# WHAT WORKS? COMPARING THE BLUEPRINTS LIST OF "EVIDENCE-BASED" PREVENTION STRATEGIES WITH OTHER LISTS

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# HOW DO YOU KNOW IF AN INTERVENTION IS "EVIDENCE-BASED"?

### **ASK TWO QUESTIONS:**

- 1. DOES IT WORK?
- 2. HOW DO YOU KNOW IT WORKS?
  - WHAT IS THE EVIDENCE FOR ITS EFFECTIVENESS?

KEEP IN MIND: THERE ARE MANY DIFFERENT TYPES
OF EVIDENCE AND METHODS OF EVALUATION

# HOW DO YOU KNOW IF AN INTERVENTION IS "EVIDENCE-BASED"?

- THE GOAL OF "WHAT WORKS" REGISTRIES IS TO IDENTIFY EVIDENCE-BASED INTERVENTIONS
- THERE ARE MANY REGISTRIES, AND THEY VARY IN:
  - THE OUTCOMES OF INTEREST
  - THE PROCESS AND STANDARDS USED TO DETERMINE EFFECTIVENESS; E.G., WHETHER OR NOT THEY REQUIRE THAT INTERVENTIONS:
    - BE EVALUATED USING A RANDOMIZED CONTROLLED TRIAL
    - DEMONSTRATE LONG-TERM EFFECTS
    - REQUIRE REPLICATION
    - CONSIDER HARMFUL EFFECTS

# EVIDENCE-BASED PROGRAMS, PRACTICES, AND POLICIES

- EVIDENCE-BASED PROGRAMS: LST, NFP, MST, ETC.
  - INDIVIDUAL "BRAND NAME" INTERVENTIONS
  - EXPLICIT THEORETICAL RATIONALE & CHANGE MODEL, MANUALS, TRAINING, TA, FIDELITY CHECKLISTS
  - PROVEN EFFECTIVE IN A WELL CONDUCTED EVALUATION(S)
- EVIDENCE-BASED PRACTICES: CBT, FAMILY THERAPY, ETC.
  - GENERIC STRATEGIES PROVEN EFFECTIVE, ON AVERAGE, IN A SYSTEMATIC REVIEW OF THE EXPERIMENTAL EVALUATIONS OF THE GROUP OF PROGRAMS USING THAT STRATEGY
- EVIDENCE-BASED POLICIES: RESTRICTING ALCOHOL SALES TO MINORS, ETC.
  - REGULATIONS OR STATUTES ENACTED TO PREVENT OUTCOMES ACROSS A LARGE POPULATION
  - USUALLY PROVEN EFFECTIVE IN QEDS COMPARING OUTCOMES
     BEFORE AND AFTER THE POLICY WAS ENACTED

# **EVALUATION DESIGN**

- WHAT IS THE DIFFERENCE BETWEEN A RANDOMIZED CONTROLLED TRIAL (RCT) AND A QUASI EXPERIMENTAL DESIGN (QED)?
- IN BOTH TYPES, TWO GROUPS ARE INVOLVED: ONE RECEIVES THE PROGRAM, THE OTHER DOESN'T
- IN RCTS ONLY: GROUPS ARE RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS
- WHAT ARE THE ADVANTAGES OF RCTS?
  - HELPS ENSURE THAT GROUPS ARE THE SAME AT BASELINE
  - ANY OUTCOMES THAT EMERGE CAN THEN BE ATTRIBUTED TO THE PROGRAM, NOT A PRE-EXISTING DIFFERENCE BETWEEN GROUPS
  - RCTS USUALLY HAVE GREATER INTERNAL VALIDITY THAN QEDS

# HOW DOES BLUEPRINTS DETERMINE "WHAT WORKS"?



# **OUTCOMES CONSIDERED BY BLUEPRINTS**

- BEHAVIOR
  - ANTISOCIAL BEHAVIOR
  - POSITIVE BEHAVIOR
- EDUCATIONAL SKILLS AND ATTAINMENT
- EMOTIONAL WELL-BEING
- PHYSICAL HEALTH
- POSITIVE RELATIONSHIPS

# EVIDENCE CONSIDERED BY BLUEPRINTS

- INTERVENTION SPECIFICITY (SCREENED BY STAFF)
  - IS THE PROGRAM GROUNDED IN THEORY, PRACTICAL AND LOGICAL
- EVALUATION QUALITY
  - DOES THE PROGRAM SHOW INTENDED EFFECTS ON TARGETED OUTCOMES?
- INTERVENTION IMPACT
  - WHAT IS THE SIGNIFICANCE AND SIZE OF THE EFFECT?
- SYSTEM READINESS (CONSIDERED AFTER RATED MODEL/PROMISING)
  - CAN THE PROGRAM BE REPLICATED WITH FIDELITY AND INTEGRATED INTO EXISTING SYSTEMS?

# BLUEPRINTS CRITERIA FOR MODEL+ RATING

- EVALUATION DESIGN: RANDOMIZED CONTROLLED TRIAL (RCT)
- IMPACT (OVER ALL STUDIES): STATISTICALLY SIGNIFICANT AND SUBSTANTIVE POSITIVE EFFECTS
- SUSTAINABILITY: EFFECT SUSTAINED FOR AT LEAST 1 YEAR POST-INTERVENTION

INDEPENDENT REPLICATION: AT LEAST 1RCT OR QED

ALL STUDIES ARE WELL CONDUCTED: ADDRESS THREATS

TO INTERNAL VALIDITY

NO KNOWN HEALTH-COMPROMISING MAIN EFFECTS

# BLUEPRINTS CRITERIA FOR MODEL PROGRAM

- **EVALUATION DESIGN: RCT**
- IMPACT (OVER ALL STUDIES): STATISTICALLY SIGNIFICANT AND SUBSTANTIVE POSITIVE EFFECTS
- SUSTAINABILITY: EFFECT SUSTAINED FOR AT LEAST 1 YEAR POST-INTERVENTION
- REPLICATION (INDEPENDENT OR NOT): AT LEAST 1RCT OR QED
- ALL STUDIES ARE WELL CONDUCTED: ADDRESS THREATS
  TO INTERNAL VALIDITY
- NO KNOWN HEALTH-COMPROMISING MAIN EFFECTS

# BLUEPRINTS CRITERIA FOR **PROMISING**PROGRAMS

**EVALUATION DESIGN:1 RCT OR 2 QEDS** 

ALL STUDIES ARE WELL CONDUCTED: ADDRESS

THREATS TO INTERNAL VALIDITY

**IMPACT (OVER ALL STUDIES): STATISTICALLY** 

SIGNIFICANT AND SUBSTANTIVE POSITIVE EFFECTS

SUSTAINABILITY: NOT REQUIRED

REPLICATION: NOT REQUIRED

NO KNOWN HEALTH-COMPROMISING MAIN

**EFFECTS** 

# BLUEPRINTS CRITERIA FOR OTHER RATINGS

INEFFECTIVE: 1 RCT OR 2QED; NULL EFFECTS; WELL CONDUCTED STUDY

HARMFUL: 1RCT OR 2QED; SIGNIFICANT HARMFUL EFFECTS; WELL CONDUCTED STUDY

INCONCLUSIVE EVIDENCE: RCT OR QED; CONTRADICTORY/WEAK FINDINGS; METHODOLOGICAL PROBLEMS

INSUFFICIENT EVIDENCE: NON-EXPERIMENTAL DESIGN
OR NO EVALUATIONS

# BLUEPRINTS REVIEW PROCESS

## **SYSTEMATIC REVIEW PROCESS**

- •INCLUSIVE SEARCH FOR ALL STUDIES: REDUCES POTENTIAL SELECTION BIAS
- EXPLICIT ELIGIBILITY CRITERIA
- •STUDIES SCREENED BY THESE CRITERIA
- REVIEW INCLUDES ALL SCREENED STUDIES
- •QUANTITATIVE REVIEW: USING PRE-ESTABLISHED GUIDELINES/RULES
- META-ANALYSIS WHEN APPROPRIATE (3+ QUALITY STUDIES)
- DETAILED WRITE-UP OF REVIEW AND DECISION

## BLUEPRINT DATABASE FACT SHEET

- PROGRAM NAME AND DESCRIPTION
- DEVELOPMENTAL/BEHAVIORAL OUTCOMES
- RISK/PROTECTIVE FACTORS TARGETED
- RISK/PROTECTIVE FACTORS IMPACTED
- CONTACT INFORMATION/PROGRAM SUPPORT
- TARGET POPULATION
- PROGRAM EFFECTIVENESS (EFFECT SIZE)
- OPERATING DOMAIN: INDIVIDUAL, FAMILY, SCHOOL, COMMUNITY

## BLUEPRINT DATABASE FACT SHEET

- LOGIC/THEORY MODEL
- PROGRAM COSTS:
  - UNIT COST, START-UP, IMPLEMENTATION, FIDELITY MONITORING, OTHER, BUDGET TOOL
- COST BENEFIT/RETURN ON INVESTMENT (WHEN AVAILABLE):
  - NET UNIT COST-BENEFIT, BENEFITS
- FUNDING: OVERVIEW, FINANCING STRATEGIES
- PROGRAM MATERIALS
- REFERENCES

# OTHER "WHAT WORKS" REGISTRIES

- NATIONAL REGISTRY OF EVIDENCE-BASED PROGRAMS AND PRACTICES (NREPP)
- OFFICE OF JUSTICE PROGRAMS CRIME SOLUTIONS AND OFFICE OF JUVENILE JUSTICE AND DELINQUENCY PREVENTION MODEL PROGRAMS GUIDE (MPG)
- U.S. DEPARTMENT OF EDUCATION WHAT WORKS CLEARINGHOUSE (WWC)
- THE CENTERS FOR DISEASE CONTROL COMMUNITY
   GUIDE
- THE CALIFORNIA EVIDENCE-BASED CLEARINGHOUSE FOR CHILD WELFARE

# NATIONAL REGISTRY OF EVIDENCE-BASED PROGRAMS AND PRACTICES (NREPP)

- ACCORDING TO THE WEBSITE: SAMHSA IS DISCONTINUING NREPP BECAUSE:
  - IT "DID NOT ADDRESS THE SPECTRUM OF NEEDS OF THOSE LIVING WITH SERIOUS MENTAL ILLNESS AND SUBSTANCE USE DISORDERS"
  - USERS "COULD NOT RELY ON THE GRADING [E.G., RATINGS ON A SCALE FROM 1-4] FOR THE LISTED INTERVENTIONS....NEITHER WOULD THERE BE ANY WAY FOR THEM TO KNOW WHICH INTERVENTIONS WERE MORE EFFECTIVE THAN OTHERS"
  - THE SYSTEM WAS FLAWED...IT MAINLY REVIEWED SUBMISSIONS FROM DEVELOPERS

## **CRIME SOLUTIONS.GOV**

#### HTTP://WWW.CRIMESOLUTIONS.GOV

- BEGUN IN 2011 TO REPLACE THE STANDARDS USED BY THE OJJDP MODEL PROGRAMS
   GUIDE AND EXAMINE ADDITIONAL OUTCOMES
- OUTCOMES OF INTEREST: CRIME, DELINQUENCY, VICTIMIZATION, CORRECTIONS,
   COURTS, POLICE, FORENSICS
- TYPES: PROGRAMS AND PRACTICES
- RATING SYSTEM: CLASSIFIES INTERVENTIONS AS
  - EFFECTIVE: HAVE STRONG EVIDENCE OF EFFECTIVENESS
  - PROMISING: HAVE SOME EVIDENCE OF EFFECTIVENESS.
  - NO EFFECTS: HAVE STRONG EVIDENCE OF NO OR HARMFUL EFFECTS



## **CRIME SOLUTIONS.GOV**

#### HTTP://WWW.CRIMESOLUTIONS

#### CRITERIA

- TYPE OF EVALUATION DESIGN (FOR PROGRAMS): 1RCT OR 1 QED
  - RATES STUDIES (ON 0-3 SCALE) ON INTERVENTION SPECIFICITY, RESEARCH
    DESIGN, SAMPLE SIZE, RELIABLE AND VALID MEASURES, FOLLOW-UP PERIOD,
    INTERNAL VALIDITY, IMPLEMENTATION FIDELITY, SIZE OF EFFECTS
  - **EFFECTIVE** PROGRAMS HAVE MORE RIGOROUS STUDY DESIGNS AND STRONGER EVIDENCE OF EFFECTIVENESS THAN **PROMISING** PROGRAMS
    - NEITHER CATEGORY CAN SHOW EVIDENCE OF HARM
- READINESS TO DISSEMINATE: NOT REQUIRED
- REPLICATION: NOT REQUIRED
- SUSTAINABILITY: NOT REQUIRED

## **CRIME SOLUTIONS.GOV**

HTTP://WWW.CRIMESOLUTIONS

• **STRENGTHS**: COMPREHENSIVE, SPECIFIC RATING CRITERIA, USER-FRIENDLY WEBSITE, UPDATED, IDENTIFIES INEFFECTIVE INTERVENTIONS

#### WEAKNESSES:

- LESS RIGOROUS CRITERIA: A PROGRAM EVALUATED ONCE, IN A QED, WITH NO LONG TERM EFFECTS CAN BE RATED AS EFFECTIVE
- DOES NOT PROVIDE INFORMATION ON TARGETED RISK AND PROTECTIVE FACTORS

HTTP://IES.ED.GOV/NCEE/WWC/FINDWHATWORKS.ASPX

- OUTCOMES OF INTEREST: ACADEMIC ACHIEVEMENT (LITERACY, MATH, SCIENCE, ETC.), SCHOOL DROP OUT, STUDENT BEHAVIOR
- TYPES: PROGRAMS, PRACTICES, POLICIES
- RATING SYSTEM: CLASSIFIES INTERVENTIONS AS
  - MEETS EVIDENCE WITH NO RESERVATIONS
  - MEETS WITH RESERVATIONS
  - DOES NOT MEET STANDARDS



HTTP://IES.ED.GOV/NCEE/WWC/FINDWHATWORKS.ASPX

#### CRITERIA

- MEETS EVIDENCE: 1 RCT WITH LOW (<50%) AND NON-DIFFERENTIAL ATTRITION, PARTICIPANT EQUIVALENCE AT BASELINE, AND STRONG INTERNAL VALIDITY
- MEETS WITH RESERVATIONS: AT LEAST ONE QED (WITH A COMPARISON GROUP) OR LESS WELL IMPLEMENTED RCT STUDY WITH PARTICIPANT EQUIVALENCE AT BASELINE
- DOES NOT MEET STANDARDS: HIGH ATTRITION, GROUPS NOT EQUIVALENT AT BASELINE, MEASURES WERE NOT VALID OR RELIABLE, CONFOUNDING FACTORS NOT CONTROLLED
- REPLICATION: NOT REQUIRED
- SUSTAINABILITY: NOT REQUIRED

HTTP://IES.ED.GOV/NCEE/WWC/FINDWHATWORKS.ASPX

- RATES EFFECTIVENESS AS: POSITIVE, POTENTIALLY POSITIVE, MIXED, NO DISCERNIBLE EFFECTS, POTENTIALLY NEGATIVE, OR NEGATIVE
  - BASED ON THE STUDY QUALITY, STATISTICAL SIGNIFICANCE, SIZE OF EFFECT, CONSISTENCY OF EFFECTS ACROSS STUDIES

HTTP://IES.ED.GOV/NCEE/WWC/FINDWHATWORKS.ASPX

 STRENGTHS: UPDATED, GOOD SEARCH TOOLS, MANY PROGRAM DETAILS, IDENTIFIES HARMFUL PROGRAMS

#### WEAKNESSES:

- DOES NOT REQUIRE REPLICATION OR SUSTAINED EFFECTS
- RATING SYSTEM DIFFICULT TO UNDERSTAND
- WEBSITE NOT VERY USER FRIENDLY (HARD TO SEARCH FOR SPECIFIC PROGRAMS)

# THE CDC COMMUNITY GUIDE

HTTPS://WWW.THECOMMUNITYGUIDE.ORG/

- OUTCOMES OF INTEREST: PHYSICAL INJURY/HEALTH, MENTAL HEALTH,
   VIOLENCE, TOBACCO USE, SUBSTANCE USE/ABUSE, WORKPLACE
   HEALTH
- TYPES: PRACTICES AND POLICIES
- CRITERIA: BASED ON SYSTEMATIC REVIEWS/META ANALYSES, RATES INTERVENTIONS AS HAVING:
  - STRONG EVIDENCE OF EFFECTIVENESS, HARM, OR LACK OF EFFECTIVENESS

The Guide to Community Preventive Services

What Works to Promote Health

- SUFFICIENT EVIDENCE OF EFFECTIVENESS, HARM, OR LACK OF EFFECTIVENESS
- INSUFFICIENT EVIDENCE

# THE CDC COMMUNITY GUIDE

HTTPS://WWW.THECOMMUNITYGUIDE.ORG/

#### CRITERIA

- EVALUATION DESIGN: BASED ON SAMPLING, ATTRITION, MEASURES, ANALYSIS, INTERNAL VALIDITY
- OUTCOMES: CONSIDERS EFFECT SIZE AND FOLLOW-UP LENGTH
- REPLICATION: NOT REQUIRED
- SUSTAINABILITY: NOT REQUIRED

# THE CDC COMMUNITY GUIDE

HTTPS://WWW.THECOMMUNITYGUIDE.ORG/

- **STRENGTHS**: CLEAR RECOMMENDATIONS, IDENTIFIES HARMFUL PROGRAMS, SOMEWHAT RIGOROUS REVIEW PROCESS
- WEAKNESSES:
  - NOT CONSISTENTLY UPDATED
  - DOES NOT NECESSARILY REQUIRE RCTS, REPLICATION, OR SUSTAINED EFFECTS
  - DOES NOT IDENTIFY SPECIFIC PROGRAMS OR TARGETED RISK/PROTECTIVE FACTORS
  - WEBSITE NOT VERY USER FRIENDLY

# SUMMARY OF THE LISTS & CRITERIA

List	Outcomes	Types of Interventions	Readiness for Dissemination?
Blueprints	Education; Physical and mental health; Antisocial and positive behaviors	Programs Practices Policies	YES
Crime Solutions	Crime, victimization, criminal justice system	Programs Practices	No requirement
WWC	Education	Programs Practices	No requirement
Community Guide	Health	Practices Policies	No requirement

# SUMMARY OF THE LISTS & CRITERIA

List	Required Number/ Type of Studies	Sustained Effects?	Identifies Programs with Harmful Effects?	Overall Research Design Rigor
Blueprints	Model and Model +: 2 RCTs or 1 RCT & 1 QED Promising: 1 RCT or 2 QEDs	Model and Model+: 1 year Promising: No	Listed as harmful	HIGH
Crime Solutions	1 RCT or QED	No	Listed as: No Effects	MEDIUM-LOW
WWC	Meets Evidence: 1 RCT Meets w/ Reservations: 1 RCT or QED	No	Listed as: "negative" or "potentially negative" effects	MEDIUM
Community Guide	1 RCT or QED	No	Listed as harmful or having no effects	MEDIUM

# **EXAMPLE OF DIFFERENCES ACROSS LISTS**

List	Nurse Family Partnership	Big Brothers/ Big Sisters	Project Alert	Lion's Quest Skills for Adolescence	SNAP Under 12	MST
Blueprints	Model	Promising	REMOVED	Not Listed	Not Listed	Model Plus
Crime Solutions	Effective	Effective	No Effects	No Effects	Effective	Effective
WWC	Not Reviewed (N/A)	School version Meets Standards No Effects	Not Listed	Meets Standards Potentially Positive Effects	Not Reviewed (N/A)	Not Reviewed (N/A)
Community Guide	Home visitation programs are: Recommended: Child abuse Insufficient Evidence: Violence	Not listed	Not listed	Not listed	Not listed	Not listed

# MOVING FORWARD: HOW DO YOU DECIDE WHICH INTERVENTION TO USE?

- FACT CHECK: LOOK FOR EVIDENCE OF EFFECTIVENESS;
   DON'T BE FOOLED BY PROPAGANDA
- KNOW WHICH OUTCOMES YOU ARE INTERESTED IN AND CONSULT THE APPROPRIATE LIST
- PRIORITIZE PROGRAMS MEETING THE MOST RIGOROUS STANDARDS (E.G., "MODEL" AND "EFFECTIVE")
  - PRIORITIZE "PROMISING" PROGRAMS THAT APPEAR ON MULTIPLE HIGH STANDARDS LISTS
- USE MULTIPLE SOURCES TO GATHER FACTS ABOUT PROGRAM COSTS AND REQUIREMENTS