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# Preface

Capturing the scope of an ecological process such as the evaluation of the American Stop Smoking Intervention Study for Cancer Prevention (ASSIST) in monograph form presents a daunting task because the evaluation's scope and methodology were constantly evolving. Numerous challenges arose in the writing of this monograph: (1) Some factors and covariates in the evaluation analysis consisted of relatively simple measurements, whereas others required entire sections or chapters to describe in adequate detail. (2) Demonstration projects were undertaken, such as the creation of a print newspaper database of tobacco coverage, which were ultimately not included in the overall ASSIST evaluation analysis but still have relevance to future research efforts. (3) Fundamental assumptions of the original evaluation, such as original design of a direct comparison between ASSIST and non-ASSIST states, were changed as ASSIST-type interventions were introduced in other states.

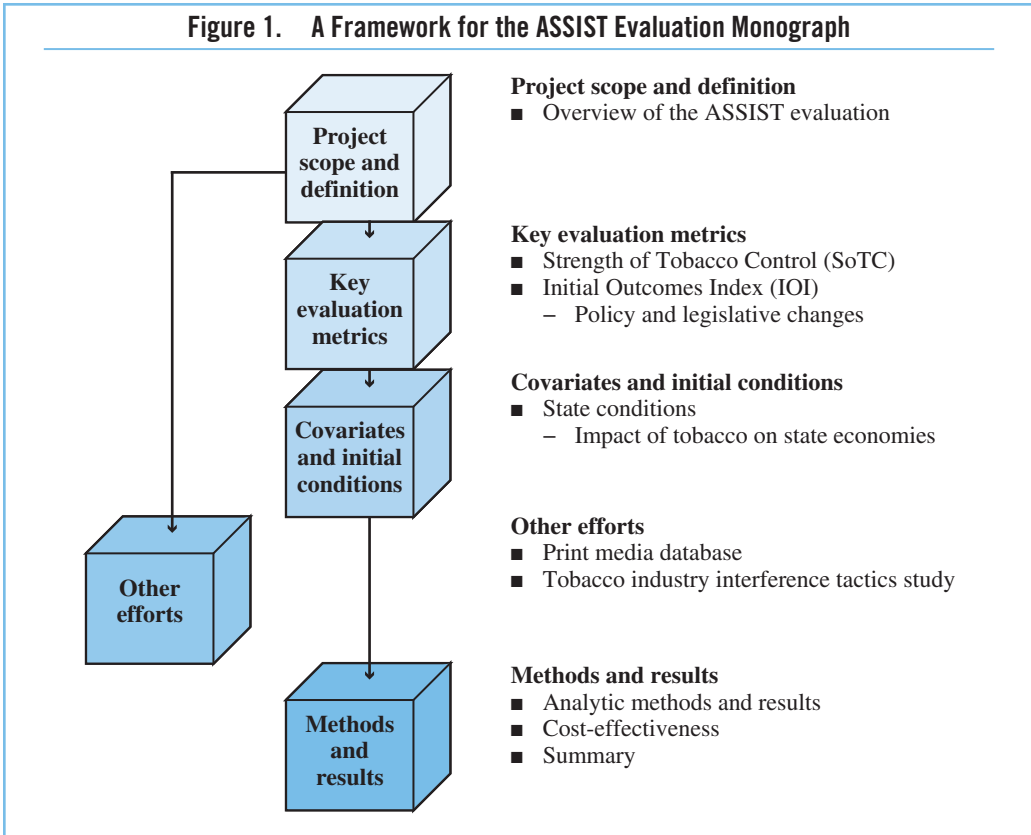
At the same time, the full story of the ASSIST evaluation is an important one to tell, because in the richness and complexity of its evolution, it serves as a guide for the future of evaluating large-scale population-level public health projects. Older evaluation methodologies were simply not adequate for a project of the scope of ASSIST and, in turn, the methods presented here will undoubtedly evolve further to meet the growing scope of future public health efforts.

Figure 1 outlines a framework for the content presented in this monograph. The monograph tells a procedural story rather than a chronological one, tracing the development of the ASSIST evaluation conceptual model, examining its assumptions in detail, discussing related projects, and finally reviewing the evaluation results in detail.

This framework provides a basis for presenting an overview of the ASSIST evaluation and its design, a detailed discussion of its evaluation components, a summary of related projects, and a discussion of the evaluation outcomes. The chapters are as follows:

*Chapter 1. The ASSIST Evaluation Project: An Overview.* This chapter presents an overview of the ASSIST evaluation and its historical context. It reviews the key points of the ASSIST project and describes the conceptual model that guided the ASSIST evaluation as well as the key constructs of the conceptual model, the rationales for their inclusion, and the research questions that established the linkages between these conceptual constructs.

*Chapter 2. The Strength of Tobacco Control Index.* The Strength of Tobacco Control index is a composite measure of the core components of a state-level tobacco control program, developed to assess which components of ASSIST or ASSIST-like programs might be related to a specified outcome or a trend of lower smoking prevalence or cigarette consumption. The Strength of Tobacco Control index assesses three major constructs: tobacco control resources, capacity, and program efforts focused on policy and environmental change. The Strength of Tobacco Control index was developed for the



ASSIST evaluation but has demonstrated applicability for other evaluations, such as the Robert Wood Johnson Foundation’s SmokeLess States National Tobacco Policy Initiative. The Strength of Tobacco Control index is now being used to compare tobacco control programs across the United States. This chapter describes the creation of the Strength of Tobacco Control index, details its descriptive characteristics, and provides examples of how it may be used to assess and improve state-based tobacco control programs.

*Chapter 3. Measuring Policy and Legislative Changes.* The implementation of legislative changes that would promote a tobacco-free social norm and environments was a critical objective of the ASSIST project. The ASSIST evaluation assessed changes in state and local clean indoor air laws as a component of the Initial Outcomes Index. This chapter describes the methods used to track and measure these legislative changes. A longitudinal comparison of clean indoor air legislation in ASSIST and non-ASSIST states is also provided.

*Chapter 4. Initial Outcomes Index.* Changes in policy occur and can be measured before changes in individual behavior. An Initial Outcomes Index was developed to assess the policy outcomes of the states’ tobacco control efforts. This chapter describes the variables used in this index and the methods used to create it.

*Chapter 5. State Facilitating Conditions and Barriers to Implementation of Tobacco Control Programs.* Tobacco growing and production can profoundly affect the adoption of policy-based tobacco control interventions, as evidenced by substantial differences between tobacco-producing states and nonproducing states in areas such as tobacco taxes and the adoption of tobacco control policies. This chapter outlines the issues and assumptions leading to the development of a state-level variable representing the economic dependence of states on tobacco growing and manufacturing, for use as a covariate in the ASSIST evaluation regression analyses as part of the measures of state conditions.

*Chapter 6. Measuring the Impact of Tobacco on State Economies.* State differences in population demographics, and economic, political, social, cultural, and geographic factors can affect the likely acceptance, implementation, and outcomes of a state tobacco control program. This chapter describes these factors and how they might affect an evaluation of a tobacco control program, together with a discussion of which factors were used as part of the ASSIST evaluation. In addition, potential measurement techniques for other factors are suggested for use in future evaluations.

*Chapter 7. The ASSIST Newspaper Tracking System.* Media advocacy was one of the three principal interventions of the ASSIST model. An analysis of the amount and type of newspaper media coverage potentially attributable to media advocacy interventions was one approach used to evaluate their success. This chapter describes a state-level index to measure newspaper coverage of the four ASSIST priority policy areas—clean indoor air, restrictions on minors' access to tobacco, excise tax increases, and restrictions on tobacco advertising and promotion. Although this index was not used in the ASSIST evaluation, the chapter demonstrates its potential value for future analyses.

*Chapter 8. Evaluating Tobacco Industry Tactics as a Counterforce to ASSIST.* Tobacco industry efforts to counter tobacco control initiatives are not typically taken into account when tobacco control programs are evaluated, even though counterefforts constitute a strong force that impedes achievement of tobacco control intervention objectives. In this chapter, examples of tobacco industry efforts to counter ASSIST and other state tobacco control programs are provided from the peer-reviewed literature and tobacco industry documents. While the inherent difficulty of measuring these counterefforts ultimately precluded their use in the ASSIST evaluation model, the chapter discusses the impediments to creating a tobacco industry effort measure and potential solutions for overcoming these impediments.

*Chapter 9. Final Outcomes: Analytical Methods and Results.* The final outcomes of the ASSIST evaluation are cigarette smoking prevalence and per capita cigarette consumption at the end of the intervention. This chapter describes the methodology and statistical techniques used to assess the final outcomes and discusses the evaluation results.

*Chapter 10. Cost-effectiveness of ASSIST.* This chapter uses standard econometric techniques to assess the cost-effectiveness of the ASSIST project. The standard

econometric techniques enable comparisons of the cost-effectiveness of ASSIST with other types of tobacco control interventions and with other large-scale public health initiatives.

*Chapter 11. The ASSIST Evaluation: Contributions to Evaluation of Complex Public Health Initiatives.* The closing chapter summarizes the major findings of the ASSIST study and discusses how this evaluation effort can serve as a model for evaluating large-scale, complex public health initiatives. The chapter discusses the broader issues in evaluation of large-scale initiatives, such as addressing complexity in public health projects and the need to go beyond existing “black box” approaches. It also discusses the programmatic and evaluation challenges, such as tobacco industry efforts to undermine or counter public health initiatives, and the potential for generalizing evaluation efforts such as ASSIST.

The ASSIST evaluation represents a successful attempt to measure the effectiveness of upstream tobacco control interventions in an environment where these interventions were widely adopted beyond the states funded by the National Cancer Institute. Using a rigorously developed and validated model, the evaluation shows a positive correlation between these interventions and a decline in tobacco usage and, more important, provides a model for how complex public health issues can be evaluated at broad levels of the population. In this sense, efforts such as the ASSIST evaluation represent part of the future of public health as this field moves beyond individuals and communities to address the fundamental sociopolitical issues that will reduce society’s burden of disease and preventable death.

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