

EU-Human Exposome Project

REMEDIA

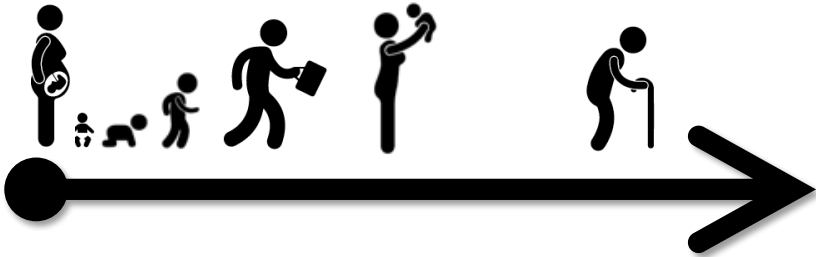
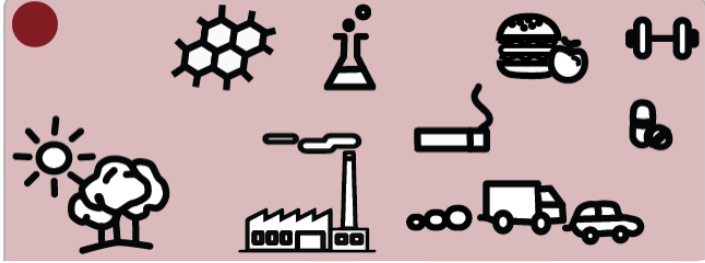
Sophie Lanone



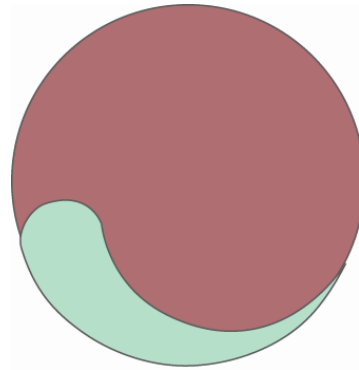
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement #874753

What is REMEDIA about?

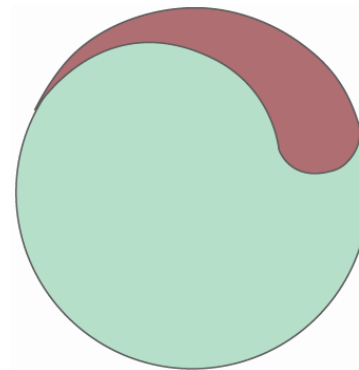
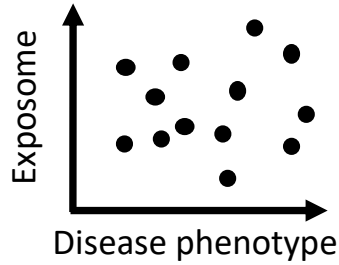
External exposome



Internal exposome



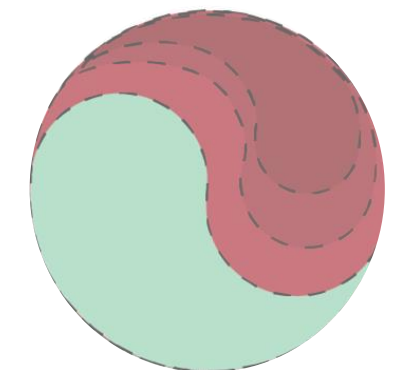
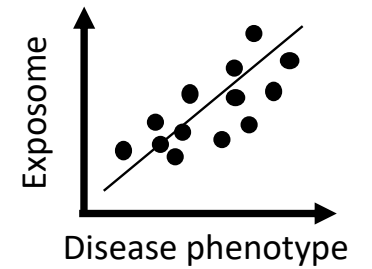
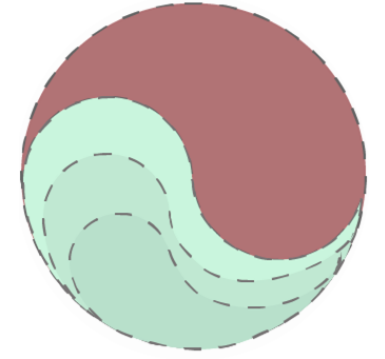
Chronic Obstructive
Pulmonary Disease
(COPD)



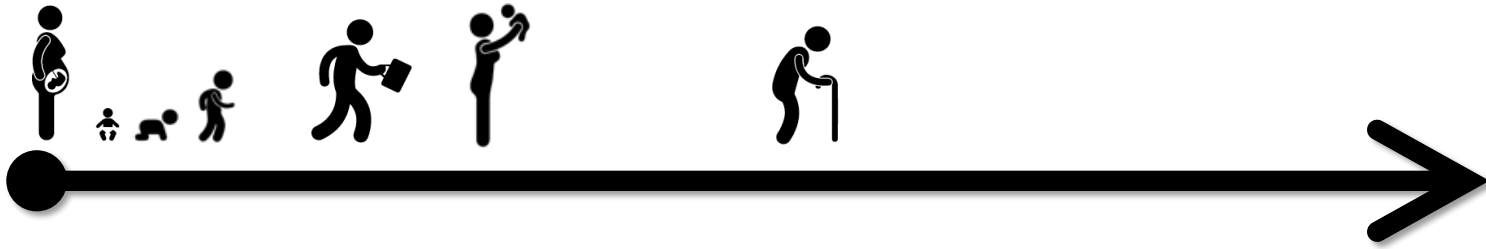
Cystic Fibrosis
(CF)



REMEDIA

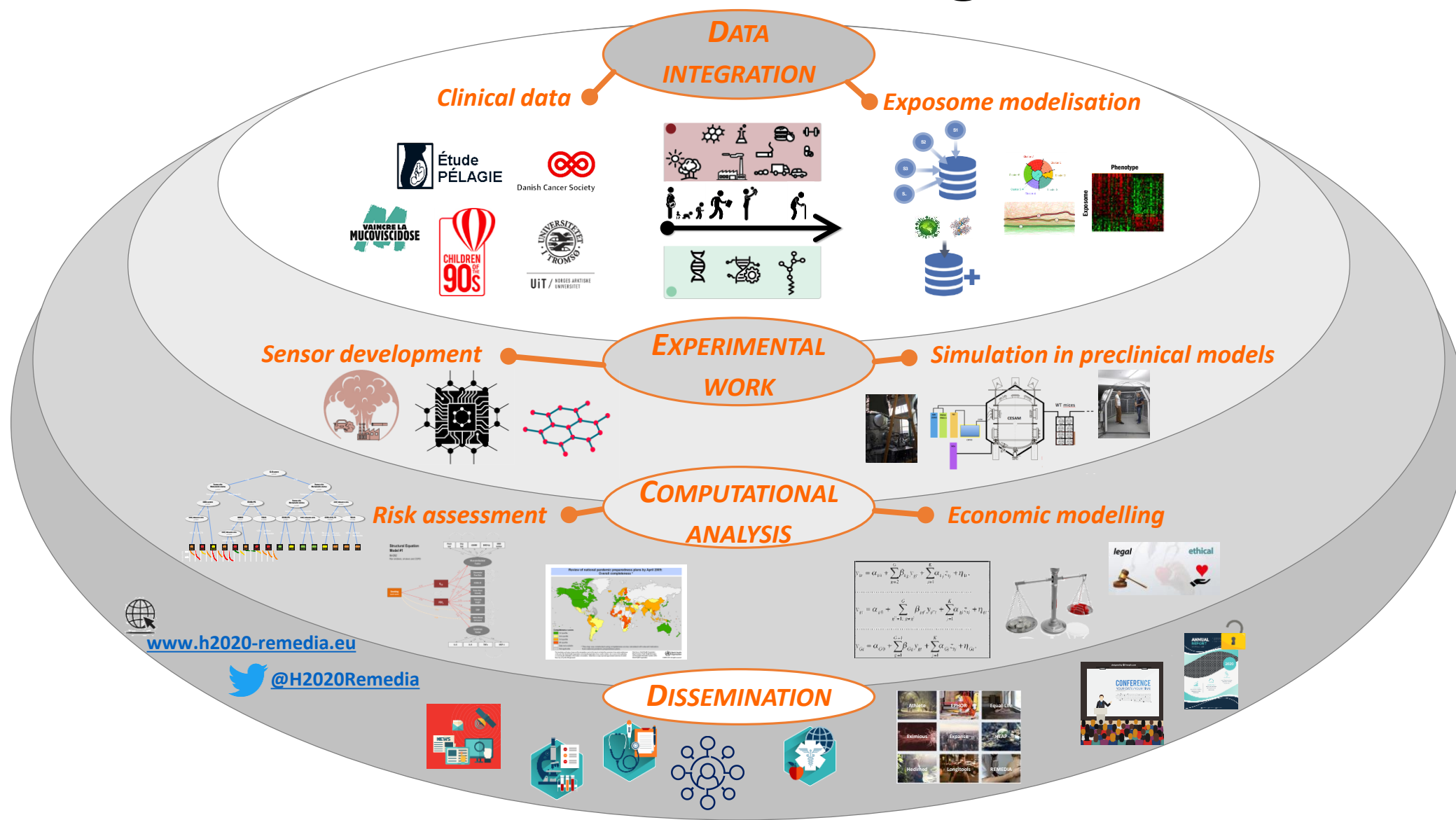


Why is this important?

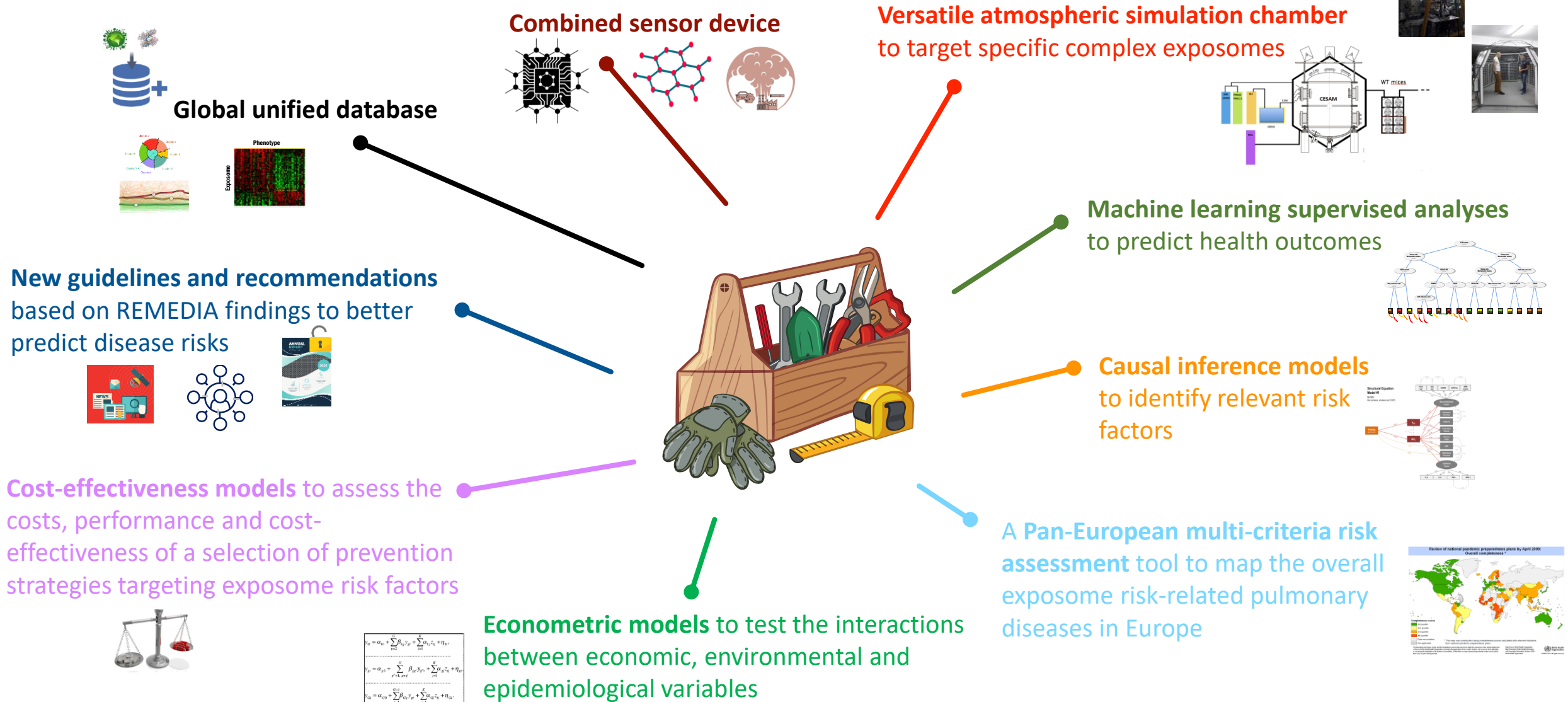


- High burden:
 - COPD: 3rd cause of death
 - CF: most common inherited genetic disorder
- **Invalidating diseases** - progressive decline of lung function
- **Fatal diseases** - no curative treatment
- **High phenotypic variability** of unknown origin - no good therapeutic efficacy

How will REMEDIA reach that goal?



What will REMEDIA deliver in 5 years

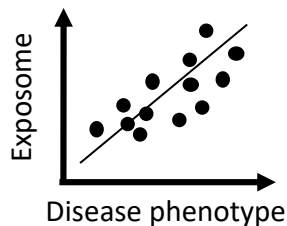
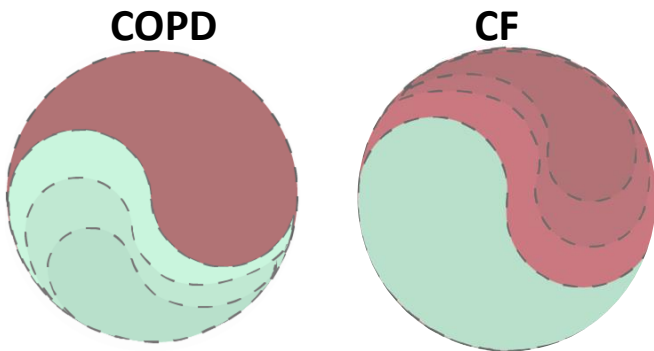


How will REMEDIA contribute to reaching the goals of the Green Deal



Protect the health and well-being of citizens from environmental-related risks

- REMEDIA outputs:



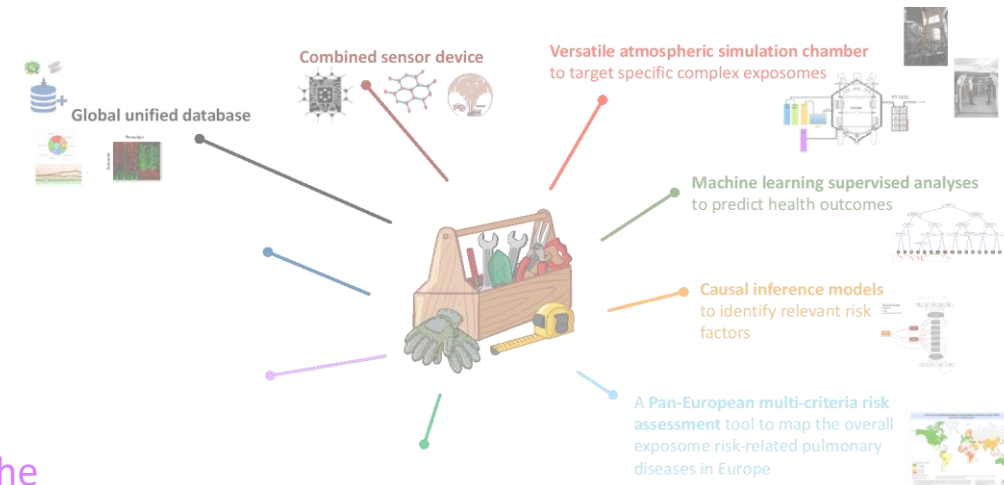
New guidelines and recommendations based on REMEDIA findings to better predict disease risks



Cost-effectiveness models to assess the costs, performance and cost-effectiveness of a selection of prevention strategies targeting exposome risk factors

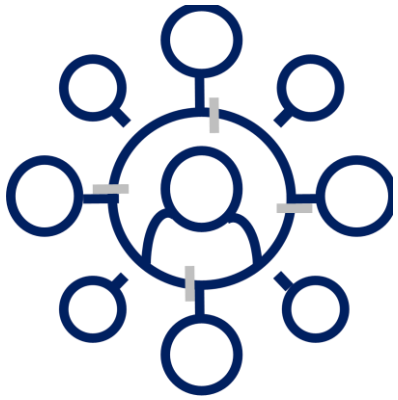


$$\begin{aligned}
 y_{it} &= \alpha_{0i} + \sum_{j=1}^k \beta_{ij} x_{ijt} + \sum_{l=1}^m \gamma_{il} z_{ilt} + \eta_{it} \\
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 \end{aligned}$$



Econometric models to test the interactions between economic, environmental and epidemiological variables

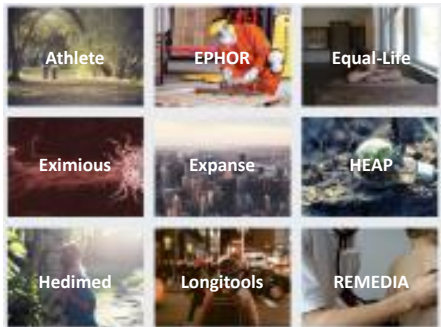
What are the critical needs for success



Identify decision makers, regulators, stakeholders from civil society to establish direct interaction with them throughout the project

Feed-back from policy making, NGOs, international organizations and patient associations to

- discuss their needs and adapt our guidelines / toolbox to their needs
- contribute to optimize / promote the dissemination of results



Sharing data on key component(s) to be considered in other Exposome Network projects with respiratory diseases as endpoints

Take advantage of the different approaches developed (exposome components, clinical endpoints, analytical methodologies, ...) to achieve larger picture

Address the robustness of each project individual Toolbox (i.e. simulation chamber, multi-risk assessment map for REMEDIA) in all Exposome Network projects

Acknowledgements

13 partners
9 countries

