

Preface

There is always an easy solution to every human problem—neat, plausible, and wrong.

—H. L. Mencken (1880–1956)

The world of tobacco control has become increasingly complex over the past several decades. It involves more extensive collaborations; new structures and configurations for coordinating efforts; and multilevel social, professional, and knowledge networks to improve information sharing for public health. Given such complexity, there has been a corresponding increased need to address tobacco control issues using a systems perspective that enables one to better understand and navigate the dynamic and evolving nature of the terrain to achieve the next generation of improved health outcomes.

This monograph describes the results of the initial two years of the Initiative on the Study and Implementation of Systems (ISIS), a four-year project. This initiative is one of the first major coordinated efforts to study and implement a systems thinking perspective using several systems approaches and methodologies that appeared to be promising for tobacco control in itself and as an exemplar for other complex issues in today's public health environment. In the ancient, revered Egyptian myth, the goddess Isis breathed clean air into her late husband Osiris to restore him to life. In analogous fashion, the ISIS project hopes to contemporize the myth in a tobacco control context and encourage systems perspectives that have the potential to help people breathe cleaner air and be restored to a smoke-free life.

Although this work is aimed at the efforts of the tobacco control community, the word “tobacco” intentionally appears only in the subtitle of this monograph. That is because ISIS was a research effort that focused on the tobacco control environment to examine how to apply systems approaches to issues that have become endemic throughout public health, including the need for

- Better understanding of outcomes, including the unintended consequences of complex interventions and events
- Effective capture, dissemination, and management of knowledge throughout the multilayered public health system
- More efficient organization and linkage of the efforts of multiple, diverse stakeholders
- Adoption of evidence-based practices that inform practice and improve outcomes
- Strengthening of collaborative networks of scientists, policy makers, government and foundation managers, practitioners, and the public

This work was undertaken to help address some of the fundamental organizational issues in tobacco control and, by corollary, much of public health. The goal was to investigate the potential

of integrated, systems-based approaches to facilitate the efforts of all stakeholders to make substantive changes in public health outcomes. The lack of such linkages poses a particularly serious challenge to the public health system. For example, a 2001 Institute of Medicine report, *Crossing the Quality Chasm*, points to “a health care system that frequently falls short in its ability to translate knowledge into practice...”^{*(p3)} In this view, the lack of progress is due to (1) a system that fosters research that does not always translate directly into outcomes in patients and (2) practitioners who do not often have a voice in this research community. These types of disconnections illustrate the need for more synergistic teamwork, within a system of systems, that has the potential to dramatically improve public health outcomes.

In ISIS, the term *systems* plays a central role. However, its definition remains elusive. The term has multiple manifestations and meanings in the world of tobacco control, encompassing everything from the structure of organizations, to the arrangement of networks, to the dynamics of change, to the patterning of information. The evolution of this project puts it squarely in the trajectory of some of the key trends in contemporary public health, all of which can be viewed as essentially “systems” issues:

- **There is a growing macro-level focus in tobacco control and public health.** A review of the history of tobacco control efforts shows that the earliest initiatives were aimed at the individual and cessation; intermediate efforts increasingly focused on the community level and collaborative interventions; and subsequent efforts emphasized larger population groups and more broad-based interventions, such as legislative changes, taxation, and media advocacy. A systems-level focus on tobacco control is a logical next step in understanding and managing the complex nature of tobacco use, as both an epidemiological and a personal health issue.
- **There is a growing need to better integrate research and practice.** The core concerns of putting evidence-based knowledge about tobacco control into practice and giving practitioners a voice in the research agenda point to a need to re-examine the basic paradigms of science, how it interfaces with society, and how society’s investment in research and development is understood.
- **The tobacco control environment has, in and of itself, become a system of systems.** Understanding and navigating a landscape that includes national organizations, community-based advocacy groups, health practitioners, public health officials, researchers, funding sources, and the community itself have become the next major challenge in creating and implementing evidence-based practice that changes public health outcomes.
- **The systems of systems that now characterize tobacco control are embedded within a larger public health context with important focal outcomes such as reduced morbidity and mortality.** Tobacco control has had tremendous successes in reducing

*Committee on Quality of Health Care in America, Institute of Medicine. 2001. *Crossing the quality chasm: A new health system for the 21st century. Executive summary*. Washington, DC: National Academies Press. http://books.nap.edu/execsumm_pdf/10027.pdf.

consumption, prevalence, morbidity, and mortality. Universally applying what we know would have a tremendous impact on tobacco control and disease reduction. Being able to do so and reaching the next level of achievements in outcomes, however, require a better understanding of the complex interrelationships and dynamics of the tobacco control system, its connections to both the public health system and the public, and its dynamic relationships with the industry that continues to generate both products and profits.

These trends, at many levels, reflect the evolution of public health itself—from treatment of specific diseases, to prevention, to social and policy movements, to the study of interrelated factors and beyond. This monograph is the result of that evolution; its aim is to contribute to continued evolution by encouraging consideration and use of systems thinking in tobacco control and potentially in public health in general.