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SUMMARY

Chronic diseases are the leading cause of morbidity and mortality across Europe. Tools that enable decision makers to prioritise, develop and implement cost-effective policies to prevent chronic diseases and reduce premature deaths in the most vulnerable populations are needed. The EConDA project developed a computer model to test the cost-effectiveness of prevention, screening and treatment interventions on the future burden and cost of chronic diseases.

OBJECTIVES

- To Implement cost-effective policies that improve prevention of chronic diseases.
- To reduce health inequalities in chronic disease prevalence by impacting upon populations most at risk.

METHODOLOGY

Following review of the literature, a meeting was held amongst expert health economists to reach a consensus on the best way to measure the cost-effectiveness of interventions for chronic disease prevention. The agreed approach was then implemented in the cost-effectiveness modelling.

A computer simulation model and tool was developed to test the future impact of interventions to prevent, screen and treat chronic diseases such as type 2 diabetes, chronic obstructive pulmonary disease and coronary heart disease.

The impact of the following interventions on the future burden of chronic diseases by 2050 were tested:

1. A 20% sugar sweetened beverage tax
2. Multi-component Lifestyle Interventions
3. Smoking cessation services
4. Hypothetical treatment for COPD
5. Albumin screening for CKD

WP COORDINATION

All the Work-Package leaders met twice a year in person, and once a year by teleconference to review progress in all the work packages. The coordinating partner, UK Health Forum, maintained contact with partners through email and skype to monitor progress and provide technical support to them for data collection and administrative management.

WP DISSEMINATION

The outputs of the project were disseminated in a number of ways:

- The project website (<http://www.econdaproject.eu/publications.php>)

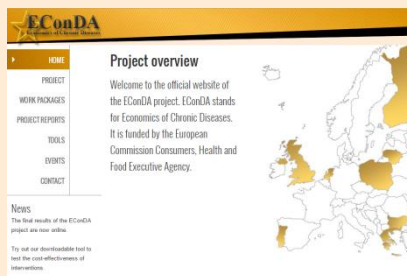


Figure 1: Project Website

- Country workshops
- Final project conference
- Presentations at conferences
- 3 scientific articles published
- Press release
- Dissemination through the European Chronic Disease Alliance
- 4 scientific articles sent to Journals or in preparation

WP EVALUATION

The project was evaluated with 6 process indicators and 6 outcome indicators, as well as surveys with work package leads and workshop delegates.

RESULTS

- Economic analyses of chronic disease should take a societal perspective to account for costs beyond healthcare.
- Obesity is predicted to increase across the majority of the EConDA countries and across all levels of education by 2050, while smoking is expected to decrease.
- Changing obesity rates will increase the future burden of disease and in some countries increase inequalities.
- Interventions addressing risk factors such as obesity and smoking before chronic diseases develop are generally more cost-effective than treatments when a time horizon of 10 years is taken.
- Significant health and economic gains can be achieved with even small reductions in obesity.



Figure 2: The EConDA tool. Download here: <http://www.econdaproject.eu/tools.php>

CONCLUSION

Statistical modelling is a useful and necessary tool by which to test the long term impact of a range of interventions from upstream policy and prevention interventions, to screening and treatment.

Future work will further develop this EConDA model to include additional multi-stage diseases and measure multiple-risks on the future burden of chronic disease.