PRISE Center

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Methods Expertise Glossary

Methods Expertise	Description
Anthropology	The study of people, cultures, and societies, past and present. In health research, it helps us understand how beliefs, traditions, and social structures influence health behaviors and outcomes.
Behavioral Economics	An approach that draws from psychology and economics to better understand how people make decisions, and how their choices can be shaped by context, habits, and other factors.
Causal Inference	A set of methods used to understand whether—and how—a specific action, policy, or intervention causes a particular outcome. It helps researchers go beyond identifying patterns to determine what actually makes a difference.
Community Engaged Research	An approach that involves the people and communities most affected by the research as equal partners. Their input helps shape the goals, design, and outcomes of the research to ensure it is relevant and respectful.
Comparative Effectiveness Research	A research approach that compares different interventions to learn which works best for a specific group of people or setting.
Data Science/Bioinformatics	The use of statistical and computational tools to analyze complex data and uncover meaningful patterns, trends, and insights, often in health and biomedical research.
Digital Health	The use of technology, like mobile apps, telehealth, and electronic health records,to support health care delivery, communication, and outcomes.
Dissemination Research	The study of how health information, interventions, and innovations are shared and taken up in real-world settings—like communities, clinics, or health systems.

Economic Evaluation & Costing	The analysis of the costs and benefits of health interventions such as cost-effectiveness, cost-benefit, and cost-utility, to help guide decisions about how to best use resources.
Health Policy	Focuses on the study and development of policies aimed at improving health outcomes, with a focus on how decisions are made, implemented, and evaluated.
Implementation Science Theory & Design	The use of frameworks, models, and strategies to plan, carry out, and study how health interventions are put into practice.
Improvement Science	An approach that uses structured methods to test and refine changes aimed at improving the quality, safety, and performance of health care systems.
Intervention Adaptation	The process of modifying health interventions to better fit the needs, culture, or context of a specific population or setting, while still preserving the elements that make the intervention effective.
Intervention Mapping	An approach to developing health interventions that are grounded in theory and evidence. It guides researchers through assessing needs, setting goals, choosing strategies, and planning for implementation and evaluation.
Machine Learning	The use of machine learning methods to identify patterns in health data, predict outcomes, and support evidence-based decision-making.
Mixed Methods Research	An approach that combines both quantitative (numeric) and qualitative (narrative) research methods.
Operations Research	The use of mathematical, analytical, and modeling techniques to improve decision-making, resource use, and efficiency within health care systems.
Organizational Assessment	A process for gathering information about an organization's structure, operations, and

	performance to identify strengths and areas for improvement.
Population Health	An approach that focuses on the health outcomes of groups of people, including how those outcomes are shaped by social, economic, and environmental factors.
Population Health Modeling	The use of mathematical and statistical models to understand, predict, and improve health outcomes at the population level.
Population Size Estimation	A set of methods used to estimate the number of people in a specific population, often those that are hard to reach or not well represented in existing data.
Predictive Modeling in Clinical Care	The use of data and statistical algorithms to predict individual health outcomes or risks.
Process Mapping	A method for visually outlining steps in a health care process to identify gaps, inefficiencies, and opportunities for improvement.
Program Evaluation	The assessment of a program's design, implementation, and outcomes. It can include process, outcome, and impact evaluation to understand what works, for whom, and how to improve future efforts.
Psychology/Behavior Change	An approach that examines how psychological factors influence behavior and uses evidence-based strategies to support individual behavior change.
Qualitative Research	Research approaches like interviews and observations that explore people's experiences, perspectives, and contexts in depth. These methods can include rapid techniques, such as rapid qualitative and ethnographic approaches, which allow for faster data collection and analysis without sacrificing depth or richness of the data.
Social Epidemiology	The study of how social factors like income, education, race, and neighborhood conditions affect health outcomes.

Social Marketing	The use of marketing strategies to design and promote programs that encourage healthy behaviors and improve public health.
Sociology	An approach that explores how social behaviors, institutions, and cultural norms shape health and well-being
Stakeholder/Policy Analysis	A method for understanding how different individuals and groups influence, support, or are affected by health policies.
Study Designs	The frameworks used to answer research questions and evaluate interventions. These include: • **Experimental Designs:** Use randomization to compare outcomes between groups, such as those receiving an intervention and those who do not (control group). • **Observational Designs:** Examine the effects of exposures, risks, or treatments without influencing who receives them. • **Quasi-Experimental Designs:** Evaluate interventions without randomization, often used when random assignment isn't feasible.
Surveillance & Data Systems	The systematic collection, analysis, and interpretation of health data to monitor and improve public health.
Systems Analysis & Improvement Research	A step-by-step method for improving how health care services are delivered. It helps teams understand where breakdowns happen in care, use data to find solutions, and make changes that lead to better outcomes.