Committee on a Blueprint for a National Prevention Infrastructure for Behavioral Health Disorders: Meeting 1, Part 2

A Registry of Evidence-based Youth Prevention Programs

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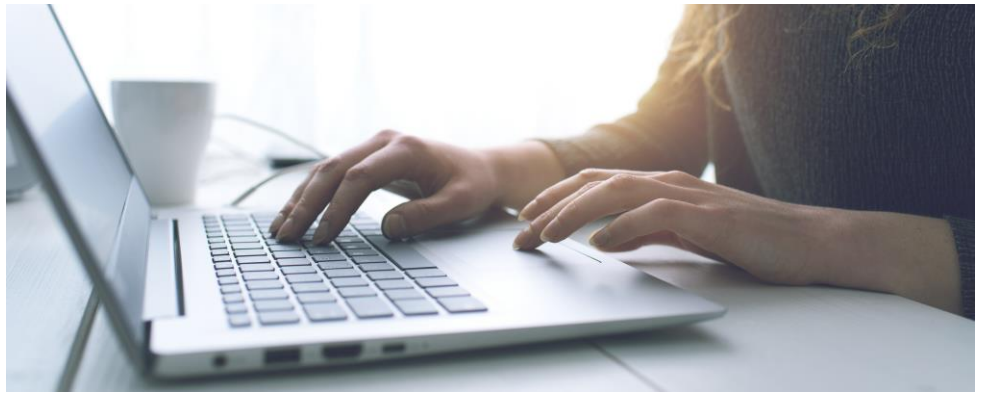
NATIONAL ACADEMIES Sciences Engineering Medicine

- January 25, 2024
- Washington, D.C.

What are Evidence-Based Interventions (EBIs)?

Interventions that have been:

- Rigorously tested,
- Proven effective,
- Translated into models available to community-based organizations.



Evaluations subjected to
critical peer review by…..

Experts in the field who have examined the evaluation's methods and agreed with its conclusions about the intervention's effects.

How to Identify EBIs and where to find them?

Online Registries

- Means et al., 2015, p. 101: *"Assess applied research and evaluation studies of programs/interventions according to evidentiary (evidence-based) standards"* to identify effective interventions.
- Focus on the results from high-quality research to answer the question **"What works?"**
- Generate an inventory of **Evidence-Based Interventions (EBIs)**.
- Up to 24 online registries within the U.S. and Europe alone.
- Funders use ratings of EBIs to inform decisions of awarding federal, state, and local prevention dollars.

Means, S., Magura, S., Burkhart, B. R., Schroter, D. C., & Coryn, C. L. S. (2015). Comparing rating paradigms for evidence-based program registers in behavioral health: Evidentiary criteria and implications for assessing programs. *Evaluation and Program Planning, 48*, 100-116.

U.S. Federal Online Registries

Outcomes are specific to each Federal agency

SAMHSA's National Registry of Effective Prevention Programs (NREPP) launched in 1995 and suspended in 2018 **(Outcome Focus: Substance abuse, Mental disorders)**.

Clearinghouse	Federal Department	Relevant Legislation	Outcome Focus
CLEAR: Clearinghouse for Labor and Eval Research	Labor	Reemployment Services and Eligibility Assessment	Employment
CrimeSolutions	Justice	Juvenile Justice Reform Act of 2018	Crime
HomVEE: Home Visiting Evidence of Effectiveness	HHS-ACF	Maternal, Infant & Early Childhood Home Visiting	Child Development, Maternal Health
PSC: Prevention Services Clearinghouse	HHS-ACF	Family First Prevention Services Act (FFPSA)	Child Welfare, Home Placement
WWC: What Works Clearinghouse	Education	Every Student Succeeds Act (ESSA)	Achievement, Teacher Effectiveness
P2W: Pathways to Work Evidence Clearinghouse	HHS-ACF	Temporary Assistance for Needy Families (TANF)	Poverty, Homelessness

Note: HHS-ACF: Health and Human Services, Administration for Children and Families

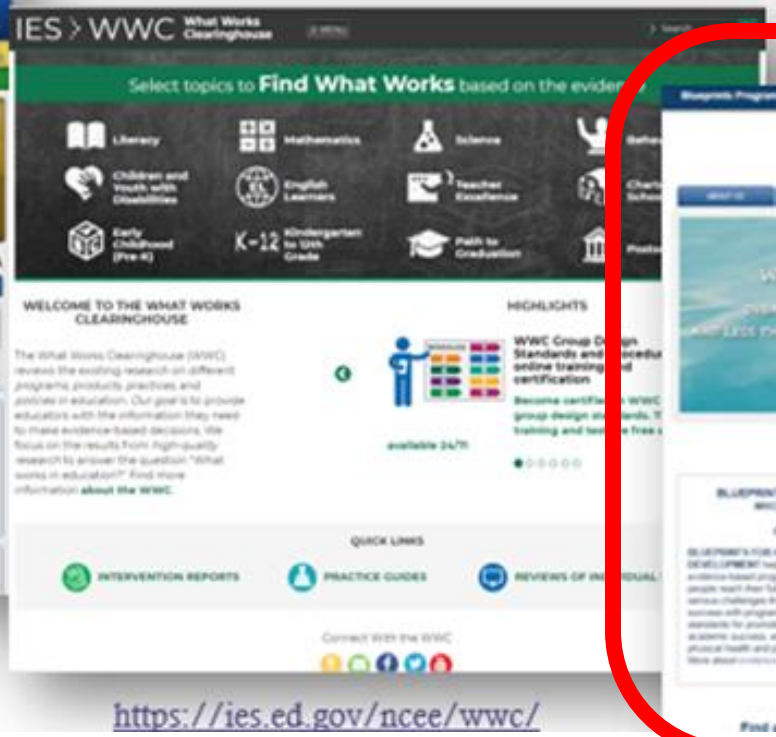
Presentation #1:

Scaling up Evidence-Based Interventions in US Public Systems to Prevent Behavioral Health Problems

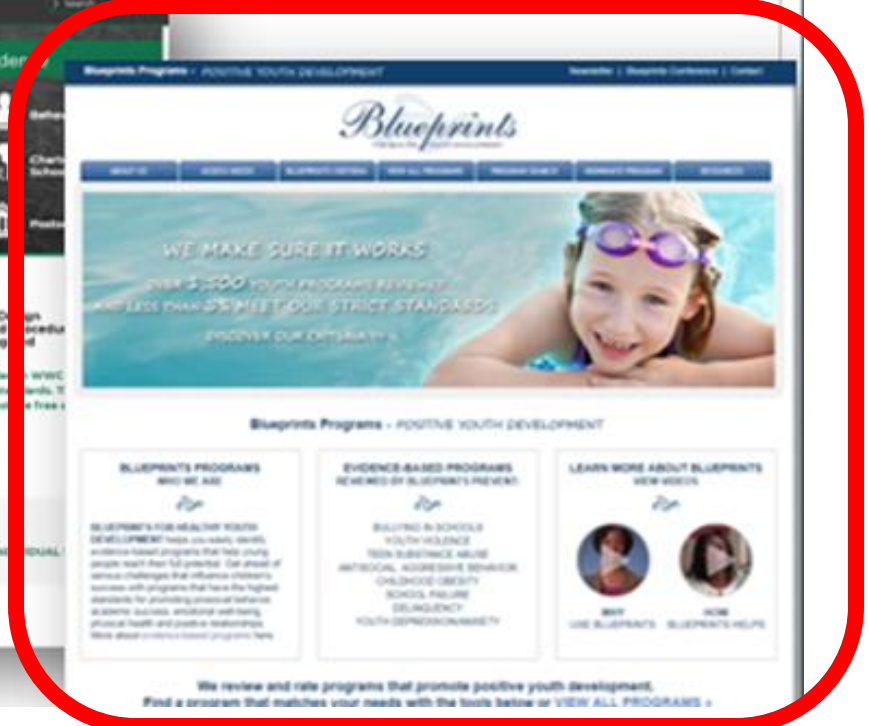
Abby Fagan, PhD

We know what works (mostly)!

https://crimesolutions.gov/



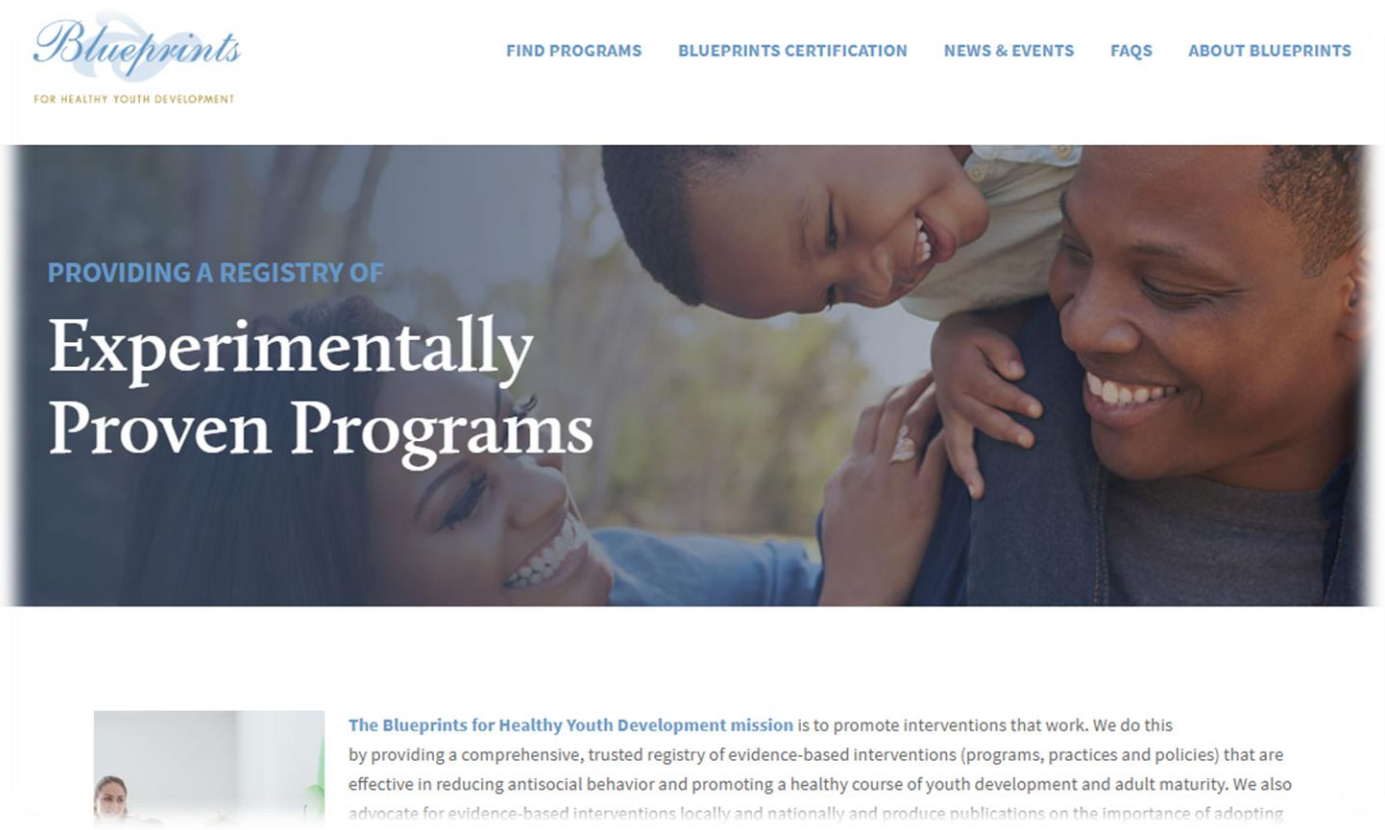
https://ies.ed.gov/ncee/wwc/



Arnold Ventures

Arnold Ventures is a philanthropy finding solutions that scale

Blueprints for Healthy Youth Development



Goal: To provide communities, policymakers, agencies and researches with a *trusted* guide to youth prevention programs that work.

www.BlueprintsPrograms.org

CR Consumer Reports

Upstream Prevention

30+ years of prevention research shows it is possible to reduce negative health outcomes – including violence, suicide, and substance misuse – *before they ever start*.

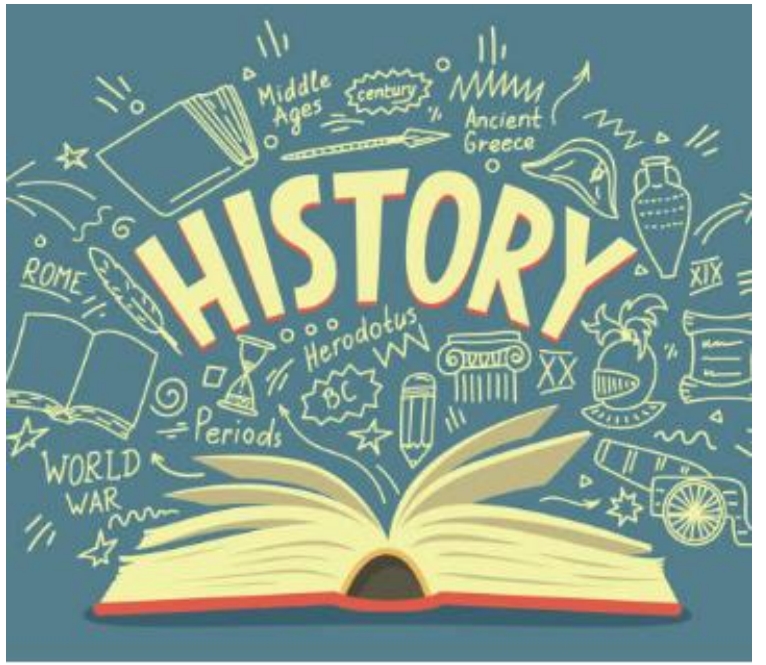
Determining and addressing the root causes and conditions that contribute to negative health outcomes is known as **Upstream Prevention**.

Goal is to build resilience, decrease risk factors, and build protective factors to have impacts on individual and public health downstream.

Blueprints provides a **registry of effective "upstream prevention" EBIs** implemented at individual, family, school, and community levels that improve child development, support families, and enhance school experiences.

- Started in 1996 by Dr. Delbert S. Elliott.
- Initially reviewed programs that were effective in addressing violence and drug use outcomes.
- Expanded scope in 2010 to include mental and physical health, self-regulation, educational attainment and other positive developmental outcomes.
- Reviewed 2,977 studies and 1,612 programs.
- 113 have met Blueprints standards.

Blueprints
FOR HEALTHY YOUTH DEVELOPMENT



Blueprints FOR HEALTHY YOUTH DEVELOPMENT

What makes Blueprints unique?

- ***Longest running*** online registry in the U.S. and around the world.
- Only registry focused ***solely on upstream prevention*** EBIs.
- Reviews evaluations of outcomes that benefit youth across a wide ***range of domains:***
  - Child welfare
  - Public health
  - Mental health
  - Educational attainment
  - Delinquency
- ***Constantly updated*** to keep up with new findings.

What are the most important elements of translating evidence?

1. Clear scientific standards.
2. A rigorous review process.
3. Rating for all programs (meets standards, does not meet standards).

Clear Scientific Standards

Prev Sci (2015) 16:893–926
DOI 10.1007/s11121-015-0555-x

Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation

Denise C. Gottfredson[1] · Thomas D. Cook[2] · Frances E. M. Gardner[3] · Deborah Gorman-Smith[4] · George W. Howe[5] · Irwin N. Sandler[6] · Kathryn M. Zafft[1]

Published online: 7 April 2015

Abstract A decade ago, the Society of Prevention Research (SPR) endorsed a set of standards for evidence related to research on prevention interventions. These standards (Flay

Introduction

A decade ago, the Society of Prevention Research

SPR Standards of Evidence

Methodological criteria developed by prevention scientists and endorsed by the Society for Prevention Research (SPR)

1) Efficacy – extent to which an intervention does more good than harm when delivered under optimal conditions
2) Effectiveness – intervention effects when delivered in real-world conditions

Goals of increasing methodological quality and consistency in preventive intervention research

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Related Pages

- ADVOCACY FOR PREVENTION SCIENCE
- Advocacy Engagement – Rapid Response Process
- Advocacy Toolkits and Resources
- COMMUNITY MONITORING SYSTEMS
- Partnership between SPR and the NPSC
- Policy Briefs, MAPS IV TR Task Force
- Standards of Evidence
- Standards of Knowledge
- Type 2 Translational Research and Braided Funding
- CONTACT US
- HOME

STANDARDS OF EVIDENCE

The Society for Prevention Research is committed to the advancement of science-based prevention programs and policies through empirical research. Increasingly, decision-makers and prevention service providers seek tested and efficacious or effective programs and policies for possible implementation.

SPR Standards of Evidence

Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation, April 2015

In 2013, the Society for Prevention Research (SPR) Board of Directors convened a task force to update and extend the "SPR Standards of Evidence: Criteria for Efficacy, Effectiveness, and Dissemination" published in 2005. The "Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation" published online: 07 April 2015 in Prevention Science (click here) represents the work of this task force. The revised and updated standards include special attention to standards for replication studies and scaling up of effective interventions. New standards have been added for testing theory, describing interventions, measuring the quality of implementation, documenting adaptations in the field, reporting study results, and evaluating outcomes of scale-up efforts. Guidance is also provided on determining effectiveness in face of multiple outcomes/multiple studies. The article was published in *Prevention Science*, April 2015, with commentaries from several prevention scientists.

The SPR Board of Directors endorses the "next generation" standards produced through this effort and anticipates that these revised standards will help to encourage research that will strengthen the impact of prevention science to improve the public health and well-being. We encourage you to disseminate it broadly.

Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination (2005)

Here is the link to article https://link.springer.com/article/10.1007/s11121-005-5553-y

As part of SPR's strategic plan, in 2003, the SPR Board of Directors appointed a committee of prevention scientists, chaired by Brian Flay, to determine the requisite criteria that must be met for preventive interventions to be judged tested and efficacious or tested and effective. **The Standards of Evidence developed by this committee were unanimously adopted by the Board of Directors of SPR on April 12, 2004, as the standards which SPR asserts should be met if a program or policy is to be called tested and efficacious or tested and effective.** The "Standards of SPR Standards of Evidence: Criteria for Efficacy, Effectiveness, and Dissemination" was published in *Prevention Science,* September 2005.

Prevention Science
https://doi.org/10.1007/s11121-021-01263-2

Common Methodological Problems in Randomized Controlled Trials of Preventive Interventions

Christine M. Steeger[1] · Pamela R. Buckley[1] · Fred C. Pampel[1] · Charleen J. Gust[1] · Karl G. Hill[1]

Accepted: 9 June 2021

Abstract
Randomized controlled trials (RCTs) are often considered the gold standard in evaluating whether intervention results are in line with causal claims of beneficial effects. However, given that poor design and incorrect analysis may lead to biased outcomes, simply employing an RCT is not enough to say an intervention "works." This paper applies a subset of the Society for Prevention Research (SPR) Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research, with a focus on internal validity (making causal inferences) to determine the degree to which RCTs of preventive interventions are well-designed and analyzed, and whether authors provide a clear description of the methods used to report their study findings. We conducted a descriptive analysis of 851 RCTs published from 2010 to 2020 and reviewed by the *Blueprints for Healthy Youth Development* web-based registry of scientifically proven and scalable interventions. We used Blueprints' evaluation criteria that correspond to a subset of SPR's standards of evidence. Only 22% of the sample satisfied important criteria for minimizing biases that threaten internal validity. Overall, we identified an average of 1–2 methodological weaknesses per RCT. The most frequent sources of bias were problems related to *baseline non-equivalence* (i.e., differences between conditions at randomization) or *differential attrition* (i.e., differences between completers versus attritors or differences between study conditions that may compromise the randomization). Additionally, over half the sample (51%) had missing or incomplete tests to rule out these potential sources of bias. Most preventive intervention RCTs need improvement in rigor to permit causal inference claims that an intervention is effective. Researchers also must improve reporting of methods and results to fully assess methodological quality. These advancements will increase the usefulness of preventive interventions by ensuring the credibility and usability of RCT findings.

Keywords Randomized controlled trial · RCT · Preventive interventions · Internal validity · CONSORT · Systematic review

Introduction

Randomized controlled trials (RCTs) are often considered the gold standard for determining experimental validity and the causal effects of preventive interventions (Shadish et al., 2002; West & Thoemmes, 2010). With high-quality implementation, RCTs allow for causal inferences and estimates of average treatment effects that are more reliable and credible than those from other empirical methods (Deaton & Cartwright, 2018). Despite the strength and appropriateness of the RCT to evaluate an intervention (i.e., program, practice, or policy), simply using an RCT design and reporting results is not sufficient to determine whether an intervention "works." Given that poorly implemented RCTs may produce biased outcomes (Schulz et al., 2010), an RCT must be correctly designed, implemented, and analyzed in order to make causal

Christine M. Steeger, Pamela R. Buckley contributed equally to this work.

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Publication available on Blueprints website: https://www.blueprintsprograms.org/publications/

Funder acknowledgement:
This study was funded by Arnold Ventures

Rigorous Review Process

A report says a program works → Report undergoes internal review by Blueprints experts → Report sent for external review by Blueprints Advisory Board Members

Pamela Buckley, PhD
Educational Psychology

Charleen Gust, PhD
Social Psychology

Fred Pampel, PhD
Sociology

Christine Steeger, PhD
Developmental Psychology

Program Name:

Author(s):

Primary Criteria

Yes ? No

☐ ☐ ☐ *1. High-Quality Design:*

☐ ☐ ☐ *2. Sample Ns Tracked:*

☐ ☐ ☐ *3. Measures Independent:*

☐ ☐ ☐ *4. Measures Valid/Reliable:*

☐ ☐ ☐ *5. Behavioral Outcome Measure:*

☐ ☐ ☐ *6. Intent-to-Treat:*

☐ ☐ ☐ *7. Proper Level:*

☐ ☐ ☐ *8. Baseline Outcome Controls:*

☐ ☐ ☐ *9. Baseline Equivalence:*

☐ ☐ ☐ *10. Differential Attrition Minimal:*

☐ ☐ ☐ *11. Tested Baseline-by-Condition Attrition:*

☐ ☐ ☐ *12. Posttest Effect on Behavioral Outcome:*

☐ ☐ ☐ *13. Iatrogenic Free:*

Model Criteria

☐ ☐ ☐ *14. Long-Term Effect on Behavioral Outcome:*

Secondary Criteria

☐ ☐ ☐ *15. Effects on R&P Factors:*

☐ ☐ ☐ *16. Sample General:*

☐ ☐ ☐ *17. Fidelity of Implementation:*

☐ ☐ ☐ *18. Effect Sizes:*

☐ ☐ ☐ *19. Mediation Analysis:*

Summary

☐ ☐ ☐ *20. Recommended for BP Board:*

☐ ☐ ☐ *21. For Board Review Only, Is There a Trial Registration:*

Blueprints Advisory Board

Expertise in research design and methodology from different disciplines

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Biostatistics
John Hopkins University

Elizabeth Tipton, PhD
Statistics and Data Science
Northwestern University

Abigail Fagan, PhD
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University of Florida

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Child and Family Psychology
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Prevention Science,
Life Span Development
University of Colorado

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Education & Human Development
University of Virginia

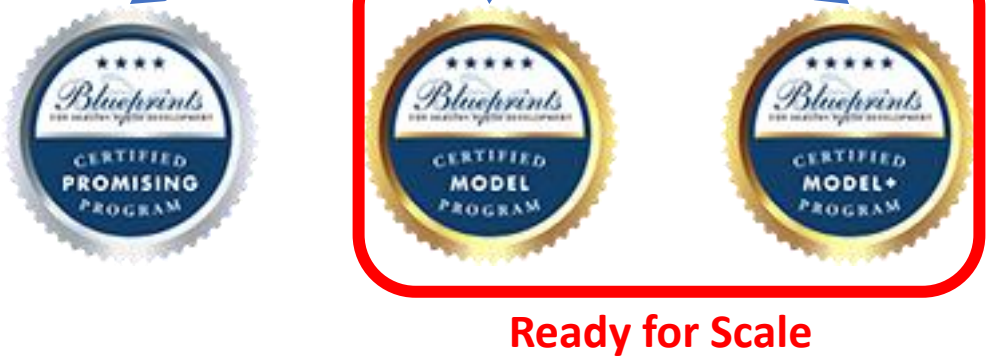
Blueprints Review Process

A report says a program works

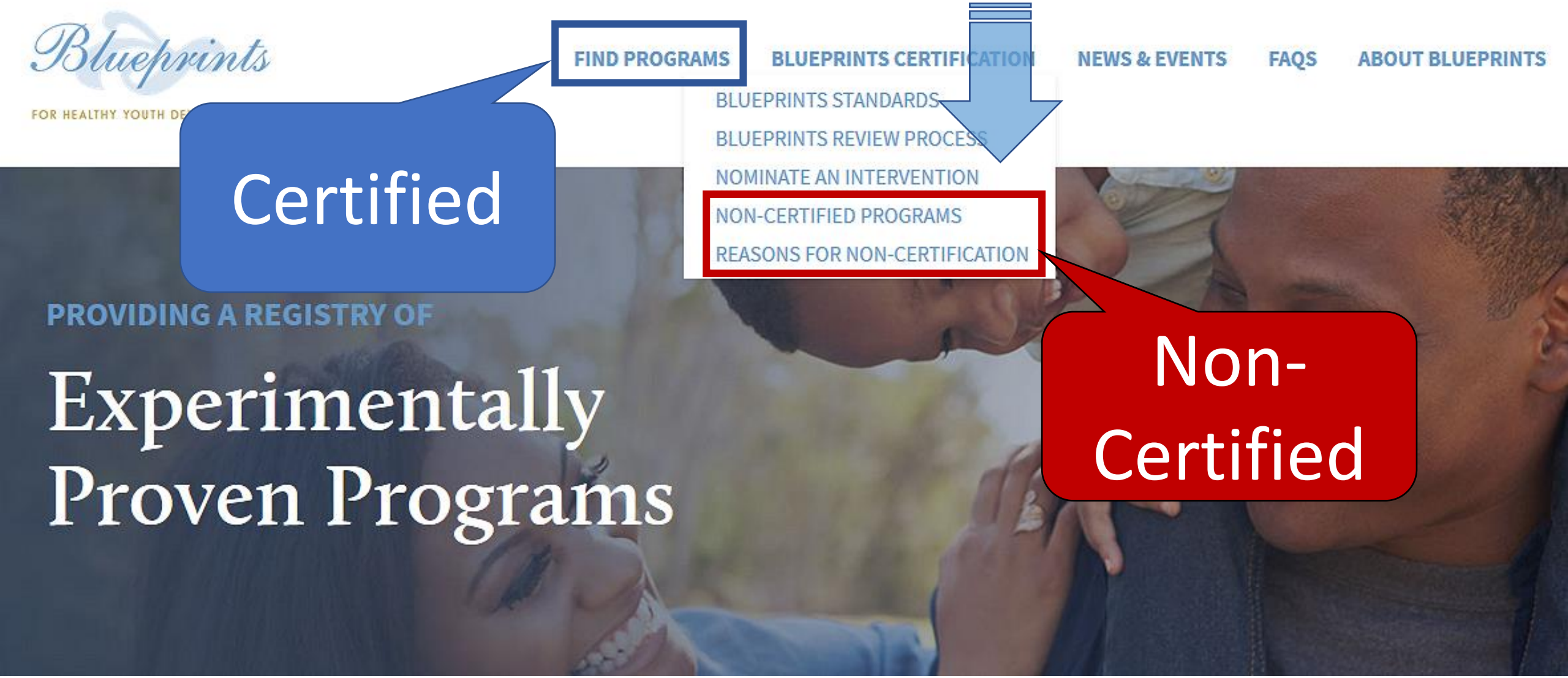
Report undergoes internal review by Blueprints experts

Report sent for external review by Blueprints Advisory Board Members

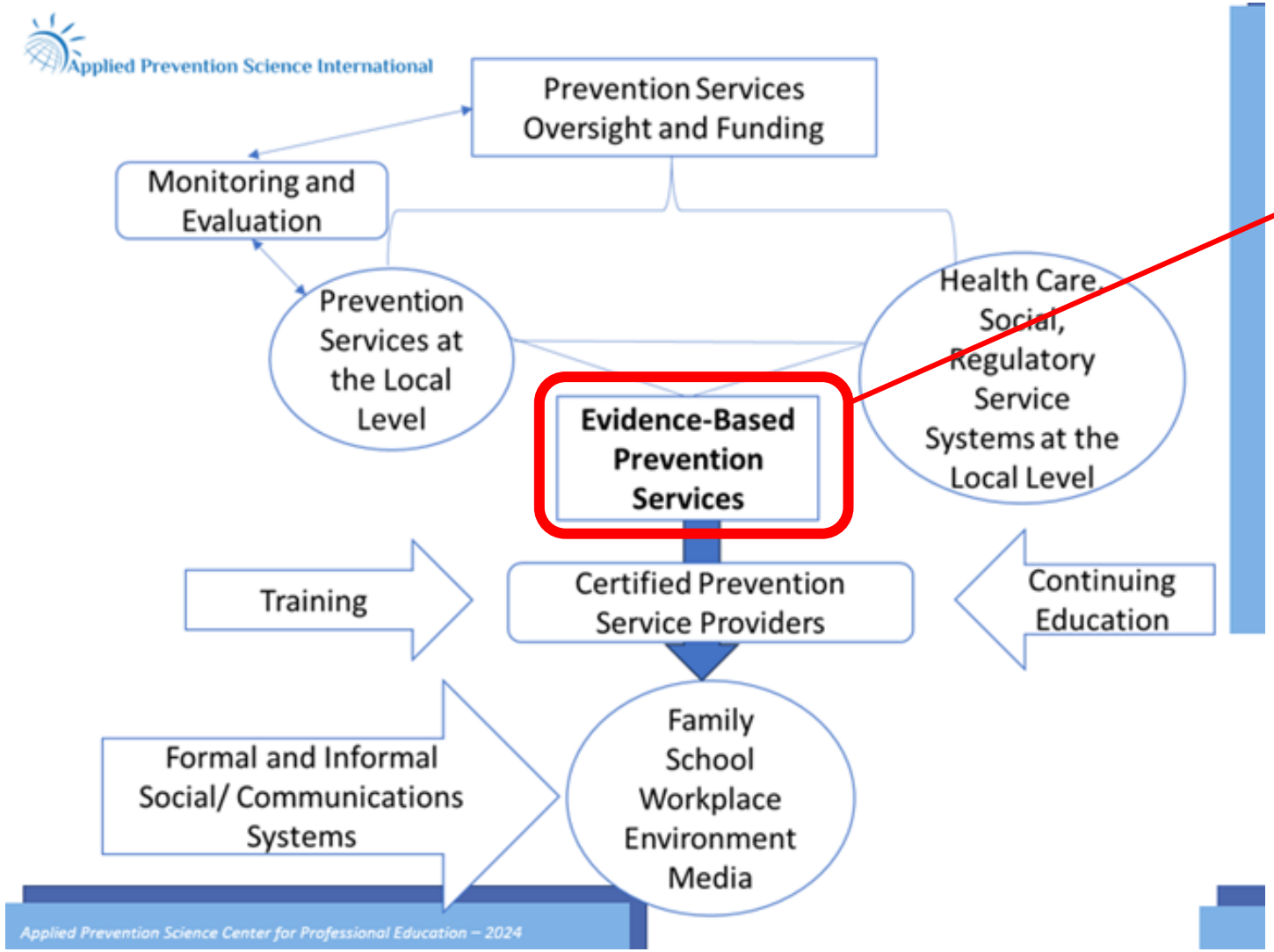
Program Certified



Ready for Scale



Certified and Not-Certified Interventions are presented in <u>different parts of our website</u> and <u>not on the same list</u>!



Blueprints
FOR HEALTHY YOUTH DEVELOPMENT

What "Pieces" Are In Place Now

- Epidemiologic Data Sets – National and State
- Evidence-based services—Source of Information
- Training of prevention professionals—just beginning
- Credentialling and licensing—just beginning
- Funding—should be consistent and adequate

Presentation #2: A Concept of a Community-Based Prevention Service Delivery System
Zili Sloboda, Sc.D. and Diana H. Fishbein, Ph.D

Access to EBIs in micro-level environments to include:

- Parenting and Family-Skills Programs that:
  - Enhance parenting practices
  - Enhance family communications and support
- School Programs that:
  - Create safe and supportive school experiences to include school climate
  - Enhance performance
  - Enhance life-skills

Presentation #2: A Concept of a Community-Based Prevention Service Delivery System
Zili Sloboda, Sc.D. and Diana H. Fishbein, Ph.D

Presentation #1:

Scaling up Evidence-Based Interventions in US Public Systems to Prevent Behavioral Health Problems

Abby Fagan, PhD

EBI Knowledge

- Facilitator: What Works registries provide information on EBIs
  - *e.g., Blueprints, Crime Solutions, WWC*
- Barrier: Registries are not well known and don't provide all information needed to understand, compare, and select EBIs
- Recommendation: Support (state-level) ***intermediary organizations*** to help systems leaders and staff navigate registries

Statewide Public and Private Initiatives

- CO House Bill 22-1295 (Department Early Childhood and Universal Preschool Program) requires funding be allocated to programs meeting Blueprints' evidence standards
  - *"Be identified by the University of Colorado as a proven, evidence-based intervention to support healthy youth development" (p. 101)*
- State funds are matched with private donations to scale three EBIs on Blueprints across communities throughout CO.

Nurse-Family Partnership
Helping First-Time Parents Succeed

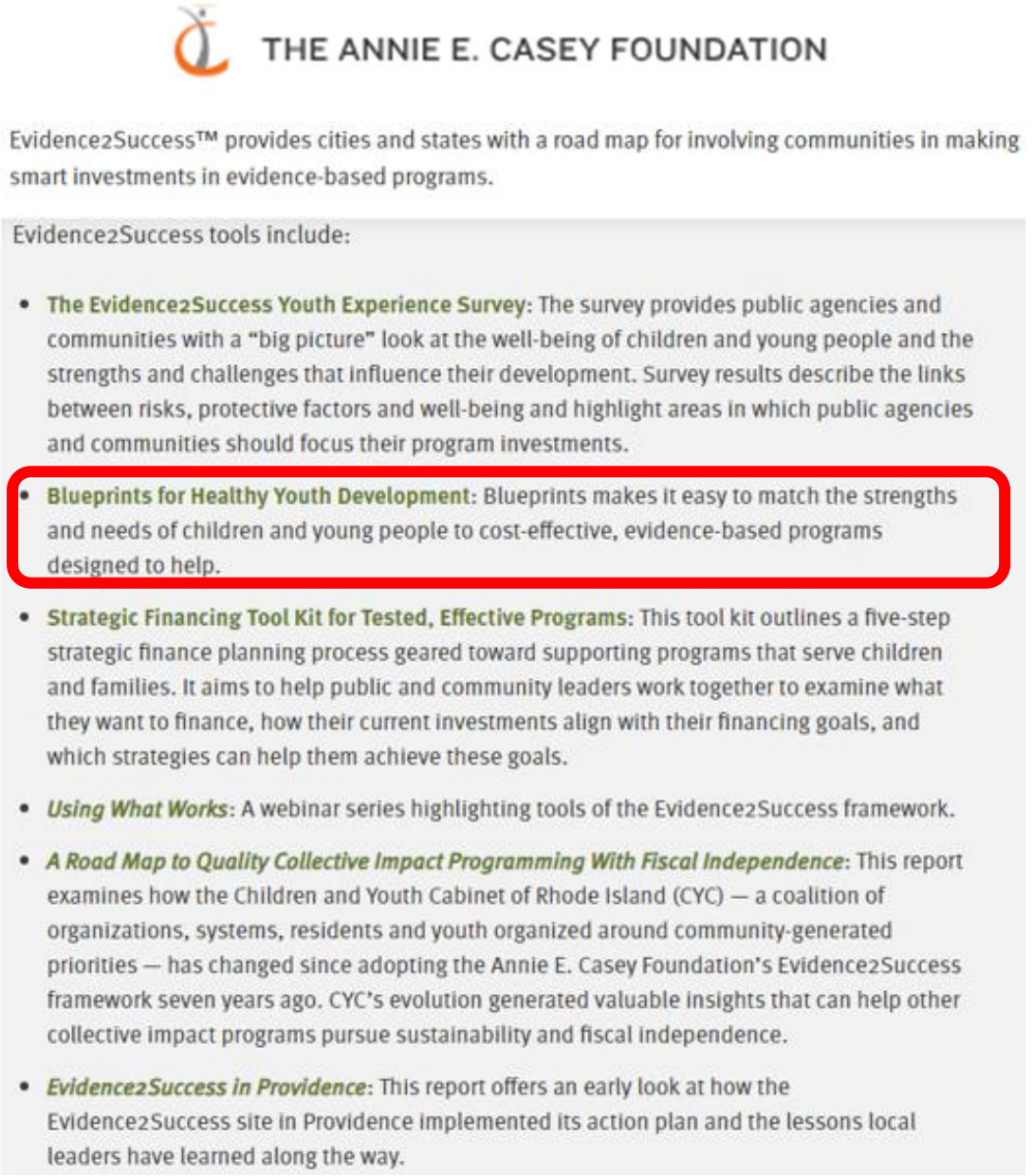
The Incredible Years

child first

National Philanthropic Foundation and Community Partnerships

Brings together public-system leaders and community members to:

- Understand how children are doing with the help of data.
- Select EBIs to enhance strengths and address needs.
- Develop financing and action plans to support the ongoing use of those proven programs.



THE ANNIE E. CASEY FOUNDATION

Evidence2Success™ provides cities and states with a road map for involving communities in making smart investments in evidence-based programs.

Evidence2Success tools include:

- **The Evidence2Success Youth Experience Survey:** The survey provides public agencies and communities with a "big picture" look at the well-being of children and young people and the strengths and challenges that influence their development. Survey results describe the links between risks, protective factors and well-being and highlight areas in which public agencies and communities should focus their program investments.
- **Blueprints for Healthy Youth Development:** Blueprints makes it easy to match the strengths and needs of children and young people to cost-effective, evidence-based programs designed to help.
- **Strategic Financing Tool Kit for Tested, Effective Programs:** This tool kit outlines a five-step strategic finance planning process geared toward supporting programs that serve children and families. It aims to help public and community leaders work together to examine what they want to finance, how their current investments align with their financing goals, and which strategies can help them achieve these goals.
- ***Using What Works***: A webinar series highlighting tools of the Evidence2Success framework.
- ***A Road Map to Quality Collective Impact Programming With Fiscal Independence***: This report examines how the Children and Youth Cabinet of Rhode Island (CYC) — a coalition of organizations, systems, residents and youth organized around community-generated priorities — has changed since adopting the Annie E. Casey Foundation's Evidence2Success framework seven years ago. CYC's evolution generated valuable insights that can help other collective impact programs pursue sustainability and fiscal independence.
- ***Evidence2Success in Providence***: This report offers an early look at how the Evidence2Success site in Providence implemented its action plan and the lessons local leaders have learned along the way.

How has my thinking evolved since beginning this work?

Highlight studies to express three themes:

1. Harmonize across clearinghouses (confusion over ratings).
2. Expand focus from internal validity ("What works") to consider external validity ("For whom, what settings?")
3. Outreach is needed to enhance uptake of EBIs.

885 programs with evaluations published from 2010-2021 and recorded in the Blueprints database.

Key Findings:

1. 2% developed for Black or Af Am youth and 4% targeted Hispanic or Latino populations.
2. 77% of studies reported race; of those, most enrollees were White (35%) then Black or Af Am (28%); 31% collapsed across race or categorized race with ethnicity.
3. 64% reported ethnicity; of those, 32% of enrollees were Hispanic or Latino.

Conclusion: Better reporting is needed to advance programs that reduce racial disparities and to determine whether communities with unique demographic features (e.g., rural location, specific racial, ethnic groups, etc.) have been studied.

Prevention Science (2023) 24:1261–1274
https://doi.org/10.1007/s11121-023-01564-8

Check for updates

Racial and Ethnic Representation in Preventive Intervention Research: a Methodological Study

Pamela R. Buckley[1] · Velma McBride Murry[2] · Charleen J. Gust[1] · Amanda Ladika[1] · Fred C. Pampel[1]

Accepted: 7 June 2023 / Published online: 29 June 2023

Abstract
Individuals who are Asian or Asian American, Black or African American, Native American or American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Hispanic or Latino (i.e., presently considered racial ethnic minoritized groups in the USA) lacked equal access to resources for mitigating risk during COVID-19, which highlighted public health disparities and exacerbated inequities rooted in structural racism that have contributed to many injustices, such as failing public school systems and unsafe neighborhoods. Minoritized groups are also vulnerable to climate change wherein the most severe harms disproportionately fall upon underserved communities. While systemic changes are needed to address these pervasive syndemic conditions, immediate efforts involve examining strategies to promote equitable health and well-being-which served as the impetus for this study. We conducted a descriptive analysis on the prevalence of culturally tailored interventions and reporting of sample characteristics among 885 programs with evaluations published from 2010 to 2021 and recorded in the *Blueprints for Healthy Youth Development* registry. Inferential analyses also examined (1) reporting time trends and (2) the relationship between study quality (i.e., strong methods, beneficial effects) and culturally tailored programs and racial ethnic enrollment. Two percent of programs were developed for Black or African American youth, and 4% targeted Hispanic or Latino populations. For the 77% of studies that reported race, most enrollees were White (35%) followed by Black or African American (28%), and 31% collapsed across race or categorized race with ethnicity. In the 64% of studies that reported ethnicity, 32% of enrollees were Hispanic or Latino. Reporting has not improved, and there was no relationship between high-quality studies and programs developed for racial ethnic youth, or samples with high proportions of racial ethnic enrollees. Research gaps on racial ethnic groups call for clear reporting and better representation to reduce disparities and improve the utility of interventions.

Keywords Clearinghouse · Registry · Racial equity · Evidence-based intervention · External validity · Diversity · Generalizability

External validity ("What works," "For whom, what settings?")


Thank you!