

Center for the Assessment of the Public Health Impact of Tobacco Regulations

PIs: Meza, Rafael and Levy, David T.

Institution: University of Michigan at Ann Arbor

1 U54C A229974-01

Overall Center Abstract:

The Center for the Assessment of the Public Health Impact of Tobacco Regulations aims to provide evidence-based and expert-informed modeling of the behavioral and public health impacts of tobacco regulations. The Center's primary scientific domains are Impact Analysis and Health Effects. To evaluate the public health impacts of tobacco use and regulation, information must be gathered from different sources on use behaviors, health risks and the impact of regulations on use patterns. This information must then be synthesized and processed in a systematic and objective manner, helping policy makers to gauge the impact that such regulations would have at the population level and aiding them in their decision-making process. Simulation modeling of tobacco use patterns and related health outcomes can serve as a one of the key tools to assist FDA in evaluating and predicting population-level benefits and harms resulting from regulatory policies pertaining to new and existing tobacco products. When well applied, modeling also becomes a way of organizing and synthesizing different sources of information and determining gaps in that information, especially in situations where tobacco use patterns vary for different populations. Our Center will have three projects based on detailed analysis of historical tobacco use patterns in the US and using four established tobacco simulation models. The overarching aim of Project 1 (Impact Analysis, Health Effects) is to conduct comparative modeling analyses of the impact of tobacco regulations and policies on smoking and e-cigarettes use and related long-term health outcomes, including heart, pulmonary disease and maternal and child health. Project 2 (Impact Analysis, Addiction) will extend two previously developed and well-established models to examine the possible consequences of regulating nicotine in combusted tobacco products, but the models will be general enough to consider other policies that affect the product content of cigarettes, such as specific toxicants. Project 3 (Impact Analysis, Behavior) will model tobacco-related health disparities associated with polytobacco use, and to investigate how potential policy options may impact polytobacco use and downstream TRHDs. Four cores will serve the Center. An Administrative Core (AC) will coordinate the work of the projects and cores; a Career Enhancement Core (CEC) will provide training to junior investigators on the capabilities and limitations of tobacco simulation; a Data Analysis and Dissemination (DAD) Core will analyze and provide the data for each of the models and develop infrastructure for dissemination of model parameters and modeling results; Research Assessment and Input Development (RAID) Core will generate parameter estimates for key policy and health effects modeling parameters via systematic reviews and meta-analyses, and expert panels when sufficient data are not yet available.