# Reducing inequalities by removing barriers to better health

## 1. Background

Despite efforts to reduce inequalities in health, large health disparities by socioeconomic status persist. The Netherlands has a strong social safety net and comparatively low financial barriers to preventive and curative health care, but the difference in life expectancy between the least and most educated is around 4.5 years, while the difference in (self-perceived) healthy life expectancy amounts to 13.5 years.[1] These inequalities are partly due to preventable or treatable causes. This raises the question whether public health policies reach those who need them most. And if not, how access can be improved.

## 2. Objective

This project contributes to breaking down the barriers that prevent low-SES individuals from obtaining better health in two ways. First, we will document trends in inequalities in health over different parts of the lifecycle and their relation with and impact on inequalities in other societal domains like education, employment, and housing. Second, we will identify specific mechanism underlying inequalities in health using (natural) experiments. We will design, evaluate, and compare policies that try to tackle these mechanisms. Specifically, we will focus on interventions that increase the uptake of existing preventive services in vulnerable populations.

## 3. Impact

Over the next four years, four Schools of Erasmus University Rotterdam will strengthen their existing collaborations within the "Smarter Choices for Better Health" (SCBH) Erasmus Initiative. The aims of the project require integration of expertise in epidemiology, public health, clinical practice, health economics, and applied econometrics of these four schools.

Researchers will work with societal partners—such as policy makers, health insurers, and health care providers—to turn this new knowledge into action. We will build on and extend our network of national policy makers and research institutes (RIVM, CPB, TNO, Verwey-Jonker Instituut), health insurers, local governments (*Nationaal Programma Rotterdam Zuid*), and health care organizations (NCJ, preventive youth health care organizations, the regional consortium pregnancy and birth South West Netherlands) to create opportunities to design and evaluate interventions and to increase the impact of our findings on policy.

The action line is intended to be a stepping stone for further collaboration and research on inequalities in health. We will actively seek for funding opportunities to ensure continuation of the activities within the health equity action line. We will integrate our activities within existing subsidies to our members by the, Nationale Wetenschapsagenda (NWA) and the Bernard van Leer Foundation, and we will actively pursue funding opportunities beyond the duration of this action line from NWO (including the SPRING Consortium), ZonMw, NWA, EU, Nationaal Groeifonds, Topsector Life Sciences & Health, and Dutch national and local governmental organizations.

## 4. Methods

We will pursue our research objectives in three steps.

*Step 1: The scope and potential benefits of reducing health inequalities*

The first part of this project will consist of explorative research into health inequalities and associated societal factors across the lifecycle to document the scope for better health policy. The

[1] https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84842NED/table?ts=1628670017185

availability of rich administrative data for the entire Dutch population now allows for a much more detailed analysis of inequalities than was previously possible. We will focus, for instance, on inequalities in health, development, and health care use in early childhood, and trends in mortality across specific age-groups and locations. Similarly, linked data on health, health care use, income, and other societal outcomes can be used in a scenario analysis to quantify the potential welfare gains of reducing health inequalities.

*Step 2: Identifying barriers to better health*
The explorative analysis in part 1 allows us to identify specific phases in the lifecycle where the barriers to better health are high and the potential gains are the greatest. Based on this, we will then focus on the identification of causal mechanisms and policy effects for relevant specific barriers and interventions that contribute to overall inequality. This will be done using both quantitative and qualitative methods: quasi-experimental observational studies can identify the role of specific societal barriers, such as housing or work, in shaping health inequalities. With the same methods, socioeconomic inequality in the role of particular barriers, such as financial costs or physical distance to a good quality provider, can be identified. Interviews and surveys can provide in-depth knowledge on why some individuals do not take up specific care or interventions, such as freely provided youth care, that are already available within the current system.

*Step 3: Designing and evaluating interventions to break the barriers to better health*
Step 3 sets the stage for the evaluation of specific local or national policies and interventions and their effects on health inequalities. We will take stock of best practices and existing or new policy initiatives to address specific barriers that we can evaluate (e.g. lifestyle interventions, debt relief, neighborhood renovations). In particular, we will identify evidence-based interventions to increase the uptake of care and prevention programs (e.g. the provision of information through text messages, the availability of interpreters, help with paperwork) and then exploit the randomized assignment of these up-take interventions to increase the participation into these programs. These kind of randomized experiments to increase uptake are not only relevant in itself, but also provide exogenous variation in the use of care and prevention programs, which can be used to estimate (cost-) effectiveness and welfare effects of these programs. Specific interventions can be increasing the uptake of free preventive youth health care among specific groups or increasing awareness and use of full insurance against the health care deductible for low income individuals offered by the city of Rotterdam. For this part of the project we will actively seek cooperation with societal partners, such as the municipality of Rotterdam and specifically *the Nationaal Programma Rotterdam Zuid*.

## 4. Core team

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