

## Developing physical resistance and resilience against disease

Network Organisations Working group A

# Problem divided in sectors

"How can we make citizens physiologically more resistant and resilient?" Multiple sectors = multiple views on the problem!

- Subgroup A1: municipal sector
- Subgroup A2: medical sector
- Subgroup A3: educational sector
- Subgroup A4: vital occupations sector

Solution needs all sectors! Combination of bottom-up and top-down



## **Municipal sector**

Sven van Mansom, Friso Harlaar, Simon Kreulen, Zubin Pengel, Luuk Bruins, Richard van den Aardweg and Milou de Sevaux



### Problems

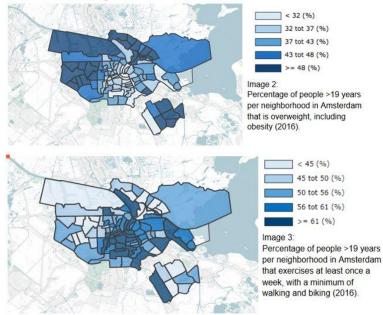
Resistance (short term)

• Inconsistent rules and communication.

#### Resilience (long term)

• Inactivity/obesity leads to lowered immunity.

#### Health in Amsterdam neighborhoods





### Solutions

#### **Resistance (short term)**

- Better communication with citizens.
- Include mayor in decision-making process.

#### **Resilience (long term)**

- Sport app.
  - Focused on neighbourhoods in Amsterdam
  - Rewards for improving health
- Plan B Sugar tax.





### **Medical sector**

Daan van Baarsen, Mick van den Boer, Sam Bijhouwer, Una Garcia, Justine de Jong and Tijn Schickendantz



### The problems

- Insufficient physical activity causes reduced physical resilience
- Identifying risk cases
- Introducing risk cases to local health initiatives





### Our solution

- Identifying risk cases with a voluntary population screening
  - Age, BMI (height, weight), eating habits, exercise habits
- Creating an online overview of local health based initiatives
  - Offering a choice of initiatives
  - Keeping track of weight progress
- Multidisciplinary approach
  - Municipalities, education, insurance companies



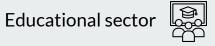






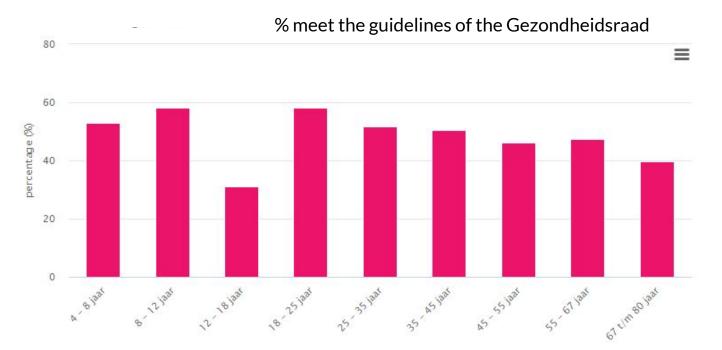
## **Educational sector**

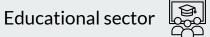
Roemer Wage, Dennis de Buck, Joran Verweij, Cesar Groot Kormelink, Enzo Delaney-Lamour, Steijn Wehman and Maik Larooij



NICE (April 2020): 77% of Intensive Care patients suffer from overweight

#### The problem at hand







## Vital occupations

Robin van Beek, Sem Kjaer, Rogier Wesseling, Joana al Ali, Mike Evertsen and Berkay Yayla



### Problem

How can we ease the temporary labor shortages in specific industries within the vital occupations sector?



### Solution

- Compensating shortage of people in certain areas of the vital professions by taking people from other areas that have lack of work
- Provide classes for people so they can work in different areas within the vital professions





#### Conclusion

"How can we make citizens physiologically more resistant and resilient?"



- Municipal sector: Sports app, sugar tax
- Medical sector: Local health initiatives
- Educational sector: Gamifying education
- Vital occupations: Shuffling underworked vital occupations

- Combination of top-down and bottom-up measures for a larger reach
- Solutions touch all the discussed sectors