FRESHER NEWSLETTER

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FRESHER

FORESIGHT AND MODELLING FOR EUROPEAN HEALTH POLICY AND REGULATION

EDITORIAL

THE NEED FOR AN EVIDENCE-BASED EUROPEAN PUBLIC HEALTH POLICY

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This newsletter describes progress accomplished at the mid-term of the project by the FRESHER research consortium. As the principal investigator, I am quite optimistic that we will be able to fulfill our main objective : to combine, for the first time in the field of health, qualitative foresight scenarios based on potential evolutions of structural trends and drivers, which may affect the future of Non Communicable Diseases (NCDs) in Europe, with quantitative modelling, using available statistical data, best epidemiological evidence on risk factors for NCDs and micro-simulation advanced techniques, in order to predict the dynamics of NCDs at the 2030-2050 horizon in the European Union and how it may be influenced by alternative public health policies.

In the current context of crisis in the EU (« Brexit », migrant and refugees' crisis, slow economic growth since the 2008 world economic crisis, tensions on the EURO currency, etc.), such a modelling exercise may seem useless beyond its intrinsic scientific interest. We in the FRESHER consortium, and our complementary Horizon2020 Euro-Healthy project, are, however, convinced of the opposite.

Advances in knowledge are key to guarantee that the worldwide implementation of the United Nations 17 Sustainable Development Goals (SDGs), which were adopted in September 2015 for the 2030 timeline, will not create incoherence and contradictions between each other : for example that improving food security does not lead to exhaustion of fish species and oceans' biodiversity or increase in obesity in the population, that responding to the legitimate demand for energy supply in Africa does not delay the necessary transition away from fossil fuels for limiting global warming, or that effectively facing the risks of new epidemics of infectious diseases facilitated by climate change does not translate in further neglect and delays in responding to the growing burden of NCDs.

In Europe, the short-term management of current crises should not distract policy-makers from identifying and pursuing long term policies, such as prevention and treatment of NCDs, the number one public health problem, today and tomorrow, in Europe. Indeed, the recent report (September 2016) of the United Nations High Level Commission on Health, Employment and Economic Growth, jointly chaired by Presidents Zuma from South Africa and Francois Hollande from France strongly states that: « *the health sector is a key economic sector and a major driver of decent job creation, inclusive economic growth, human security and sustainable development* ». The FRESHER researchers firmly believe that foresight and modelling exercises, such as the one developed within this consortium, could be very useful to synthesise best existing evidence and facilitate a rational policy dialogue, between decision-makers, scientists, health professionals, NGOs and the general public, to translate such promising perspective into practical health policy.

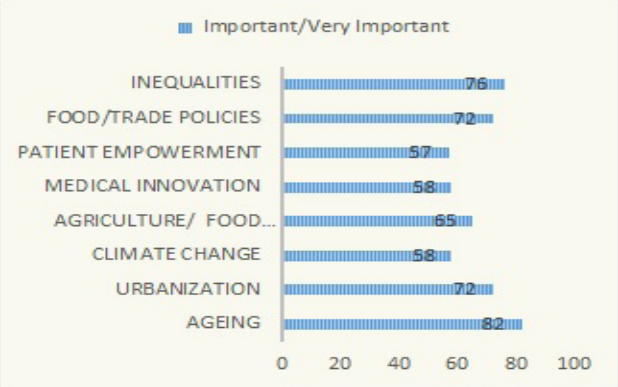
This spirit will inspire our participation at the next European Public Health (EPH) Conference in Vienna (9-12 November 2016) and a series of forthcoming initiatives and events to discuss results of FRESHER at European level throughout 2017.

FRESHER SURVEY RESULTS

A key stage of the FRESHER project has been harnessing contributions from the wider public health community, to collect their opinions on the eight FRESHER trends which have been identified and their implications for health and NCDs.

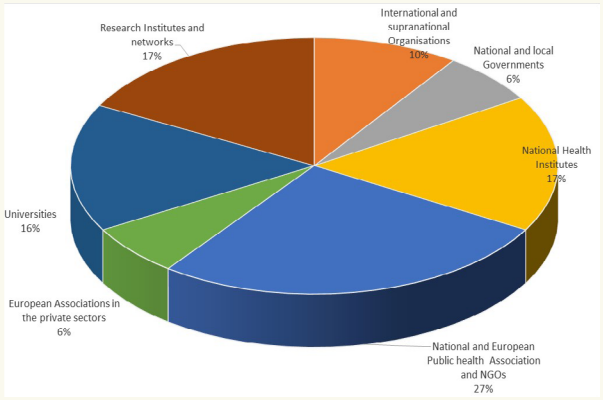
Which trends are considered to be most important?

Overall, socio-demographic and economic trends, specifically the trends of population ageing, followed by economic development and levels of inequality, then urban development, then globalization and the food trade, and agricultural practices were considered to be critically or very important drivers in the reduction of the incidence of NCDs. Socio-technological trends, such as medical innovation or patient empowerment were considered to be less important in preventing NCDs.



Who responded to the survey?

The FRESHER survey "What will impact your health the most," launched on 8 June reached out to NGOs working on NCDs, European researchers and academics, national and local government representatives, public health specialists and policymakers, who were asked to assess the level of uncertainty for each trend and its importance in reducing the incidence of NCDs in 2050. They were also asked to rate the relevance of a number of indicators to measure the impact of each trend on health and NCDs. The survey was widely disseminated through academic and policy networks - 110 experts participated in total, with between 80 or 90 valid answers per question being received.



As well as providing their views on each trend's individual impact, respondents also highlighted the way in which the different trends could potentially interact with each other. For example, given the expectation that the proportion of Europe's population living in cities is expected to reach 86% by 2050, they pointed out this could not only potentially reduce the incidence of NCDs by promoting access to fresh water, clean air and healthy food, but could also provide the infrastructure to support healthy ageing policies and more equal access to services.

Surprisingly, climate change was not considered to be one of the most important trends affecting the incidence of NCDs between now and 2050 – however this was more a recognition that that although the direct impact of climate change on the specific issue of NCDs might be limited, it is the single most important trend affecting life and health overall.

Moreover, despite experiencing "a socio-technological paradigm shift" medical innovation was also not related particularly highly compared to the impact of other trends, and indeed, one participant argued that "expensive high tech medical improvements" could actually widen the health gap. By contrast, tried and tested methods to reduce the incidence of NCDs such as reducing inequalities, improving primary care and focusing on education and prevention strategies were judged as being more effective by a number of the respondents.

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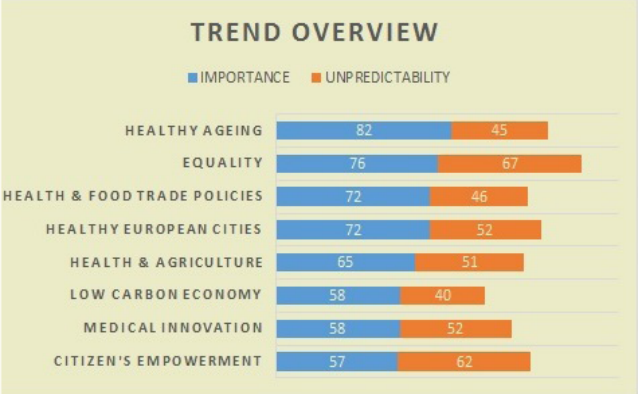
The survey also highlighted the nuances which also need to be taken into account when assessing the impact of certain trends on NCDs – for example, when considering population ageing, respondents stressed the need to take account also of the variation of years of healthy life amongst countries, as increasing the "average" healthy lifespan, may not in itself bring about a reduction of incidence of NCDs; while when considering the urbanization trend, the size and condition of an individual's living space may be just as relevant as the actual rate of urbanization itself.

Which trends are most important and unpredictable?



The second aim of the survey was to assess the levels of uncertainty for each of the trends, to understand which trends have the potential to affect the incidence of NCDs, by sudden changes in either policies or circumstances. Population ageing and climate change were considered to be the most predictable, as these are trends for which evidence and forecasting data are already available.

FRESHER SURVEY RESULTS

Conversely, inequality stands out as one of the most important but also one of the most unpredictable trends due to the uncertainty of how long the current economic crisis will last and and policy tensions about how best to respond. Health/food trade policies and health/agriculture policies were also considered to be more subject to sectoral changes even within the current economic and policy context.

Rating the Indicators

Finally, respondents were asked to rate the relevance of the indicators which had been identified to measure the impact of each trend, and its evolution, and they provided valuable feedback, not only on which indicators were considered to be the most relevant, but also on which indicators should be changed or where new indicators should be introduced. For example, respondents suggested it was also important to measure "healthy life years" as well as the number of years lost to ill-health, when considering the ageing population trend, or the inclusion of indicators related to consumption of particular types of food when considering the health/trade trend.

Next Steps

The partners of the FRESHER consortium are very grateful for the expert contributions who gave their time to complete the survey and share their educated guesses about the trends and their impact on the incidence of NCDs. The results of the survey will be incorporated in the next stage of the project – the development of the scenarios which will interface with the microsimulation model.

The first ideas for the Scenarios space will be presented at the European Public Health Conference in Vienna on Nov 9 and a new survey for evaluating the consistency and plausibility of the Scenarios Storylines will be launched in 2017!

FRESHER NEWS

IMPERIAL COLLEGE LONDON JOINS FRESHER CONSORTIUM

Imperial College London

With Imperial College London as a new scientific partner the FRESHER project has welcomed a new, valuable addition to its project consortium this year.

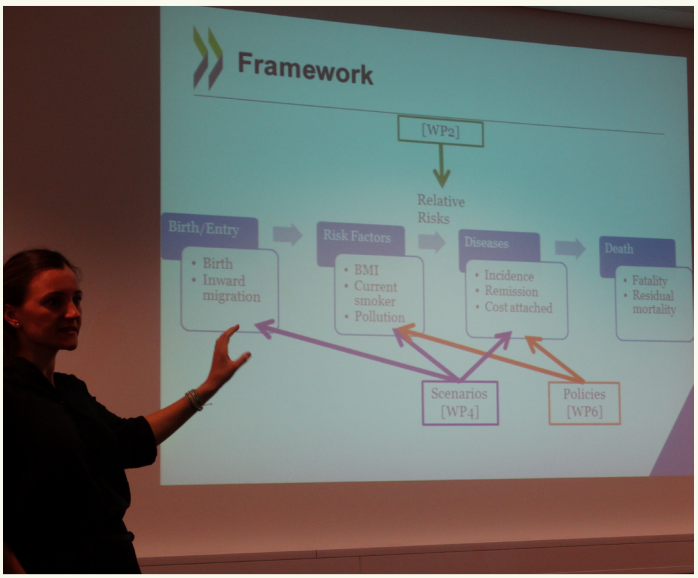
Professor Franco Sassi, who also remains Senior Health Economist at FRESHER partner OECD, was appointed to a Chair in International Health Policy and Economics at the Imperial College Business School's Centre for Health Economics and Policy Innovation earlier this year. The new Imperial team guided by Franco will mainly contribute to FRESHER modelling and policy simulation activities.

FRESHER CONSORTIUM MEETING

The first FRESHER consortium meeting of 2016 took place on June 21 and 22 in Vienna. Hosted by partner Austrian Institute of Technology and opened by the FRESHER Project Coordinator Professor Jean – Paul Moatti (Aix Marseille University) the meeting was attended by all project partners, including new colleagues from Imperial College and representatives from the Euro-Healthy partner project consortium. In light of the mid-term review of the FRESHER project, the first part of the meeting was dedicated to reviewing activities followed by updates and progress from each partner.

The meeting proceeded with a lively exchange between FRESHER project partners and Euro-Healthy colleagues Carlota Quintal (University of Coimbra) and António Alvarenga (Instituto Superior Técnico) who presented project updates and the methodology for building population health scenarios to be applied in the Euro-Healthy project after being preliminary tested in a Portuguese case study.

Archana Singh-Manoux (INSERM) presenting "Mapping social, behavioral, and biomedical determinants of chronic diseases" methods, progress and results of WP2



Marion Devaux (OECD) explaining sought integration of work package inputs into the micro-simulation model under WP5

The discussion focused on selection of the indicators and outcomes for building the population health index, on the aggregation process, the time horizon and territorial scale.

The second part of the meeting hosted a dedicated FRESHER micro-simulation model workshop, organized by the Organization for Economic Cooperation and Development. Aliénor Lerouge and Marion Devaux presented the baseline model through its modelling principles, input data and examples of simulation and possible outputs. The workshop proceeded to explore how outputs from other work packages feed into the overall micro-simulation model and the input requirements needed for the integration to evolve.

NEW FRESHER REPORTS NOW ONLINE

As part of the FRESHER project, a number of deliverables and reports, which contribute to the different work areas, are now available for download online on the FRESHER website, www.foresight-fresher.eu/en/Tools/Project-Documents/.

A Systematic Review of the Impact of Inequalities on NCDs summarizes the methods and findings of recently studied associations between socio-economic status (SES) and NCDs, with particular focus on cardiovascular diseases, cancer and diabetes. This report, produced by FRESHER researchers from the Governance and Economics Research Network of the University of Vigo (GEN) is particularly relevant in terms of furthering evidence of inequalities on the incidence and prevalence of NCDs across social groups. The research group's second paper **A Systematic Review of Socio-economic Status, Health and NCDs** offers an additional perspective by focussing on the complex relationship between income and health, looking at relevant studies from the past 5-years.

The **D 3.2 Workshops Report of Drivers and Trends of Future Developments of Non-Communicable Diseases** summarizes the results of the three horizon scanning workshops in Vienna, Brussels and Lisbon which brought together experts from a vast variety of disciplines to identify and discuss the main trends and drivers of NCDs on a 2030-50 time horizon. The outcome of the workshops, led by FRESHER partner Austrian Institute of Technology (AIT) also informs the **D 3.1 Horizon Scanning Report** and feeds into the FRESHER's scenario building process.

D 5.1 Validated European Health Policy Model software and documentation, produced by project partners OECD, Aix Marseille University, GEN and AIT presents the overarching parameters of the micro-simulation model architec-

The dynamic FRESHER model is designed to allow it to take into account the different mega trends and scenarios developed within the project and to integrate partner contributions such as health expenditure calculations and different aspects of health exposure performed within the geospatial analysis.

Finally, the **D 6.1 Compilation of Current Public Health Policies in Different European Regions** and the **D 6.2. Review on the Evidence on Public Health Impact of Existing Policies** produced by FRESHER project partner, the Istituto Superiore di Sanità assess past and present (good) practice in health-relevant policy formulation in Europe. The first report evaluates policies in the areas of health prevention, protection and care related to specific NCDs and the causes which are linked to them, while the second evaluates the health interventions which have been implemented, according to their impact, costs and cost-effectiveness, and the feasibility of their implementation on a large scale. These deliverables are a prelude to the formulation of recommendations and strategies to tackle the future health NCDs scenarios identified within FRESHER.

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EUROPEAN PUBLIC HEALTH CONFERENCE

Join FRESHER at the 9th European Public Health Conference 9-16 November 2016, Vienna, Austria

Scenarios for the Future of Health in Europe - Evidence from the FRESHER Project

9th November 2016 : From 0900 to 1330

An interactive pre-conference session, with FRESHER partners, presenting the preliminary results of the FRESHER scenarios for the future of NCDS. A discussion on the different perspectives of each scenario against the background of major structural trends and drivers.

Free Entry : Light Lunch and Refreshments will be served

Meet FRESHER partners at the following events on 10 November 2016:

Addressing health inequities across Europe: from evidence to policy organized by Eurohealthy

Environment and Health organized by European Commission, DG Research and Innovation

Looking forward to meeting you there!

Follow FRESHER on Twitter!

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