
Evaluating Diabetes Health Policies Using Natural Experiments: The Natural Experiments for Translation in Diabetes Study

As the prevalence and burden of type 2 diabetes continue to grow, public and private agencies have increasingly attempted to translate research interventions into innovative policies to prevent and control diabetes and its associated costs. While these policies are supported by promising research, it is unknown whether such interventions will succeed under real-life circumstances or cause unintended consequences. Ongoing evaluation of health policies using strong research designs is needed to determine whether the benefits outweigh the costs.

Natural experiments use pragmatic research designs and readily available data sources to evaluate and compare a new or existing policy to other policies or predictions of what may have happened in the absence of any intervention. The Natural Experiments for Translation in Diabetes (NEXT-D) Study is a network of academic, community, industry, and policy partners collaborating to advance the methods and practice of natural experimental research. Each of these centers maintains a strong partnership with stakeholders to evaluate public or organizational policies to prevent or control type 2 diabetes using a rigorous and practical natural experimental study design.

NEXT-D adopted a conceptual framework based on socio-ecological models that portrays the relationships among NEXT-D projects within geographic, organizational, and economic sectors. Each natural experiment uses a rigorously designed quasi-experimental study to evaluate public health policies to prevent or control type 2 diabetes, while considering the effects of system-level influences in the framework (i.e., health system, purchasers, community resources, public policy).

Each NEXT-D project is a case example for using robust natural experimental approaches to inform public health policy. NEXT-D sites and projects include the following:

- [Kaiser Permanente Northern California](#), in partnership with a large health care purchaser, evaluate population-based telephone wellness coaching to encourage healthy lifestyles.
- [University of California, Los Angeles](#), in partnership with United Healthcare, evaluate health and economic impacts of a diabetes-specific health insurance plan.
- [Mt. Sinai St. Luke's and Mt. Sinai Roosevelt Hospitals](#), in collaboration with six primary care clinics, evaluate health systems and provider interventions that address diabetes detection and prevention.
- [Harvard Pilgrim Health Care Institute and Harvard Medical School](#), in partnership with OptumInsight Life Sciences, evaluate the impact of high-deductible health plans on diabetes health outcomes and costs.
- [Northwestern University Feinberg School of Medicine](#), in partnership with UnitedHealth Group and YMCA of the USA, evaluate health and economic impacts of a national group-based adaptation of the Diabetes Prevention Program (DPP).

Natural experiments present a unique opportunity to evaluate and compare outcomes and unintended consequences of current policies in a way that reflect real-world circumstances. Such research has the potential to affect the implementation and scalability of evidence-based interventions across diverse populations and settings. Strong partnerships with community and policy

stakeholders, along with the support of collaborative research networks such as NEXT-D, are particularly valuable when devising design strategies and overcoming common research challenges. Findings from the NEXT-D network will be extremely relevant to broad audiences, including community and policy stakeholders working both within and beyond the areas of diabetes care and prevention.

[Read the entire article:](#) Ackermann RT, Kenrik Duru O, Albu JB, Schmittiel JA, Soumerai SB, Wharam JF, Ali MK, Mangione CM, Gregg EW; NEXT-D Study Group. Evaluating diabetes health policies using natural experiments: the natural experiments for translation in diabetes study. *Am J Prev Med.* 2015 Jun;48(6):747-54. doi: 10.1016/j.amepre.2014.12.010. PubMed PMID: 25998925.

This document is intended to summarize the findings of a scientific publication and is written for policymakers, including health plan directors, public health professionals, and public policy leaders.