Closing the Gap Network +

Aims of the network, research questions and research principles

1. Aims and Goals of the Network

To reduce the health and mortality gap between people with SMI and the overall population, our aims are to:

- **Understand the causes and consequences of the health and mortality gap.** This involves understanding how the social conditions and lifestyles of people with SMI impact their health, whether and how these differ from the population as a whole, and the consequences of these differences for morbidity and mortality; and
- **Identify the most effective ways to mitigate these causes and consequences.** This involves understanding which of these differences are important in affecting health outcomes, how they are potentially amenable to change without generating health inequalities due to adverse social conditions, and the ways in which this could be achieved including any specific opportunities linked to lifestyles.

The core principles of the network are to be;

- Participatory
- Inclusive
- Innovative
- Outward facing
- Sharing
- Engaged

The specific research goals of the Network are:

A. **Understand the causes and consequences of the health and mortality gap**

1. To understand how people with SMI perceive and use green and blue space, the impact of interactions with green and blue space on their health and wellbeing, and the nature of any differences with the population as a whole.
2. To explore how integrating datasets on health status and use of health services with other datasets, such as environmental data, can deliver new insights into the interactions between different determinants of health for people with SMI, and hence their impacts on health inequalities
3. To develop ways in which digital technologies can be used to reveal the connections between environmental factors and personal health and activity data for people with SMI.
4. To explore innovative, creative ways to engage people with SMI in network research and outputs that increase wellbeing and physical activity.
5. To understand the role of social and economic vulnerability in the both the generation of worse health for people with SMI and an individual’s ability to make gains from an intervention.
B. **Identify the most effective ways to mitigate these causes and consequences**

1. To determine the most effective roles and responsibilities of the primary and secondary healthcare sectors in understanding and supporting people with SMI and supporting interventions.
2. To determine the effectiveness of existing initiatives to promote the use of green and blue spaces for people with SMI.
3. To design and pilot new initiatives, including technology-based interventions, to increase physical activity of people with SMI.
4. To determine the best way to prevent initiatives from generating further health inequalities through social and economic vulnerability, and investigate promising initiatives that reduce them.
5. To develop a new resource enabling integration of datasets for future research on inequalities affecting people with SMI.
2. Research questions

A. Understand the causes and consequences of the health and mortality gap.

A1. To understand how people with SMI perceive and use green and blue space, the impact of interactions with green and blue space on their health and wellbeing, and the nature of any differences with the population as a whole.

i. How do people with SMI perceive, use and benefit from green and blue space, and are there specific differences between different SMI groups, and from those of the general population?

ii. How do formative childhood experiences affect perceptions, use and benefits of green and blue space, and are there any associations between these experiences and the later development of SMI?

iii. Do the benefits of green and blue space vary according to the level and type of activities pursued in them, including social interaction, and is there any evidence for dose-response relationships?

A2. To explore how integrating datasets on health status and use of health services with other datasets, such as environmental data, can deliver new insights into the interactions between different determinants of health for people with SMI, and hence their impacts on health inequalities.

i. How is the prevalence of SMI associated with green and blue space at different scales, and what is the interaction between SMI and physical health problems at these scales, including rural and urban differences?

ii. How do inequalities for people with SMI vary for different conditions and groups in society e.g. ethnic, LGBT and migrant groups?

iii. What are the barriers faced by people attempting to navigate the health and social care system for (a) people with SMI, (b) caregivers, (c) people working in the system as community health champions, and (c) GPs and primary care workers?

A3. To develop ways in which digital technologies can be used to reveal the connections between environmental factors and personal health and activity data for people with SMI.

i. Can technology be used to improve interactions and benefits (e.g. tailored maps, intelligent walking), and what are the barriers and limitations for people with SMI in accessing digital technology?

ii. How can digital technologies contribute to support physical and mental health care or towards awareness raising in relation to lifestyle choices?

iii. Can we recreate the experiences and benefits of blue and green space using VR?

A4. To explore innovative, creative ways to engage people with SMI in network research and outputs that increase wellbeing and physical activity.
i. Can creative experiences play a role in enhancing wellbeing for people with SMI, and for young people who may be at risk of developing SMI?
ii. Does creativity enhance the experience and benefits of green and blue spaces, and what forms of creativity are most effective?
iii. Can the experience of interacting with creativity be captured so people who can’t go out could experience it through VR?

A5. To understand the role of social and economic vulnerability in the both the generation of worse health for people with SMI and an individual’s ability to make any gains from an intervention.

i. What further do we need to know about the distribution and interaction of social and economic circumstances of people with SMI?
ii. Do these social and economic circumstances interact differently from adverse conditions experienced by the general population to produce health inequalities?
iii. What are the key features of services that are responsive and effective for people with SMI in relation to social and economic vulnerability, and key features of those that are not?

B. Identify the most effective ways to mitigate these causes and consequences

B1. To determine the most effective roles and responsibilities of different parts of the health sector in understanding the challenges faced by people with SMI and supporting interventions.

i. How do different services, including health checks, vary in their impact, cost-effectiveness and inequality for people with SMI, and how can examples of good practice at local level be used more effectively to support intervention review and development.
ii. What is the effectiveness of social prescribing for enhancing the mental and physical health of people with SMI, and how should it fit alongside other interventions for people with SMI?
iii. How can different healthcare workers including GPs and other primary healthcare workers, volunteers beyond the NHS who are often relied on to deliver interventions, and carers and caregivers, be best supported in enhancing the physical health of people with SMI, including during transitions such as leaving hospital?

B2. To determine the effectiveness of existing initiatives to promote the use of green and blue spaces for people with SMI.

i. Do different types of initiatives in green and blue spaces deliver different levels of benefit, e.g. how do benefits from ecotherapy and gardening therapy compare with
walking in green and blue space, and how does activity in green space differ from activity indoors?

ii. What evaluation techniques and evidence are ‘good enough’ to measure the effectiveness of green and blue space (or other) interventions in the absence of impractical and expensive RCTs?

iii. What is the range of co-benefits from encouraging use of blue and green space for people with SMI, e.g. for other sectors such as transport, biodiversity conservation, climate regulation?

B3. To design and pilot new initiatives, including technology-based interventions, to increase physical activity of people with SMI and reduce health inequalities.

i. How can new technologies improve delivery of advice and care through digitally-enabled communication between service users and professionals (e.g. GPs or specialists), as well as personalising of interventions and self-management for people with SMI, and what are the potential gains at a population level?

ii. How effective are existing ‘off the shelf’ technologies recommended by NHS Digital for the general population for people with SMI?

iii. How can interactive digital media outputs (with XR stories) be used most effectively to raise awareness about physical health and SMI

B4. To determine the best way to prevent initiatives from generating further health inequalities through social and economic vulnerability, and investigate promising initiatives that reduce them.

i. Are any of the traditionally excluded groups still being excluded in initiatives for people with SMI, what are the implications for generating further inequalities, and how can such exclusion be overcome?

ii. What is the contribution of the social and economic circumstances experienced by people with SMI in the generation of the profound health and mortality gaps and where is the best place to intervene on these?

iii. What is the effectiveness of services that promote good practice in their care and understanding of the specific social and economic difficulties experienced by people with SMI?

B5. To develop a new resource enabling integration of datasets for future research on inequalities affecting people with SMI.

The format of this resource is yet to be determined. However, datasets are already being developed on green and blue space, and on studies and reviews on digital technologies specific to physical health and SMI.
3. Network research principles

1. Sharing
   - A collective vision and endeavour
   - Participation, co-production and co-ownership

2. Participatory
   - Involvement of people with lived experience in the research
   - Active engagement with those involved in policy, delivery and practice

3. Inclusive
   - A sensitive and supportive approach
   - Commitment to understanding contextual basis

4. Engaged
   - Integration of local advocates and community members into network activities
   - Working with people with lived experience

5. Innovative
   - Commitment to novel approaches
   - Commitment to interdisciplinarity

6. Outward-facing
   - Effective communication and knowledge exchange before, during and after research
   - Engagement with the external research community
   - Policy and delivery relevant