**Action Line 1:** ***Prevention 2.0: Anyplace, Anywhere, Anytime*** **- Summary**

1) **Background and vision:**

Current health developments worldwide call for an increased focus on prevention. Preventive measures are vital to tackle the burden of non-communicable diseases (NCDs) and increase the sustainability of health care systems. The benefits of effective prevention are widely acknowledged but how prevention efforts should be organized is hotly debated.

At the core of the debate lies a trade-off between scale and scope. Large-scale interventions typically follow a one-size-fits-all approach. Everyone is assumed to make suboptimal decisions about their health and they receive the exact same intervention. This leads to a narrow scope of these interventions as they cannot cater to the varying needs, preferences and contexts of individuals. Individually tailored interventions are optimized for each individual. They are complex, tackle many different behaviors, and typically involve personal coaching or guidance. However, it is unclear if and how they can be scaled up to large populations.

*Prevention 2.0 has the ambition to bridge this divide.* Our goal is to gain knowledge on how to design large scale behavioral health interventions that consider people's unique needs and the context of their daily lives.

2) **Our objective:**

The objective of this project is to gain theory- and evidence-based insight into the design of impactful behavioral health interventions by considering the needs, preferences and contexts of individuals. We aim to advance scientific knowledge on the extent to which the effectiveness of behavioral health interventions can be improved by tailoring to (i) individual-level needs and preferences, including psychological traits and states, and to (ii) environmental-level contexts, such as economic, social, cultural, and institutional factors.

Better prevention requires smarter choices about which health behavior change interventions to favor in which context. We identify at least three channels to address context in behavioral interventions: 1) interventions can alter the context itself, 2) interventions can be adapted to varying contexts, and 3) interventions can boost people's decision-making capabilities to effectively manage their own context. With our interventions, we aim to respect the importance of individual autonomy and recognize that the way context is addressed should be informed by individual needs and preferences. To achieve our objectives, we plan to investigate how different contexts influence the formation of (possibly conflicting or competing) intentions and goals, how they contribute to barriers and facilitators people encounter en route to desired behavior, and how to apply behavior change strategies to stimulate individual autonomy. We envision that in-depth knowledge about the interaction between health behavior and context, with individual needs and preferences in mind, will lead to sustainable interventions that are adaptive, scalable and portable.

3) **Our impact:**

Throughout Prevention 2.0, we plan to acquire new evidence to help design more effective preventive health interventions by considering people's unique needs and the context of their daily lives. In order to maximize scientific impact, we plan to focus on health behaviors that are relevant to large parts of the population, associated with non-communicable diseases, and/or relatively understudied (e.g., sleep). To achieve maximal societal impact, we plan to specifically disseminate our findings among key policy decision makers and the public. We will therefore make use of the immediate connections

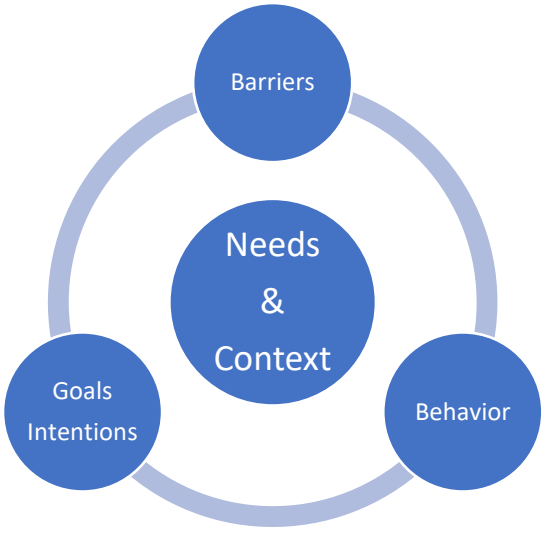
available through the core team of the action line (both the Department of Applied Economics and the Department of Public Health entertain tight links to local and national policy domains) as well as the connections available from other action lines. The latter will require a tighter synchronization of outreach activities across actions lines for which a dedicated person in the management team of the SCBH initiative will be responsible.

Whenever productive and mutually beneficial, we will actively seek cooperation with other action lines of the SCBH initiative (e.g., how to organize payment models for prevention at the system level, or the effects of preventive interventions on health equity) as well as closely related themes in the Convergence of Health & Technology (e.g., Human-centered Technology & AI for Health and Improving Health Journeys) and Resilient Delta (e.g., the SPRING theme).

Finally, we see the funding provided by Erasmus Initiative as seed-money to establish first findings. These findings will help us attract further funds to finance future projects. The core team has already taken first measures in this direction, by a) discussing practical procedures to maximize the chances to obtain funding, and b) starting to apply for small grants to finance some smaller projects from the team.

**4) Methodology:**

We plan to utilize a wide range of methodologies reflecting both the core team's diverse background and skills, and the holistic approach taken in this action line to design effective interventions. Qualitative and quantitative surveys will help us understand how people with different needs and contexts formulate possibly competing goals and intentions. Surveys and observational field studies will be used to identify the barriers that stand between goals and desired behavior. The assessment of needs and context will be theory driven and we specifically plan to create new knowledge on how they interact with the goal formation process and the identified barriers. Finally, based on our findings on goals and barriers, we plan to design portable behavioral interventions that are customized to the needs and context of the target population, and that boost individual decision-making capabilities to make smarter choice about health. We will use RCTs to test these interventions in the small (laboratory, pilot field studies) and select the most promising interventions for implementation in large-scale field experiments.



**5) Core team:**

**Action Line Leaders**: Georg Granic (ESE), Joost Oude Groeniger (Erasmus MC, ESSB)
**Postdoctoral researchers**: Lili Kokai (Erasmus MC), Stefan Lipman (ESHPM)
**PhD students**: ESE (vacancy); Erasmus MC (vacancy)
**Affiliated steering group members**: Kirsten Rohde (ESE)
**Affiliated MT members**: Hans van Kippersluis (ESE)