

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

Institution: University of Michigan at Ann Arbor

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Project 3: Modeling the Impact of Tobacco Control Policies on Polytobacco Use and Associated Health Disparities

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Project 3 Abstract:

The tobacco market has become increasingly complex over the past decade, with new products recently introduced and others on the horizon. The increasing diversity of products will change the way people use tobacco and other nicotine-containing substances, including new combinations of polytobacco users. Little is known about how the evolving tobacco marketplace will shape the patterns of individual- and poly-tobacco use, their subsequent long-term health effects, and potential disparities by socioeconomic status (SES) and race/ethnicity. Because many products, including e-cigarettes, have only recently entered the market, long- term health outcome studies have not yet been conducted. In lieu of waiting decades for such data, simulation modeling can predict future health outcomes and provide insights into how different policies and regulations may affect disparities in consumption of polytobacco use and downstream health outcomes. The purpose of this project is to estimate tobacco-related health disparities associated with polytobacco use and to investigate the impact of specific tobacco control policy options on these disparities by: (1) determining disparities in polytobacco use and monitoring changes in patterns over time; (2) estimating the impact of tobacco control policies on disparities in patterns of tobacco and nicotine product use; (3) determining downstream tobacco- related health disparities in health outcomes associated with individual- and poly-tobacco use; and (4) modeling the impact of potential policies on tobacco-related health disparities associated with individual- and poly- tobacco use. Results from Aims 1 and 2 will provide evidence-based and expert-informed estimates of polytobacco use, potential policy impacts, and health outcomes by SES and race/ethnicity to inform the modeling in Aims 3 and 4, which will directly address disparities in long-term health consequences and policy impacts. As part of the Center for the Assessment of the Public Health Impact of Tobacco Regulations, this project will focus on Impact Analysis (Aims 2 and 4) and Health Effects (Aims 3 and 4), as described in RFA- OD-17-006, with a secondary emphasis on Behavior (Aim 1). Knowledge gained from this study will guide policy-makers' decisions regarding which potential policies may be most effective in reducing downstream tobacco-related health disparities due to polytobacco use over time.