Building a strong scientific evidence base for effective policies in the retail environment to help reduce tobacco use and disparities

The Advancing Science & Practice in the Retail Environment (ASPiRE) Center is an National Cancer Institute (NCI)-funded collaborative of tobacco control researchers, practitioners, and legal experts investigating how tobacco retailer density and innovative retail tobacco interventions impact people and communities.

• In the Tobacco Town project, our research team uses agent-based modeling to study innovative policies in the retail setting and their impact in different types of communities, especially those with low-income and minority populations.
  » Draining the tobacco swamps: Shaping the built environment to reduce tobacco retailer proximity to residents in 30 big US cities JOURNAL ARTICLE
  » Tobacco Swamps Dashboard INTERACTIVE DASHBOARD

• The Dissemination and Implementation (D&I) Core team integrates best practices from Implementation Science in all stages of ASPiRE’s research to help translate, communicate, and disseminate new evidence for practitioners at the front lines of tobacco control. Our Community Advisory Board partner in Houston, Texas used the Tobacco Sales Fact Sheets (co-developed with the Stanford Big City Tobacco Control project) as part of testimony in the Texas legislature in the Spring of 2022.
  » aspirecenter.org WEBSITE
  » Tobacco Sales Fact Sheets FACT SHEETS
  » ASPiRE Year in Review 2021 ANNUAL PROJECT SUMMARY

Using simulation to explore children’s mental health policy making in state agencies

This study represents the first use of an agent-based model (ABM) to explore children’s mental health policy making dynamics and simulate the impacts of knowledge broker interventions. The simulation results suggest that the presence of knowledge brokers can: 1) influence consensus formation, 2) accelerate policy decisions, and 3) role increase the likelihood that policies with a strong evidence base are adopted.

• Simulating the role of knowledge brokers in policy making in state agencies: An agent-based model JOURNAL ARTICLE & RESEARCH BRIEF
Developing and disseminating the Translational Science Benefits Model toolkit to help clinical and translational scientists measure the impact of their work in the real world

Researchers from the Institute of Clinical and Translational Sciences (ICTS) at the School of Medicine and the CPHSS team created a framework—the Translational Science Benefits Model (TBSM)—that clinical and public health researchers can use to measure the impact of their work in four distinct domains: CLINICAL, COMMUNITY, ECONOMIC, and POLICY. The accompanying Translating for Impact Toolkit can help researchers plan, track, and demonstrate the impact of a single project, a complete body of work, or the work of programs and centers.

Project partners and collaborators include the Institute for Public Health (IPH) National Council, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Centers for Diabetes Translation Research (CDTR) programs, NIH-funded Clinical and Translational Science Awards (CTSA) programs at numerous universities nationwide. There is potential for use of the framework to plan for, track, and demonstrate impact of the new school of public health at Washington University in St. Louis.

- TranslationalScienceBenefits.wustl.edu WEBSITE
- Translating for Impact Toolkit TOOLKIT

Guiding the future of implementation and sustainability research

Our CPHSS Sustainability team has advanced implementation science by working to promote, conceptualize, and measure the sustainability of programs and practices over time. Early team efforts produced one of the first conceptual frameworks of sustainability. The team subsequently developed two free online tools, the PSAT (Program Sustainability Assessment Tool) and the CSAT (Clinical Sustainability Assessment Tool), to help programs and clinical practices rate their sustainability capacity. Current work focuses on validity of the tools as the focus on sustainability grows in implementation science.

The Sustainability team has worked on a local, national, and global scale in both research and practice capacities. Partners include the Centers for Disease Control (CDC) Office on Smoking and Health (OSH), the Rocky Mountain Tribal Leaders Council, and St. Jude Global.

- Sustaintool.org WEBSITE
- Finalist for the Society for Implementation Research Collaboration (SIRC) Mission Award which recognizes outstanding contributions of collaborative teams in advancing implementation science and practice AWARD
- Pending R01 grant, a partnership between CPHSS and St. Jude Children's Research Hospital, featuring validation of the CSAT tool for studying implementation of evidence-based pediatric healthcare around the world. GRANT
- The Clinical Sustainability Assessment Tool: measuring organizational capacity to promote sustainability in healthcare JOURNAL ARTICLE & RESEARCH BRIEF
- Team member, Sara Malone, received her PhD in Public Health Sciences in 2022; her dissertation explored measuring sustainability in clinical settings. DEGREE
Developing evidence-based implementation user guides on tobacco prevention and control topics

Since 2008, CPHSS has worked with the Centers for Disease Control and Prevention (CDC) Office on Smoking and Health to develop a set of user guides on tobacco control topics. The User Guides help fill the gap between research and practice by translating Best Practices for Comprehensive Tobacco Control Programs guidelines into evidence-based strategies and practical guidance that can be used by communities working to decrease tobacco use and secondhand smoke exposure.

- **Tobacco Where You Live: Native Communities** USER GUIDE
- **Putting Evidence into Practice in Tobacco Prevention and Control** USER GUIDE
- **All User Guides** USER GUIDE SERIES

Understanding the impact of substance use disorder/opioid use disorder programs in Franklin County Missouri

CPHSS is partnering with Prevent+Ed to understand the impact of their work in Franklin County, funded through HRSA’s Rural Communities Opioid Response Program (RCORP). Early planning work explored the barriers to treatment that residents experience. The CPHSS team is now exploring the impact of the programming implemented by Prevent+Ed to address these barriers by assessing changes in stigma among providers, effects of the certified peer specialist program, and awareness among community members.

Contributing to a National Academy of Sciences panel reviewing the process for developing the national Dietary Guidelines for Americans

Center Director, Douglas Luke, PhD, serves on a National Academies of Sciences, Engineering, and Medicine committee charged with evaluating the process of developing national dietary guidelines. The committee recently released its midcourse report.

- **Evaluating the Process to Develop the Dietary Guidelines for Americans, 2020-2025: A Midcourse Report** REPORT

Supporting health equity in retail policy advocacy in rural Missouri & Illinois

The Implementation Science Center for Cancer Control (ISC-3) project explores health equity issues in the tobacco retail environment in Eastern Missouri and Southwestern Illinois. The project team is developing translational products that community partners can use in their local-level policy advocacy efforts.
Training researchers and evaluators on the use of systems science methods to enhance the social impact of health and social science research

CPHSS hosted its 3rd annual Systems Science for Social Impact summer training institute in July 2022, returning to an in-person Institute after hosting the training virtually in 2021 during the COVID-19 pandemic. The 2022 class of 39 participants represented 15 states in the U.S., Canada, and Switzerland, and chose from five system science tracks: Agent-based Modeling (ABM), Group Model Building (GMB), Social Network Analysis (SNA), System Dynamics (SD), and Systems Thinking (ST).

- “This was the most positive professional meeting experience I have had as a graduate student. I thoroughly enjoyed my time learning and networking with others.”
  – ABM Participant

- “It was a phenomenal week that flew by! Many great connections and extremely useful content.”
  – GMB Participant

- “I have LOVED this experience, and very much hope to participate again – or at least stay involved in the Wash U community.”
  – SNA Participant

Visit our website at cphss.wustl.edu

2022 Systems Science for Social Impact Summer Institute participants attend a reception at Missouri Botanical Garden. Photo by Sid Hastings/WUSTL Photos