Health foresight –
A survey on quantifying tools

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Context

To improve foresight and “prospective prudence” in PH: evidence-based quantification

Existing approaches needing improvement, evaluation

(Fehr et al. 2012 JECH 66(12):1088 – 91)

Toolmakers survey:

- Status quo of model development & availability
- Experiences made with model use
- Priority options for further development
Methods

Survey aiming at collecting relevant information from the “provider” side (toolmakers)

Survey topics:
- Status quo of model development and availability
- Experiences made with model usage
- Options for further development
- Options for (comparative) evaluation
- Options for maintenance and continued availability of the tools including their data contents
Tools / responses

No (full) response

ARMADA
Health Forecasting
QBM
SimSmoke

Full response

DYMAMO-HIA
EcoSense
Foresight Obesity
HECOS
HEIMTSA
ICT
IEHIA Guidance System
IMPACT
MicMac
MSLT
Prevent
RIVM-CDM

Additional full response

ICT Plus
ACE-MSLT
THIMM, HealthPaths, CRMM

Initial tool set = 17
Survey response set = 17
Status quo of tool development & use

- Maintenance or new elements
- Handling inequalities
- Handling uncertainty
- Financial support
- Use by others
- Support for users
- Evaluation

Limited
Yes
Tool use (selected answers)

For what purposes has the tool been used, since 2011?

(Aims)
- Assess the impact of policies, interventions, technologies (incl. cost-effectiveness)
- Modeling and simulation research
- “Making scenarios and convincing policy makers”

(Users)
- Analysts, consultants, academic researchers
- Decision-makers in all jurisdictions across the country
- National cancer league; NGOs
- Subsequent (EC-funded / national) projects
Tool use (ctd.)

(Exposures)
- Tobacco; Blood pressure; Obesity / BMI; Physical activity
- Atmospheric pollution incl. PM2.5; Heavy metals; Arsenic
- Income inequality; Residential segregation

(Policies)
- Smoking cessation; Salt reduction; Air pollution mitigation
- Household heat production and energy efficiency policies
- Colorectal cancer screening; CT screening for heavy smokers

(Outcomes)
- Deaths averted; Life years gained
- Morbidity cases; Years with and without disability / DALYs
- Spatially resolved individual risk and community impact
- Monetary estimates
Priorities for further development

- Maintenance & availability assured
- Handling inequalities
- Handling uncertainty
- Evaluation

- Limited
- Yes
Conclusions

- Most foresight tools in this study are being maintained and are ready for use; but their future development is uncertain

- These tools are being used for a broad range of exposures, policies, health outcomes; by a variety of users

- Half of the tools is accessible for outside users; practitioners can choose among them
Conclusions (2)

- High agreement on the need to further develop assessment of inequalities and uncertainty
- Interpretation of “tool evaluation” varied a lot among respondents with limited consensus about how to proceed
- There are numerous suggestions concerning future development and use of tools to support policy-making, within health sector and beyond
- Most toolmakers are interested in exchange and cooperation (cf. high response rate to survey request, and answers to explicit question)
- Need to form a community of tool developers that engages with one another as well as with the wider world of actual and potential users
Acknowledgements

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