGBTIQ patients to disclose their orientation/identity to their GPs, c) how LWs should be trained to address the specific needs of this person; and d) which social services the LW should know that could help with the social problems addressed by the patient.

The groups then presented the solutions to the case vignettes to the other participants for further discussion. Afterwards, participants were asked for general measures of inclusion and equity as well as potential outcome measures of an adapted SP intervention specific to the LGBTIQ demographic.

The results of these workshops are shown in Table 2.

Table 2: Key Findings Charité.

| CO-CREATION HUB: Charité – Universitätsmedizin Berlin | | TARGET GROUP: LGBTIQ Persons | |
|--|--|--|--|
| <ul style="list-style-type: none"> Throughout all the components, the use of queer-sensitive language was named as an important topic For the recruitment of participants, it is important to create a setting in which LGBTIQ persons can be identified or identify themselves easily | | | |
| KEY FINDINGS REGARDING... | | | |
| PARTICIPANT RECRUITMENT <i>i.e. how to identify participants for the study</i> | GENERAL PRACTITIONERS <i>i.e. training and recruitment</i> | LINK WORKERS <i>i.e. training and recruitment, contact to participants and community engagement</i> | FORMS OF INCLUSION & EQUITY, OUTCOME MEASURES |
| GPs can adapt the Medical History Form to include sexuality, gender identity, pronouns, etc. to identify target group | Encourage GPs to address topics of gender identity, sexual orientation by giving them access to specific information and resources | When recruiting LW, consider diversity aspects (an LGBTIQ patient might be more engaged with a LGBTIQ LW) | The forms of inclusion and equity described in the Rapid Review were deemed sufficient |
| GP practices can display LGBTIQ symbols, flyers and magazines to make it easier for patients to address their identity/sexuality during the consultation | Consider recruiting GPs who have experience with LGBTIQ patients or are openly queer themselves, because they might be more connected to the target group / see more patients of the target group | Consider networks and community services that are queer-friendly spaces and targeted towards LGBTIQ persons | |
| Practice staff can add pronouns to their name tags to create more visibility | Recruiting GPs with an existing patient base of LGBTIQ persons could be considered | Networks and services that are subgroup-specific were named as important (ex. not every offer for gay men might be suited for trans persons) | Knowing that a connection to a local service was made and getting feedback on the link working procedure was deemed a good outcome |
| Encourage GPs to directly ask about the LGBTIQ identity of their patients | Offer sensitivity training for the whole team | LW can be trained about the specific needs of LGBTIQ persons , LGBTIQ specific local offers, and common problems that should be known by the LW | |
| “Rule of thumb”: offer inclusion to anyone who answers something other than “heterosexual” when asked about orientation or identity | | LW should be trained to identify red flags (social service claim, suicidality, somatic emergencies, etc.) and inform the GPs | |

3.2 AAU: First-generation migrants and refugees

At AAU the workshops of the second phase were held on June 2nd, 2025 and June 11th, 2025 at a municipal health centre in the Central Denmark Region. Similar to the workshops in the first phase, the participants belonging to the target group were recruited by health professionals affiliated to the municipal health centre. For the first workshop, 22 participated in total (15 with a background as migrant or refugee; two MDs including a representative of Danish Society for Immigrant Health (DSIH); three healthcare professionals; and two LWs). For the second workshop, 33 participated (20 with a background as migrant or refugee; four GPs; three healthcare professionals; four LWs; and two community service providers). Thus, the workshops consisted of representatives of stakeholders across the core components of a social prescribing intervention.

During both workshops, the participants were offered catering and drinks as a gesture of gratitude for their involvement. Additionally, after the second workshop, gift baskets were distributed as incentives for participation in the workshop rounds.

Workshop I: Before participants arrived, tables were grouped according to native languages such as Turkish, Arabic, Somali, and Danish. As participants arrived, they were invited to take their seats according to their preferred language. Participants were then introduced to the SP-EU project, the concept of social prescribing, the aims of the workshop rounds, and an evidence brief featuring findings from the initial review (T5.1). After the introduction, each table with four to six participants was guided through the process of describing a social prescribing 'journey map' using the personas (output of T5.2) as practical examples. Questions posed on an A3 template helped participants identify what should happen at each stage of the intervention to accommodate the needs and social context of migrants and refugees. After 30 minutes of group work with the journey maps, the groups were asked to present their answers and considerations in plenum. Here, clarifying questions could be asked. The workshop lasted 90 minutes.

Workshop II: Before participants arrived, tables were arranged with language differences and stakeholder roles in mind, so participants belonging to target groups were grouped together, GPs were grouped together, LWs and community providers were grouped together, to promote discussion related to specific tasks and roles within a social prescribing intervention. As participants arrived, they were invited to take their seats according to their stakeholder role. Since new participants attended compared to Workshop I, the second workshop began with a brief introduction to the SP-EU project, the concept of social prescribing, and the aims of the workshop rounds. Afterwards, the journey maps (findings from Workshop I), were shared with the participants. Then, each group with four to six participants was guided through the process of filling in stakeholder-specific templates, which supported them in identifying the roles and tasks of stakeholders within a social prescribing intervention, including those of patients, GPs, LWs, and community service providers. After 30 minutes of group work with the stakeholder-specific templates, the groups were asked to present their considerations in plenum. Here, clarifying questions could be asked. The workshop lasted a total of 90 minutes. Findings from the two workshops were used to develop the key findings (see table below) with suggestions on how to adapt the social prescribing intervention to accommodate the needs of refugees and migrants.

Table 3: Key Findings AAU.

| CO-CREATION HUB: Aalborg University | | TARGET GROUP: First-Generation Migrants and Refugees | |
|---|--|--|--|
| <ul style="list-style-type: none"> One major barrier related to GPs and link workers is not speaking the same native languages as migrants and refugees. Being in a vulnerable situation and experiencing oneself as vulnerable might hinder some migrants and refugees from actively participating in a social prescribing intervention. Therefore, healthcare professionals and link workers need to recognize patients' limited resources while also activating the resources that the patient has, as well as support from relatives and networks. | | | |
| KEY FINDINGS REGARDING... | | | |
| PARTICIPANT RECRUITMENT <i>i.e. how to identify participants for the study</i> | GENERAL PRACTITIONERS <i>i.e. training and recruitment</i> | LINK WORKERS <i>i.e. training and recruitment, contact with participants and community engagement</i> | FORMS OF INCLUSION & EQUITY, OUTCOME MEASURES |
| Ensure interpretation (when needed) and seek options for extra time in consultations with the GP. | GPs can ask questions that enable patients to share their interests and needs, bringing social problems into consultations. | Consider recruiting link workers who speak the native languages of the targeted migrants and refugees. | At the patient level <ul style="list-style-type: none"> Knowledge about community options (Expansion of) personal network Self-confidence Meaning in life (Mattering) |
| Language barriers can be addressed by i) using an interpreter, ii) having a volunteer, friend or relative translate, or iii) using e.g. Google Translate if the patient is competent in doing so | GPs can describe social prescribing in a concrete manner, e.g., by having pictures of link workers or mentioning specific community services | To build trust, link workers can offer face-to-face consultations. Link workers can follow up by phone or face-to-face, asking patients about what happened since the last consultation. | At the organizational level – in general practice <ul style="list-style-type: none"> Use of services in general practice |
| Patients should be honest if social prescribing or a specific community service is not of interest to them. | GPs can make sure to recruit patients who are willing to engage actively in social prescribing | In consultations, link workers can be i) curious and ask about the patient's background, interests, and needs without fixed expectations; ii) suggest ideas for community options when patients lack clear plans; iii) share information about culturally diverse community services; and iiiii) offer to accompany patients to various community options. | At the organizational level – in community service <ul style="list-style-type: none"> Visibility of services among users who are less represented in community services Accessibility of services among users who are less represented in community services. Diversity among users in community services |
| If patients want to participate in community services with peers, they may be able to recruit more from their own network | | Link workers can support community services in including participants from diverse cultural backgrounds, and support continuous participation through i) informing the patient about what to expect going onwards; and ii) sharing the patient's goals with community service providers. | |

3.3 UBERN: Older adults living alone

The second phase of the stakeholder workshops took place on June 2nd and June 16th, 2025, at the city library in Biel. This venue was selected to ensure easy access for participants. Each session lasted between 90 and 120 minutes. For the first workshop, seven older adults participated, along with three persons working with older adults. For the second, six older adults participated, as well as three persons working with older adults. As in the previous phase, participants were provided with food and beverages, and each received a financial reimbursement of 100 Swiss Francs. Transportation support was arranged and fully covered for those requiring assistance. Recruitment was again facilitated by our partner at the Swiss Red Cross.

The first workshop with 10 participants (7 older adults living alone, 3 social workers) was structured into two parts. It began with introductions from the study team and participants, followed by a brief overview of the research project and the concept of social prescribing. To set the stage for the next segment, the personas developed during the initial workshop were briefly presented. In the second part, participants were divided into three small groups, each working on one of the previously developed personas. Each group received a set of questions derived from four key components identified in the rapid review: training of GPs, training of LWs, outcome measurement, and participant recruitment. Guided by a facilitator from the study team, the groups discussed and answered the questions in relation to their assigned persona.

In preparation for the second workshop, the study team conducted a thorough review of the answers provided during the first session to identify potential adaptations to the manual. These insights formed the foundation for the second and final workshop.

The second workshop with 9 participants (6 older adults living alone, 3 social workers) also followed a two-part structure. It began with introductions and a recap of the study and the concept of social prescribing, followed by a presentation of the proposed adaptations based on the previous workshop's findings. These adaptations served as the basis for the small group discussions in the second part of the session. Participants were once again divided into three groups and asked to reflect on the proposed changes, refining, modifying, or suggesting additional adaptations they felt were necessary.

Table 4: Key Findings UBERN.

| CO-CREATION HUB: UBERN | | TARGET GROUP: Older Adults Living Alone | |
|--|---|---|---|
| KEY FINDINGS REGARDING... | | | |
| PARTICIPANT RECRUITMENT <i>i.e. how to identify participants for the study</i> | GENERAL PRACTITIONERS <i>i.e. training and recruitment</i> | LINK WORKERS <i>i.e. training and recruitment, contact to participants and community engagement</i> | FORMS OF INCLUSION & EQUITY, OUTCOME MEASURES |
| Add flyers, posters and screening questionnaires in the GP's waiting room | Train GPs to ask questions about social problems or problems not related to health | The LW should be well connected and have an excellent knowledge of local resources | More social contacts (outcome measure) |
| Willingness to participate increases if direct benefits are perceived (give examples of success stories) | General training on social prescribing to make them aware it exists, inform on resources, and increase referral capacity | Training on communication, crisis management, data protection, basic training in the social field, awareness of older adults' challenges | Improved relationship with the GP (outcome measure) |
| Reduce psychological barriers (reluctance to share problems, shame, uncertainty) | Improve communication and trust (e.g., direct eye contact, proactive questions to encourage communication) | The LW contacts older adults by phone and comes for a home visit | Delayed nursing home entry (outcome measure) |
| No (or low) cost | Other specialists could refer older adults to the GP for social prescribing | The LW is flexible , contact older adults quickly, and gives alternatives (e.g., neutral location for visits) | GP and LW satisfaction (outcome measure) |
| Keep things simple (avoid complex procedures and appointments burden, emails) | | | Long-term engagement, recommendation (outcome measure) |
| Change the LW if a trust relationship cannot be built | | | Other "usual" outcome measures: satisfaction, well-being, quality of life, reduced need for GP visits and healthcare costs, better physical and mental health |

4. Phase 3 of the Co-Creation Process: Review and Consensus Building

4.1 Review Process

The key findings of the second phase of the co-creation process were presented in each of the RCT hubs with a Local Advisory Board (LAB). These LABs consisted of representatives of each of the three groups and representatives of local GPs. The goal of the LAB was to evaluate the key findings for feasibility and appropriateness.

The LABs received the key findings in advance via email, and were asked to prepare feedback and discuss the key findings. To support this process, we prepared a feedback form containing two questions. One question focused on content-specific feedback (“Are there any key findings related to the group that you feel are missing, or need adjustment?”), and the other question focused on context-specific feedback (“Considering your local context, is there anything in the key findings that you feel is missing, or requires adjustment?”).

The LABs then met with one or more researcher(s) of the respective hub to discuss the key findings along these two questions. In each hub, the researchers collected the LAB feedback and prepared them for the next steps.

First, the feedback of all hubs was compiled and summarized, then clustered and thematically organized to fit with the results from the co-creation workshops using the categories from the key findings. Based on their frequency of occurrence and considering aspects of feasibility, a set of recommendations was developed in preparation for the consensus conference.

The set of recommendations developed for each target group consisted of the following categories:

- Recruitment of Participants
- Recruitment of GPs
- GP Training
- LW Training.

Based on the LAB feedback, the recommendations were sorted into two recommendation levels:

- “Sponsor/hubs should...” (stronger recommendation)
- “Sponsor/hubs may...” (conditional recommendation)

4.2 Consensus

On October, 21st, 2025 the final consensus conference took place. In the consensus conference, the 10 RCT hubs, the representative organizations for the target groups (Schwulenberatung, DSIH, SRK Bern) and the representative organization for the GPs (WONCA Europe) were presented the set of recommendations developed from the key findings and the LAB feedback for discussion and final voting on the set of recommendations for the RCT.

The voting procedure was as follows: each of the 10 RCT hubs could submit one vote. The representative organizations (Schwulenberatung, Danish Society for Immigrant Health, Schweizer Rotes Kreuz Bern) had two votes each. The GP representative organization (WONCA Europe) had two votes. The study coordinator (Charité) had one vote, which led to 19 votes in total. Each recommendation was voted on separately, following the Association of Scientific Medical Societies in

Germany (AWMF) guidelines [7]. A consensus was reached when $\geq 75\%$ agreed on a recommendation. A strong consensus was reached when $\geq 95\%$ agreed on a recommendation.

4.2.1 List of Final Recommendations

The following table contains the list of recommendations agreed on in the consensus conference. In the consensus conference, 27 of the 28 recommendations were unanimously accepted. Recommendation B1.4 received two “no” votes but still met the predefined consensus threshold.

Table 5: Final Recommendations for Intervention Adaption.

| Target Group | Category | No. | Recommendation |
|--------------|--------------------------------------|------|--|
| LGBTIQ | Recruitment of Participants | A1.1 | Hubs should encourage GPs to adapt medical history forms to include sexual orientation, gender identity and potentially pronouns to identify the target group |
| | | A1.2 | Hubs should encourage GP practices to signal that they are sensitive to LGBTIQ issues, e.g. by displaying inclusive material (e.g., symbols, posters, name tags with pronouns), by having LGBTIQ-related flyers and magazines in the waiting area to make it easier for patients to proactively address their gender identity and sexual orientation during the consultation |
| | | A1.3 | Hubs may encourage GPs to reflect on if and how they want to ask patients about their sexual orientation and gender identity |
| | Recruitment of General Practitioners | A1.4 | Hubs should consider recruiting GPs with an existing patient base of LGBTIQ persons |
| | General Practitioner Training | A2.1 | Sponsor/Hubs may offer (non-mandatory) sensitivity training for GP practice teams. This training may e.g. include strategies on communication behaviour, stereotyping and microaggressions |
| | Link Worker Training | A3.1 | LW training should educate LWs about the specific needs of LGBTIQ persons and ensure they know about LGBTIQ-specific common problems and local offers |
| | | A3.2 | LW training should help LWs to identify red flags that cannot be addressed in the LW setting (e.g. suicidality, somatic emergencies, help with social services claims, etc.) and other situations in which the LWs need to inform GPs |
| | | A3.3 | LW training should increase awareness in LWs to consider networks and community services that are targeted towards LGBTIQ persons or are queer-friendly |
| | | A3.4 | LW training should increase awareness that local services can be subgroup-specific (e.g., not every offer for gay men might be suited for trans persons) |

| | | | |
|--------------------------------------|---|------------------------------------|---|
| | | A3.5 | LW should know about issues of intersectionality (e.g., being LGBTIQ as a migrant, being LGBTIQ as an older adult) and how to address them |
| First Generation Migrants | Recruitment of Participants | B1.1 | Sponsor should provide additional study information and material that is easy to use and to understand, e.g. by using multiple languages, by relying on images rather than text |
| | | B1.2 | Hubs should encourage practices and LWs to find a structured approach in overcoming language barriers, by using translators (e.g. relatives/contacts of the patient, practice personnel speaking the language, use of external translators in person/via video-call) or digital translation tools |
| | Recruitment of General Practitioners | B1.3 | Hubs should try to recruit GPs and practices operating in areas with higher proportion of migrant populations |
| | | B1.4 | Hubs should try to recruit a diverse range of GPs (i.e. different genders, ages, cultural background) as it may be important for the target demographic |
| | General Practitioner Training | B2.1 | Hubs should support GPs to be open for the social problems of their patients |
| | | B2.2 | Hubs should, in support with the sponsor train GPs to recognize migrants as a heterogenous group with diverse cultural backgrounds and communities |
| | Link Worker Training | B3.1 | Sponsor should ensure the inclusion of a training block on cultural sensitivity in LW training, covering topics such as religion, world views, and family dynamics |
| | | B3.2 | Sponsor should encourage that the first LW consultation takes place face-to-face to build trust and connection |
| | | B3.3 | Hubs should ensure that scheduling and coordination of LW appointments is as easy as possible for patients |
| | | B3.4 | Hubs should encourage LWs to connect with local communities to offer culturally appropriate services |
| | | B3.5 | Hubs should consider recruiting LWs with specific language skills relevant to the populations served |
| | Older Adults Living Alone | Recruitment of Participants | C1.1 |
| C1.2 | | | Hubs should encourage GP practices to add flyers and posters in the GP's waiting room to promote the study to the target group |
| General Practitioner Training | | C2.1 | Hubs should support GPs to be open for social problems of their patients |
| Link Worker Training | | C3.1 | LW training should increase awareness of the importance of time in this group, e.g. when explaining the process |
| | | C3.2 | LW training should support LWs in reducing barriers to participation for the target group, e.g. accessibility/mobility barriers and resistance toward participation due to stigmatization |
| | | C3.3 | LW training should prepare the LWs for a flexible intervention delivery in accessibility aspects (e.g. delivery at home, at the practice, or over the phone depending on the level of trust between LW and the participant) |
| | | C3.4 | LW training should include knowledge on how to conduct home visits into the LW training |

5. Conclusion

The objective of the co-creation process was successfully completed in a timely manner with no major deviations and the final set of recommendations has been given to the RCT team for the study protocol.

6. References

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