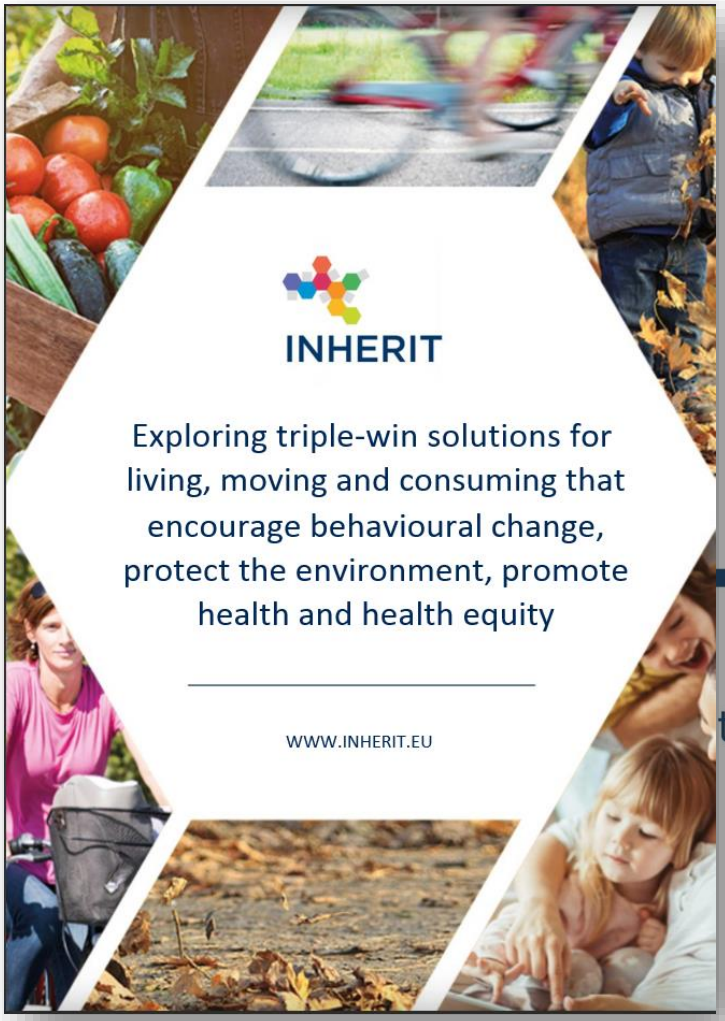

Make way for active transport: Opportunities to change travel behaviour

Brigit Staatsen (RIVM)

The INHERIT project (2016-2019), coordinated by EuroHealthNet,
has received funding from the European Union's Horizon 2020 research and innovation programme
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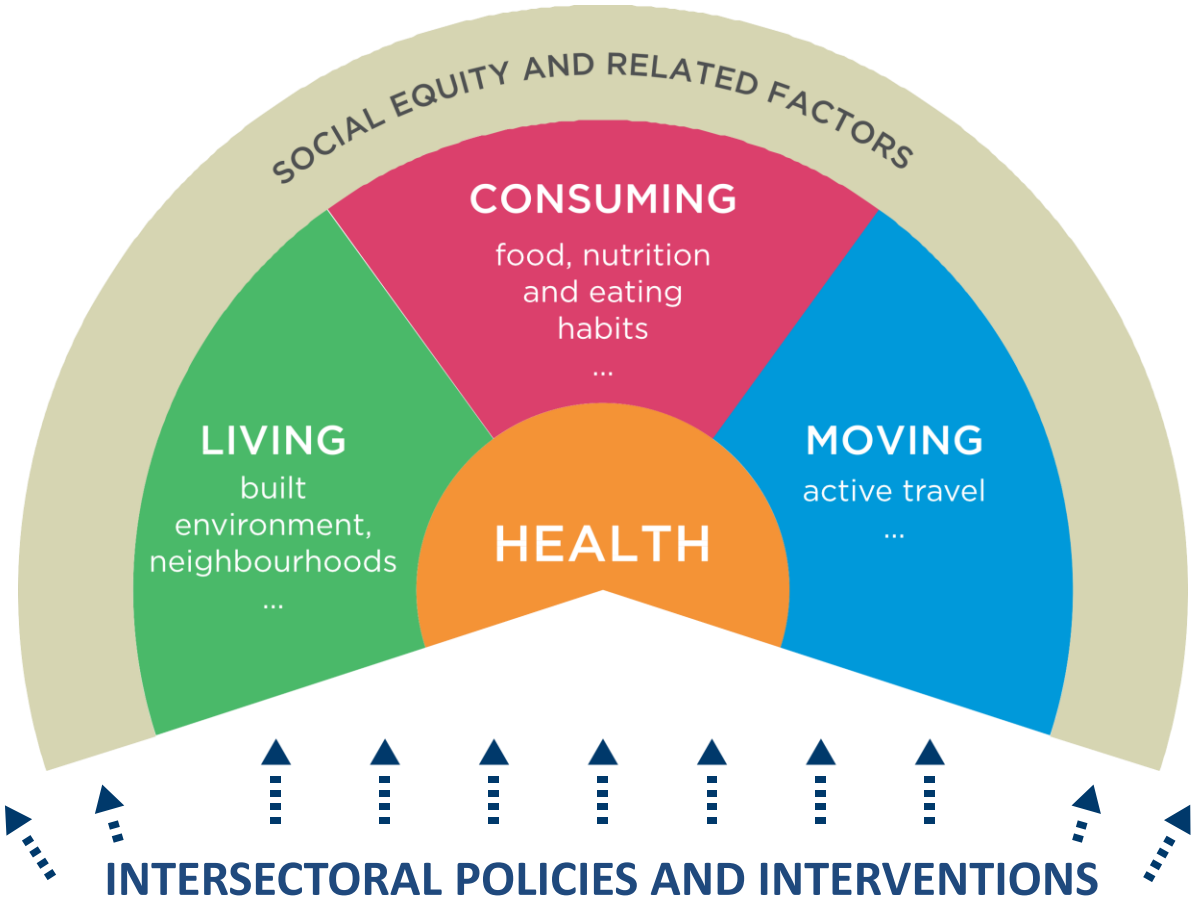
INHERIT AIMS

MODIFYING:

- Lifestyles
- Behaviours

AIMING FOR A "TRIPLE WIN":

- Health
- Equity
- Environment



INHERIT Process

BASELINE REVIEW ANALYSIS

COMMON ANALYTICAL FRAMEWORK

50 PROMISING PRACTICES

VISIONING AND FUTURE SCENARIOS

12 PILOT PROJECTS

IMPACT ASSESSMENT

POLICY KIT

Aims Baseline Review

- Bring together knowledge on impacts of key environmental factors on health across the social gradient

- Identify main (drivers of) behaviours that impact environment and health, health equity and wellbeing ('triple win')
- Collect information on policies, interventions and innovations

- Focus on behaviours and lifestyles

Focus on
Living- green space & energy efficient housing
Moving - active transport
Consuming - food and food waste

INHERIT model or “Behaviourally enhanced DPSEEA model”

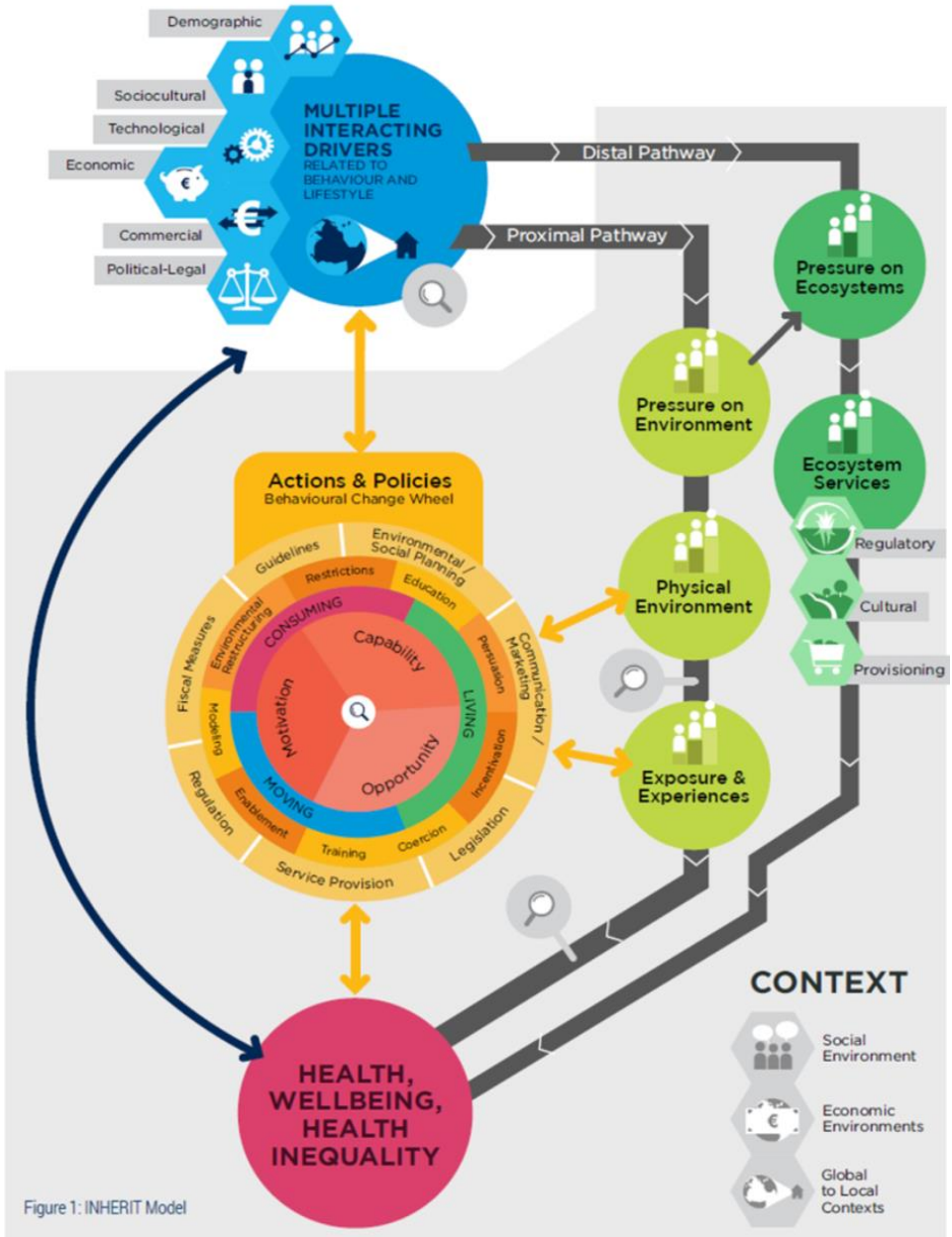


Figure 1: INHERIT Model

A brief walk through the model

Reis et al. (2013)
Michie et al. (2011)

COM-B

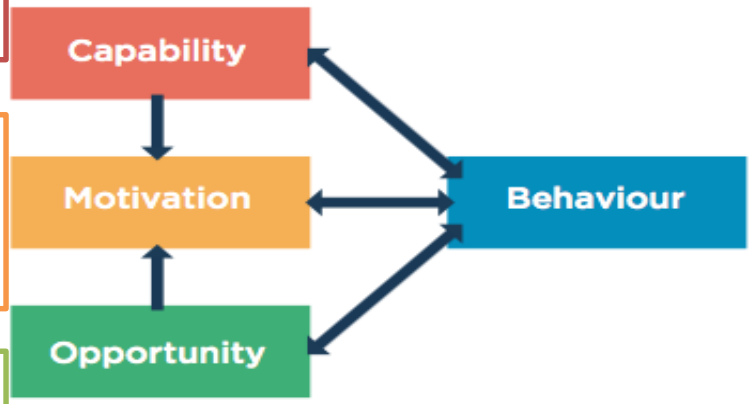
Behavioural System:

Entry-points to change behaviours and lifestyle

Being psychologically or physically able to perform certain behaviours : skills, knowledge

All brain processes that activate or inhibit behaviour; both reflective and automatic mechanisms: attitudes, habits

Physical and social environment that facilitates or hinders behaviour: availability, social norms



Michie et al. (2011)

Behavioural Change Wheel

What conditions internal to

- **Individuals/populations**
- **Decision-makers**
- **Social/physical environments**

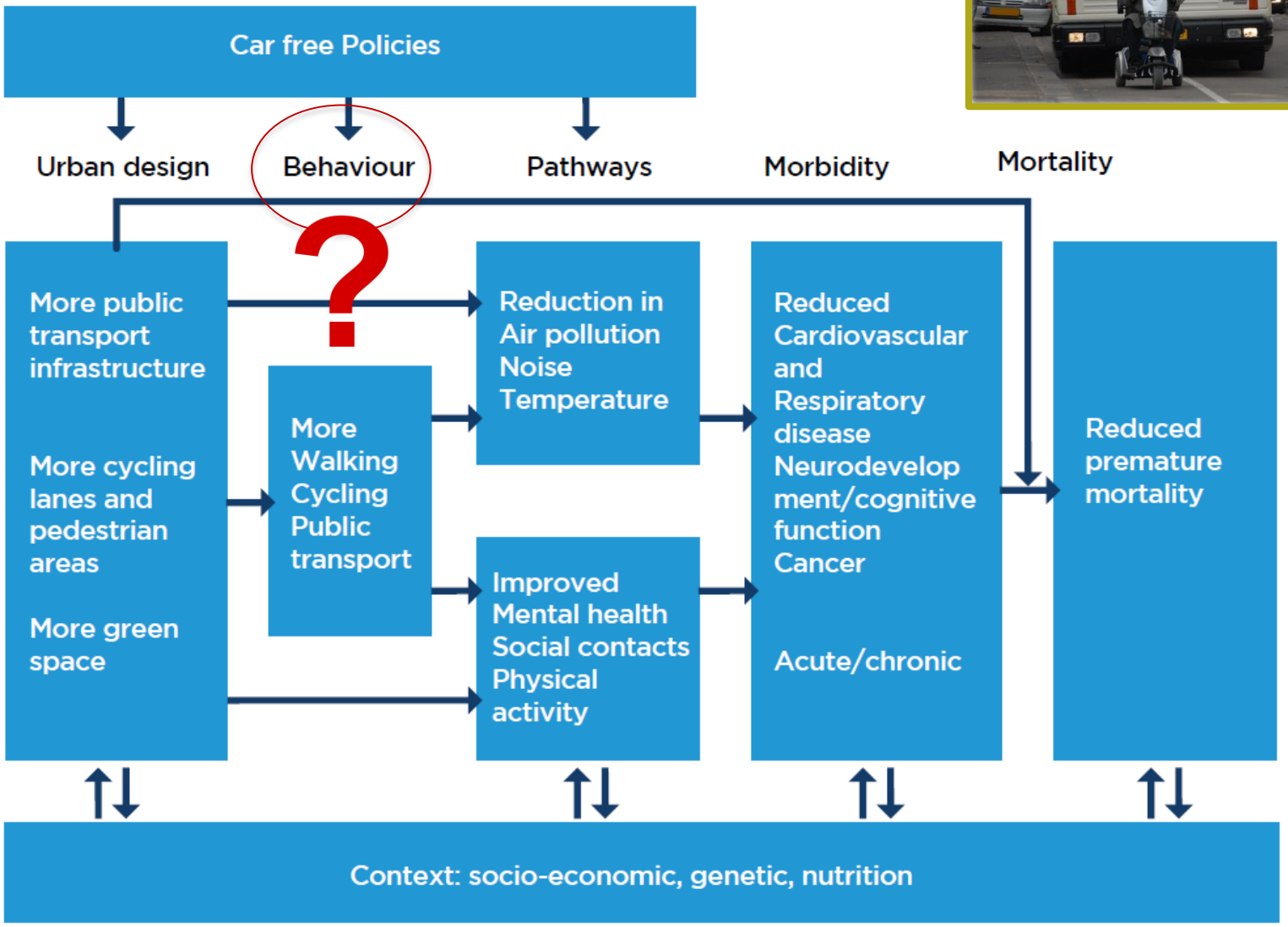
need to be in place to achieve specific behavioural targets?

MOVING
ACTIVE TRANSPORT

Challenges

- Motorised transport: 25% greenhouse gas emissions EU
- 50% daily journeys by cars < 5 km
- Congestion, air pollution, noise, sedentary behaviour
- People want convenience and speed
- Unattractive, unsafe walking & cycling infrastructure
- High household income: better active transport settings

Rethink urban design needed



Source: Nieuwenhuijsen& Khreis, 2016

Triple win shift - active transport

Environment	• Decrease in air and noise pollution and greenhouse gas emissions • Less congestion (if shift from motorized transport to active transport)
Health	• Lower body mass index and decrease obesity • Reduced prevalence of type 2 diabetes • Reduced cardiovascular morbidity/mortality • Improved mental health • Increased self-sufficiency and social activity • Positive effect related to less noise/air pollution - Decreased rates of respiratory and cardiovascular diseases - Improved sleeping patterns - Less noise • Negative effects: Increase of traffic injuries and deaths (depending on safety measures)
Health Equity	• Reduced exposure of social disadvantaged groups to traffic, air pollution and related adverse effects • Increased physical activity among low income and ethnic minority adults.

MOVING
ACTIVE TRANSPORT

Opportunities & challenge

Combine structural measures with behavioural measures

Capability	Opportunity	Motivation
Being able to (safely) cycle and walk	Safe, attractive walking and cycling infrastructure	Perceived accessibility/safety Habits
Cycle training	Dense public transport network	Incentives for active travel, fun /play aspects

MOVING
ACTIVE TRANSPORT

Rotterdamse doortrappers

INHERIT Database promising practices

INHERIT

ABOUT PROJECT IDEAS MEDIA RESOURCES

UrbanCyclers

Brief Description	UrbanCyclers is an urban cycling app for Android and iOS. Its key features include cycling route planner (as of now for Prague, Bratislava and Berlin), turn-by-turn navigation that allows for combining biking with public transport, and route tracking that is linked to a system of rewards and community experience sharing. The routing engine is based on state-of-the-art artificial intelligence algorithms that allows for setting preferences for several criteria including safety, comfort and speed.
Image	

This app has been chosen because it has a clear win-win potential that may turn into triple win. From an environmental perspective, it motivates a switch from car to cycling for daily commuting and reduces emissions, noise and congestion. From a health perspective, it promotes regular physical activity thus contributing to healthier lifestyle, reduces morbidity and premature mortality risks. The social perspective is somewhat less pronounced but cycling is one of the most affordable transport means, and a well-designed and clear app may help users overcome perceived barriers of urban cycling, e.g. by means of route planning and navigation, or community experience sharing.

Conclusions

- Need to understand & address (behavioural) trends driving current & future mobility
- Most effective: combine structural with behavioural measures
- Enough evidence to act now, (intersectoral) coherent action needed from policy makers, private sector & citizens
- Opportunities: e.g. EU-SUMP, city and country initiatives
- Need for longitudinal studies/natural experiments to improve understanding (cost-)effectiveness of innovative measures which stimulate active transport
- Sustainable and healthy transport for all

INHERIT Partners

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THANK YOU!

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