Colorado Evaluation & Action Lab
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Evidence-Based Decision Making in Colorado: Glossary of Terms (February 2025)

Introduction

This glossary provides definitions that are used in Evidence-Based Decision Making (EBDM). Having shared definitions among governmental and non-governmental stakeholders across the state is a key step forward in helping to operationalize Colorado's statewide vision of EBDM. These definitions are intended for use by all stakeholders in policy development, policy implementation, budget development, strategic planning, in conducting and sharing research/evaluation, and other EBDM activities.

These definitions were developed based on a literature review and input from subject matter experts and practitioners across Colorado, with the aim of supporting alignment with current statutorily defined, rule-defined, and commonly used definitions.

We aim to keep our definitions as broad as possible while still making them relevant for Colorado-specific use cases. Some use cases may modify the definition to meet the need.

This glossary is a living document. If you have feedback on the definitions or would like to request that additional terms be added, please contact admin@coloradolab.org.

Definitions

Best Available Research Evidence: Refers to the weight of the research evidence from the most rigorous and relevant studies available about a practice or policy, identified using a systematic process; includes both numbers-based (quantitative) and narrative-based (qualitative) data.

Continuous Quality Improvement: An iterative process of making changes and improvements to a practice or policy in its local context to increase efficiency or improve outcomes based on information that has been learned over time from evidence building.

Disparity: Disparities are differences in the experiences and/or outcomes of underserved populations directly related to the historical and current unequal distribution of social, political, economic, and environmental resources. Example: Individuals with less education experience disparities in life expectancy relative to those with more education.

Disproportionality: Disproportionality refers to a group under- or over-represented in a particular category relative to what would be expected given the population. Alternatively, the group's representation differs substantially from the representation of other groups in the same category. Example: Black families are disproportionately involved in child welfare when there is a higher percentage of Black families referred to child welfare than is found in the general population.

Essential Elements (of a program/practice): The core functions or principles of a program or practice that are hypothesized (and, ideally, empirically tested) as necessary to produce the desired impact on the target population. Essential elements should be replicable for consistent delivery (see also Fidelity of Implementation).

Evaluation: A systematic method for collecting, analyzing, and using data to examine the implementation (process or formative evaluation) and/or effectiveness (impact or summative evaluation) of a practice or policy.

Evidence-Based Decision Making (EBDM): The intersection of the best available research evidence, decision-makers' expertise, and community needs and implementation context. Recognizes that research evidence is not the only contributing factor to decisions. Other equally important factors include resourcing, cultural values, community voice, and feasibility of implementation.

Evidence Building: An iterative process of building evidence—including articulating a theory of change, examining implementation, and assessing outcomes—that supports a deeper understanding of the effectiveness of a practice or policy and continuous quality improvement. Follows Colorado's Steps to Building Evidence.

Equity in Research/Evaluation: In evidence building and evidence use, equity means looking at systemic barriers that prevent various groups from having similar opportunities to access and benefit from a program, policy, or activity. It may also involve the examination of systemic barriers that cause harm or negative consequences for some groups compared to others. Example: Studying the economic barriers to higher education that prevent youth from low-income families from having the opportunity to attend college or vocational schools at the same rate as youth from higher-income families.

Equity of Opportunity: Refers to the absence of systemic barriers that prevent different groups of individuals from having comparable opportunity to access and benefit from a program/practice, policy, or activity. May also involve the presence of accessible resources that enable different groups to have comparable opportunities. Example: Youth from low-income families have an equitable opportunity to access higher education when there are no systemic barriers that prevent them from attending college or vocational schools at the same rate as youth from higher-income families.

Fidelity of Implementation (FOI) of a Program/Practice: The extent to which the program or practice is delivered consistently and as intended. This includes delivery of the program or practice's essential elements to the identified population for the required dose.

Grey (Gray) Literature: Research and evaluation findings presented outside of peer-reviewed journals, including evaluation reports, working papers, and other information generated by government, academics, business, and industry.

Impact Evaluation: An evaluation that uses appropriate methods (randomized controlled trial or strong quasi-experimental design) to measure the degree to which a practice or policy causes the observed changes in outcomes.

Incremental Change: Incremental changes are modifications to the resources provided for an existing program/practice, or modifications to the resources provided for agency infrastructure that affect multiple programs or practices (e.g. administrative, partnership/collaboration, information technology or data infrastructure).

Logic Model: A logic model shows the relationship between a practice or policy's resources, activities, and intended outcomes. A logic model focuses on the sequencing of the work toward desired change. Unlike a theory of change, relationships documented in a logic model are typically not causal.

Mixed Methods Research: Mixed methods research relies on the combination of quantitative and qualitative research to deepen understanding of the same research question. Example: Comparing the number of prenatal care visits attended by adolescent parents using administrative data from vital records with the recommended number of prenatal visits; then interviewing these parents to explore barriers to attending the recommended number of visits.

Outputs: The activities, goods, or services provided by a practice or policy. One common output measured in process evaluations is reach or number served.

Outcomes: Measures of what a practice or policy is meant to improve for its target population; for example, improved academic achievement or reduced recidivism. Outcomes, which are typically measured in an impact evaluation, are the observable effects of the outputs according to the theory of change.

Outcome Evaluation: An evaluation that measures the degree to which a practice or policy has achieved its intended outcomes. Unlike impact evaluation, it does not necessarily determine whether the practice or policy caused the outcomes.

Policy: A law, ordinance, regulation, procedure, administrative action, incentive, or voluntary practice of governments or other institutions. Policies exist at the macro, meso, and micro level and set the context in which individual decisions and actions are made.

Policy Decision Makers: Those who create policies and/or are responsible for policy implementation. Includes legislators, commissioners, board members, and the governor (who have policy-setting authority); agency leaders such as executive and division directors and the governor (who have rule-interpretation authority); and administrators such as program staff (who are responsible for implementation).

Policy Influencers: Those who inform creation and/or implementation of policies. Influencers include both organizations (e.g., advocacy organizations, technical assistance providers, professional associations) and individuals directly impacted by the issue area/potential policy.

Practical Significance: When the size of a difference or change in an outcome is meaningful in the real world, given the context. Practical significance is independent of statistical significance and based on a subjective judgment due to professional expertise.

Primary Data: Data generated by the research process, such as through surveys, interviews, or experiments designed to address the research question of interest.

Process Evaluation: An evaluation that assesses how well a program was delivered, including factors such as acceptability, feasibility, sustainability, and the experiences of those involved.

Program or Practice: An intervention or approach with explicitly defined and replicable elements that is hypothesized to improve specified outcomes for a defined target population.

Qualitative Research: Qualitative research relies on the collection of narrative or visual data and provides deeper insight into the "how" or the "why" of activities. Qualitative research often uses interviews, photovoice, focus groups, or observation to collect data. Example: Using interviews to learn more about adolescent parents' experiences accessing health care services.

Quantitative Research: Quantitative research relies on the collection of numerical data and provides insight into the "what," "how many," and "how often" of activities. Quantitative research often uses administrative systems and surveys to collect data. Example: Examining the number of prenatal visits attended by adolescent parents using administrative data from vital records.

Quasi-Experimental Design: A type of research design that compares the outcomes of a group who receives a program or practice with the outcomes of a group who do not. Intervention and comparison groups are assigned by methods intended to create groups that are highly similar on key characteristics prior to the intervention. Such methods include but are not limited to matched comparison design (e.g., propensity score matching), interrupted time series with a comparison group, and regression discontinuity design.

Quality: Quality in research is achieved when it is rigorously conducted, consults and builds on prior evidence, and draws reasonable conclusions based on the evidence presented.

Randomized Control Trial: A type of research design that compares the outcomes of a randomly-assigned group who receives a program or practice with the outcomes of a randomly-assigned control group that does not.

Relevance (of evidence as applied to a program or practice): How closely aligned the research evidence is to how a program or practice will be implemented in a new or expanded setting. Includes considerations of the target population, the outcomes of interest, and contextual factors such as delivery setting and structure.

Rigor: Rigor depends on the methodological design and always includes asking relevant research questions, appropriately matching methods to those questions, and being transparent about decisions made in the process of answering them.

Research: A systematic exploration or investigation designed to generate or contribute to generalizable knowledge.

Research Evidence: Empirical findings generated from the systematic and rigorous application of methods and analyses to help answer a question, hypothesis, or topical investigation.

Secondary Data: Existing data collected or generated by government agencies, schools, healthcare facilities, or other organizations as part of routine record keeping. Also called "administrative data."

State Agency: Any department, commission, council, board, bureau, committee, institution of higher education, agency, or other governmental unit of the executive, legislative, or judicial branch of the state government.

Statistical Significance: When the estimated difference in a sample is unlikely to be due to random chance. For example, in a program evaluation, a statistically significant difference may be one that the author is confident is related to the program or practice rather than due to random chance in the sampling process.

Steps to Building Evidence: Colorado's iterative five-step framework that supports stakeholders in identifying the most appropriate questions and methods to contribute to the best available research evidence for a practice or policy.

Systematic Process (for identifying the best available research evidence): Finding and reporting the available research evidence in a way that is thorough, free of bias, transparent, and replicable.

Theory of Change: Also called a conceptual model, a narrative or visual representation that articulates the logic/rationale behind why and how a practice or policy is expected to lead to a change in the desired outcomes. A theory of change is causal and at the systems level. A theory of change should be developed before assessing the implementation or outcomes of a practice or policy. Impact evaluation can support testing of the theory of change.

Trend Analysis: Changes in outcomes that are tracked over time, including but not limited to performance management analyses, pre-post assessments, and interrupted time series analyses.

Underserved Populations: Populations who face barriers in accessing and using services because of, for example, geographic location, religion, sexual orientation, age, immigration status, gender identity, and/or race and ethnicity.

Unintended Consequences: Outcomes, either positive or negative, of a practice or policy that are not intended or foreseen. For example, the cobra effect happens when governments try to eradicate pests (e.g., snakes or rodents) by providing a bounty on their skin or their tail. However, infestations increase when people begin farming the animals for the bounty.

Weight of the Research Evidence: What the overall balance of information says about a topic, when considered all together.