# What Works to Prevent Urban Violence **Among Proven Risk Young Men?**

The Safe and Successful Youth Initiative **Evidence and Implementation Review** 

September 2013

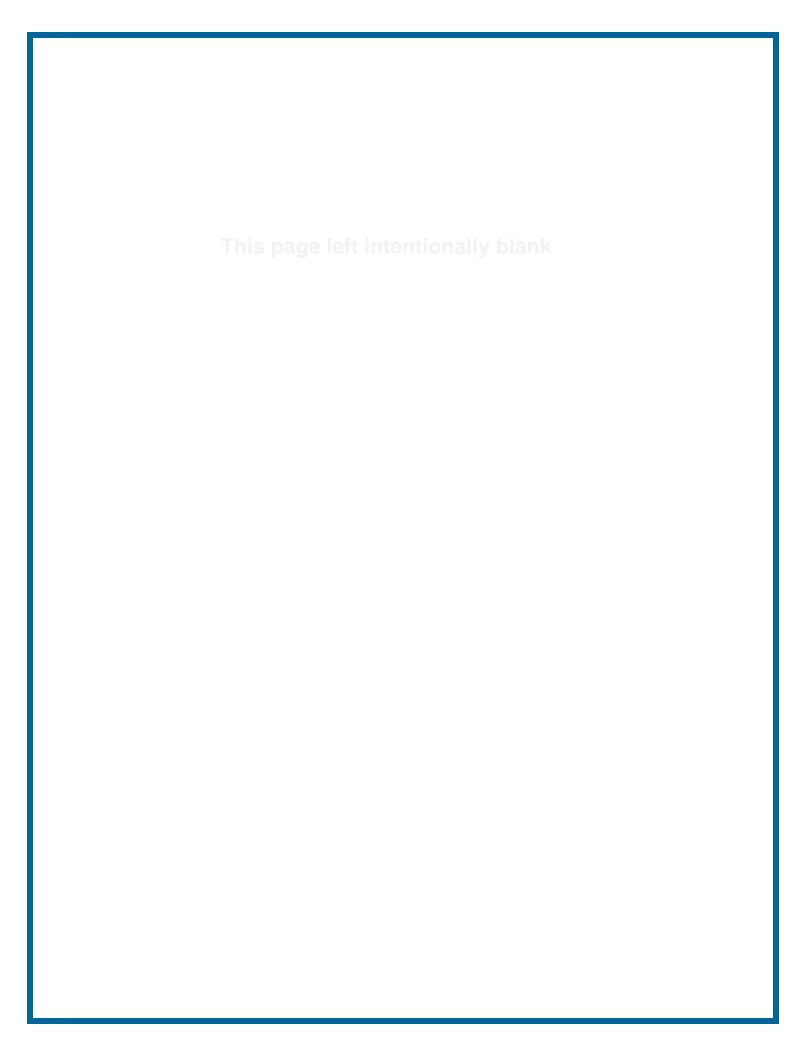
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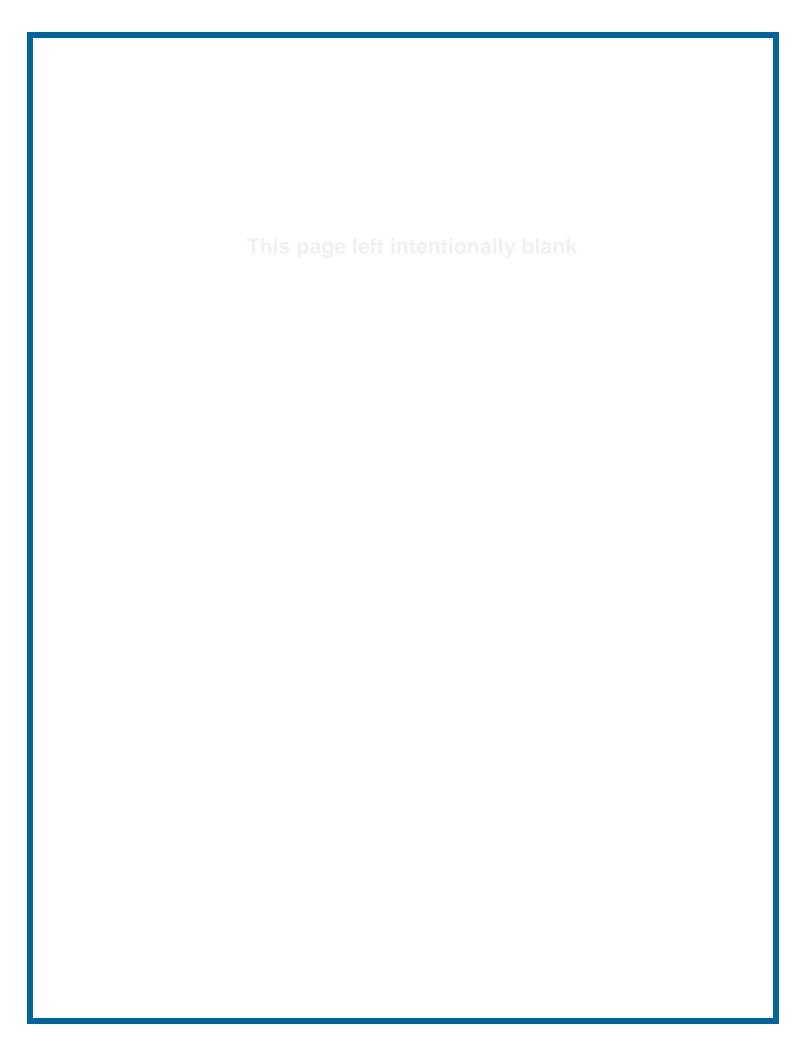
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## **Table of Contents**

Executive Summary	IV
Background and Purpose	1
Violence in Massachusetts	1
Research Basis for SSYI	1
State of Evidence-based Programs	2
SSYI Evaluation	3
Approach and Methods	3
Rapid Evidence Assessment	3
Implementation Quality	5
Rapid Evidence Assessment	6
Effectiveness	18
Crosswalk of Effectiveness and SSYI Practice	21
Implementation Quality	22
Steps in the Implementation Cycle	22
Capacity + Motivation = Readiness	26
Discussion	28
Limitations	33
Endnotes	34
References	35
Appendix	41
Methodology Notes	42

## **List of Tables**

Table 1. Crosswalk of effective practice characteristics compared with SSYI intervention characteristics.							
List of Figures							
Figure 1. Cities implementing SSYI	1						
Figure 2. Location, population, and approach in evaluated list-driven initiatives	7						
Figure 3. Number of non-list programs sharing common intervention components	11						
Figure 4. Direction of gun-related outcomes in evaluated programs	19						
Figure 5. Program implementation cycle	22						

## **Executive Summary**

The Massachusetts Safe and Successful Youth Initiative (SSYI) commissioned a review of the evidence underlying effective programs designed to reduce serious violence among targeted groups of young offenders. A Rapid Evidence Assessment (REA) methodology was used to identify and determine the effectiveness of rigorous evaluation studies of programs most similar to the SSYI intervention. A review of the implementation science literature complemented the evidence review to determine what characteristics organizations should demonstrate in order to produce optimal results from their SSYI efforts. Taken together, the guidance from evaluations of effective programs and the characteristics of high quality implementation provide SSYI with valuable insight on enhancing and improving violence prevention efforts moving forward.

## **Findings**

Eleven program evaluations were identified, of which ten were deemed as producing "effective" results, with one program showing ineffective or detrimental outcomes. The two common features of all programs deemed to be effective included:

- Using street outreach workers.
- Providing positive development supports to high-risk persons.

However, the evaluations were generally not designed to specifically test the individual effects of single intervention components (such as street outreach) on individual or community-level outcomes. Most studies focused on measuring criminal justice outcomes (i.e., arrests and homicides) rather than norms of violence or changes in individual or community-well-being (i.e., mental health status or unemployment). None of the evaluated programs included any reference to trauma-informed supports and none evaluated a program implemented in multiple cities in the same state. Despite some differences with SSYI, most of the initiatives included multi-agency efforts, community mobilization, and the use of street outreach workers. At least three used a "list" of high-risk individuals to target for suppression and social services.

The effective programs contained eight themes that can be instructive for guiding efforts to improve SSYI's ongoing implementation and to evaluate impacts.

**Sustaining impact beyond two years** has not been studied extensively and results were mixed among studies that took a longer view. Long-term studies are needed to calculate returns on investment, taking into account the broader (and generational) social, economic, and historical contexts in which these prevention models operate.

**Focusing on the highest-risk youth** is a characteristic of all the programs found to be effective, whether a "list" was created or youth were identified through other means. The one program deemed ineffective and potentially harmful did not target highest-risk youth.

**Pay attention to the next generation** of highest-risk youth who may not be classified as proven risk now, but who have a high probability of being in this category in the next several years.

**Train and supervise outreach workers** to minimize any "backfire effects" from staff becoming too involved in gang member relationships and creating more cohesion among members, which may in turn lead to increased gang activity.

**Scaling up requires greater control over organizational capacity** to implement high-quality, datadriven projects in multiple sites. Strong organizational capacity is needed to implement programs with adequate staff and resources. Expertise is needed to adapt core program elements to the community context without losing the key ingredients.

**Creating a credible message** to targeted offenders that services will be provided to help them leave the criminal lifestyle is a feature of program success If including a gang notification component, the message must also be clear to gang members that future violence will not be tolerated by the community or police.

**Using data to continuously improve implementation and outcomes** is a hallmark of programs that have been able to fine tune their approaches to strategically address population shifts and violence drivers as the program is implemented over time.

**Multi-agency and community collaboration** is a necessary and vital part of the programs deemed effective. Involving local business leaders with organizational management expertise can also be a support for building non-profit and governmental capacities.

## **Background and Purpose**

The physical, emotional, and financial consequences of youth violence on neighborhoods, communities, and states are devastating. According to the CDC fact sheet *Understanding Youth Violence*, "Violence...can increase health care costs, decrease property values, and disrupt social services." The Violence Policy Center (2012) has estimated that a gunshot injury can have a social cost of about \$1 million. This includes "intangible costs" like longtime residents leaving hard-hit communities to avoid the risk of a gunshot or living in fear of loved ones being shot.

#### Violence in Massachusetts

Youth violence has had a serious effect on the Commonwealth of Massachusetts. There have been 1,667 homicide victims from 2001 to 2010. Of these, 639 were between the ages of 14 and 24 (EOHHS, 2012). In 2010, Massachusetts was statistically the most violent state in the Northeast (which comprises six New England states plus NY, NJ, and PA; MA Health Council, 2010). Massachusetts state and local leaders were determined to change these statistics by working hand in hand with community members and multi

sectorial agencies that work most closely with the youth and families affected by the violence.

To address this issue in Massachusetts, in May 2011, the Patrick-Murray administration announced the SSYI, a multifaceted strategy for reducing youth violence in the Commonwealth. Working with community coalitions in key communities, this comprehensive initiative combines public health and public safety approaches to eliminating youth violence (EOHHS, 2012). Through the last quarter of 2012 alone, SSYI had served more than 1,300 proven risk youth<sup>1</sup>, with sites targeting at least 100 youth per year in cities shown in figure 1.<sup>2</sup>

Figure 1: Cities implementing SSYI



#### **Research Basis for SSYI**

The SSYI model is based on existing research and input from mayors, district attorneys, police, school officials, and

community representatives. A key feature is to identify proven risk youth in each city (i.e. creating a "list") and providing a continuum of services that includes street outreach and engagement, trauma counseling, intensive supervision, employment and education services and supports, and services for family members such as group counseling and family strengthening programs.

SSYI also includes aspects of OJJDP's Comprehensive Gang Strategy model, which suggests that social interventions should include "youth-serving agencies, schools, street outreach workers, grassroots groups, faith-based organizations, law enforcement agencies, and other criminal justice organizations reaching out and acting as links between gang-involved youth and their families, the conventional world, and needed services" (Howell, 1995).<sup>3</sup>

#### **State of Evidence-based Programs**

Despite some promising research reporting on effective practice with juveniles or specifically targeting gang youth, the broader research record is still mixed on how to effectively intervene- with lasting effect- in distressed communities where gun and knife violence persist. The research is still not settled on how to effectively deter

violence among older youth (18-25) or how to maximize the combination of strategic law enforcement, needed social opportunities, and mobilized community commitment to create and sustain a violence-free community.

The developmental psychology literature has provided a competency framework by which juvenile justice systems have started to reform their practice to take into the account that adolescent brain development continues until age 25 and can be delayed orharmed by adverse childhood experiences, like exposure to violence (Scott and Steinberg, 2008). No similar recognition has occurred in the adult criminal justice system, even though 18-25 year olds are considered youth from the developmental perspective. As a result, there is growing availability of programs and services that address developmental needs for violent youth in the juvenile justice system, but scant access to similar supports for older youth in the adult system.

Unlike the services provided for younger youth, older youth typically receive only instrumental support, such as access to education, jobs, and housing but rarely receive affiliational supports that connect

them with a healthy peer group and opportunities for involvement in their communities. Recovery supports are also in short supply to provide access to traumainformed substance abuse and mental health services. When older youth also happen to be males and fathers themselves, they are rarely offered parenting supports even though they may be co-raising a child, often with a girlfriend – who typically is offered parenting services instead as a way to "get" to the father (i.e., engage him in services) and provide support to the family.

#### SSYI Evaluation

A team led by the American Institutes of Research and including WestEd and Justice Resource Institute, is conducting the SSYI evaluation. A process and outcome evaluation is underway to measure the effectiveness of SSYI and identify the key factors that define its outcomes. A key product of the evaluation is to deliver a summary of best practices and strategies in violence prevention that can inform the selection of programs and strategies by SSYI sites and provide a policy yardstick by which to measure current SSYI practices against other approaches.

## **Approach and Methods**

## **Rapid Evidence Assessment**

The evaluation team used a Rapid Evidence Assessment (REA) strategy to identify effective prevention strategies. A REA is a systematic and transparent review of research, carried out much more quickly and cost-effectively than normal research syntheses (Butler et al. 2004). Using a REA permitted the evaluation team to do a credible job searching and synthesizing the literature, without creating additional cost and time demands that a meta-analysis or systematic review requires.

#### How did we find studies?

We identified and retrieved rigorous evaluations of violence reduction strategies by conducting comprehensive and systematic searches of bibliographic databases, evidence-based registries on violence and crime prevention, and interviews with the informal "college" of researchers working in the area of urban violence reduction. <sup>4</sup>

#### What studies are included?

To be included, evaluation studies had to:

assess a program that started in 1996 or later:

- be conducted either with high risk urban youth (ages 14–24) or be focused on urban neighborhoods with high risk youth;
- assess programs with multiple components and not solely be a police strategy, a reentry strategy or just offer school-based programming;
- be a quasi-experimental or experimental study of impact, like those described on this page; and,
- evaluate a program that targets serious violence and reports such outcomes.

Quasi-Experiments: When random assignment of persons or communities or other units cannot be done, alternative methods, known as quasi-experiments, are available to evaluate the impact of an intervention. Many of these methods in criminal justice involve comparing persons or neighborhoods who receive an intervention to those who do not, or examining a series of measurements of one variable before and after the start of an intervention.

#### Interrupted Time Series (ITS) Design:

This quasi-experimental design analyzes a long series of repeated measurements on a single variable such as monthly rates of homicide before and after the introduction of an intervention, (the "interruption"). ITS designs are often used when the entire population (a city or state) is receiving the intervention. A major limitation to this design is "history" or whether there are other events that could be responsible for results. To strengthen ITS designs, researchers may use similar, nearby communities without the intervention to rule out historical or regional events or use a "control variable" that is not expected to be influenced by the program.

Propensity Score Matching (PSM): In many evaluations, a group of persons or neighborhoods receiving an intervention are compared to those that are not. To make the groups as similar as possible, statistical procedures are often used for matching the persons or neighborhoods within the groups. One such procedure is called propensity score matching where researchers analyze characteristics to predict the probability of a person receiving treatment. This generates a "propensity score" for each person in the study and used to better match individuals in each group, or to draw a control group sample from a larger pool of eligible persons.

# What information was collected from each eligible report?

In this review, we summarized a wide range of information from each evaluation:

- Name and description of intervention (e.g., SSYI)
- Location of evaluation
- Scope of the intervention (e.g., statewide)
- Age and race/ethnicity of youth included in the study
- Type of violence the intervention addressed
- Evaluation design and use of "control" or "comparison" condition
- Outcomes and reporting timeframe

# How did we determine if a program was effective?

We defined effective programs as those that have reported a minimum of 10% reduction in violence when equated with an adequate comparison or, if a time series design with a single group, a 10% reduction following the introduction of the program compared to the trend beforehand. Using the available evidence, we rated each program accordingly:

**Effective Initiatives** were those that reduced violence by at least 10%.

*Inconclusive Initiatives* are those strategies that did not report a demonstrable impact on violence.

**Potentially Harmful Initiatives** are those strategies that increased violence by at least 10%.

### Implementation Quality

This review also contains an overview of elements for effective practice that are tied to the quality of program implementation. In Lipsey's (1992) meta-analysis of effective justice programs the case was made that even programs with a reputable research base may not produce anticipated outcomes if implementation quality suffers. The evaluation is assessing the implementation quality of SSYI and will produce a

preliminary comparison between SSYI implementation characteristics and those characteristics associated with high quality in the implementation science literature.

# How are we Measuring Implementation Quality in SSYI Sites?

The implementation quality review is part of the SSYI process evaluation. It involves the use of a tool adapted for use from a statewide quality implementation initiative among delinquency prevention providers in Pennsylvania. That earlier tool was based on findings from Lipsey's meta-analysis (1992), along with existing knowledge on the use of continuous quality improvement to build the evidence in innovations. The adapted tool used in SSYI includes newly researched measures of motivation to implement the practice with integrity, which along with measures of general and specific capacity to implement the intervention, provide an overall assessment of each site's readiness to implement SSYI with quality. The SSYI tool has also been adapted for a community-collaborative setting among multiple partners, and not just for one provider.

The tool is being implemented in an iterative manner. First, the site leaders and their

partners will self-assess their readiness to implement SSYI along these quality lines, followed by the evaluation team's independent assessment of each site using the same tool alongside other data collected through the process evaluation (e.g. interviews, observation, and documents).

The information from the implementation quality review will guide the provision of targeted technical assistance to SSYI sites, as needed, to improve service quality and as a result improve SSYI outcomes overall. The evidence from across disciplines is clear that without attention to quality, even the most rigorously researched effective practice will underperform, be ineffective, or even harmful.

## Rapid Evidence Assessment

We located 11 eligible studies, published from 1996-2013. These studies were all conducted at the city level and included all areas of the city or specific targeted neighborhoods within the city. There were no evaluations of a statewide initiative. Initiatives that were evaluated took place in Baltimore, Boston, Brooklyn, Chicago (2),

Cincinnati, Indianapolis, Lowell (MA),
Philadelphia, Pittsburgh, and Stockton (CA).
Most studies used single group interrupted
time series designs, although several
compared estimates from time series
analyses over the same period in similar
cities without the initiative to determine if
observed findings were part of other trends.
A few studies used propensity score
matching to statistically equate persons or
areas in the study. We organize the studies
in two categories: those that used a "list"
(like SSYI) and those that did not.

#### List-driven Initiatives

There were three evaluations of "list-driven" initiatives (Figure 3). These were the Indianapolis Violence Reduction Partnership (IVRP), the Philadelphia Youth Violence Reduction Partnership (YVRP) and the Cincinnati Initiative to Reduce Violence (CIRV).

Figure 2: Location, population, and approach in evaluated list-driven initiatives (n = 3)

#### Indianapolis

Ages 15-24, at high-risk for homicide involvement



Community notification about program

Social and community services offered

Corsaro & McGarrell 2006, 2009, 2010

#### **Philadelphia**

Juvenile and adult probationers, ages 15-24, at high risk for violence



Street outreach workers offer support and services

Probation and parole increase supervision to reduce "criminal opportunities

McClanahan, et al. 2012

#### Cincinnati

Known gang-involved offenders, any age



Aggressive law enforcement & community notification of program

Street outreach workers offer support and services

Increase relationships with community & attempt to change gun violence norms

Engel, et al. 2011

#### The IVRP

The IVRP was implemented in Indianapolis in 1999 as a response to escalating homicides. First, they identified high risk groups of individuals through a rigorous investigation involving law enforcement, local and federal prosecution, probation and parole, social service providers, and key community actors. This "list" was not used for prosecution but as leverage to get chronic offenders to discontinue their highrisk behavior. The project was then implemented in high risk neighborhoods using community notification strategies to let persons know that future violence would be met with severe sanctions; social and community service opportunities were also

communicated to attendees. The program also included a strong community outreach component, focused on increasing collaboration and communication between justice officials, community leaders in high-crime neighborhoods, faith-based leaders, social service providers, ex-offender groups, and Indianapolis educators.

To evaluate the IVRP, researchers conducted several analyses, reported across three publications. In the first (Corsaro & McGarrell 2006), they conducted a time series analysis to examine the impact of IVRP on all homicides, reporting a decline of 34%. They then compared results for Indianapolis to six other Midwestern cities

during the same time period, finding that only Indianapolis experienced a drop during the post-intervention period.

Corsaro and McGarrell (2009) also reported that gang-involved homicides dropped 38% during the post-intervention period; comparatively, non-gang homicides dropped 8% but this was not a statistically significant decrease. They also examined if IVRP impacted the targeted age group 15-24, and examined these for gender and race effects (Black male homicide, White male homicide, Black female homicide, and White female homicide).

The evaluation also reported effects on all other age groups (outside of 15-24).

Corsaro and McGarrell (2010) reported that the homicide rate declined for all youth ages 15-24 from 28.8 to 12.8 per 10,000 at risk population. This included a substantial decline for Black male homicides from a rate of 145.2 to 54.1 per 10,000 at risk population. Substantial declines were also reported for white males (homicides declined from 17.9 to 4.5 per 10,000 at risk population).

## The Philadelphia Youth Violence Reduction Partnership (YVRP)

The YVRP was implemented in 1999 to reduce homicides among young persons (mostly male), 15-24. The program targets youth on active probation and considers the following risk factors: a history of gun charges, convictions for violent offenses, arrests for drug offenses, incarceration history, age at first arrest, family history of abuse and neglect, and siblings involved in the justice system.

YVRP employs two main strategies: (1) providing emotional and practical supports, through street workers, to address root causes of crime; and (2) reducing opportunity for criminal behavior through greater supervision by police and probation officers. Facilitating YVRP is intensive collaboration among numbers of citywide agencies including the Philadelphia Police Department, adult and juvenile probation departments, and the Philadelphia Anti-Drug/Anti-Violence Network. Each youth in YVRP is assigned to a probation officer and street worker that works intensively to ensure the person stays out of trouble and moves toward responsible citizenship. The program rapidly expanded after its inception from one police district to six.

To evaluate the impact of YVRP,
McClanahan and her colleagues (2012)
analyzed data to examine whether the
initiative reduced violence in five of the
police precincts where the YVRP was
concentrated, and whether it reduced
violence by specific young persons in the
program compared to a control group.

To assess neighborhood level outcomes, the researchers analyzed the average number of youth homicides per quarter in YVRP neighborhoods (before and after the initiative, 1994-2010). Four of the five police districts experienced declines, but only one was statistically significant. These were compared to police districts that did not have YVRP.

The findings were mixed (three districts increased relative to non-YVRP districts, and two declined compared to non-YVRP districts), but none of these results were statistically significant. To assess the impact of YVRP on individual youth, McClanahan, et al. (2012) compared outcomes at 18 months after program participation for 150 YVRP involved juveniles to a similar group (using propensity score matching) of 211 juveniles on probation who could not participate in the program. YVRP juveniles

were 38% less likely to be arrested for a violent crime and 44% less likely to be convicted for a violent crime. Fatalities were rare; two juveniles were murdered during the study period, both from the comparison group. Finally, the researchers reported that the number of contacts with street workers was associated with a lower probability of being arrested for a violent crime.

#### The CIRV

The CIRV was implemented by Cincinnati in 2007 in response to increased gang-related gun violence. The city asked Proctor and Gamble to draw on its business management skills to develop an organizational structure that included law enforcement, social services, community engagement and systems.

Using police data files, CIRV identified a "list" of dangerous gang offenders. CIRV used focused deterrence strategies ("pulling levers")<sup>5</sup>, communication to gang members about enforcement strategies (through offender notification meetings. forums in the community, prison/jail, or one-to-one street/home visits), aggressive enforcement and offer of enhanced social services to gang members. Street outreach workers provided case management and violence intervention, and linked members to

employment, treatment and other services tailored to individual needs. Another component was changing community norms regarding violence by forming positive relationships with the community.

Engel and her colleagues (2011) conducted an interrupted time series to study the impact of CIRV on two outcomes, measured for 3.5 years before and 3.5 years after CIRV was impacted. Those two outcomes were: (1) monthly counts of gang-related homicide incidents; and (2) monthly counts of violent gun incidents. At 24 months they reported a 38% reduction in gang-related homicide incidents and a 41% decline at 42 months.

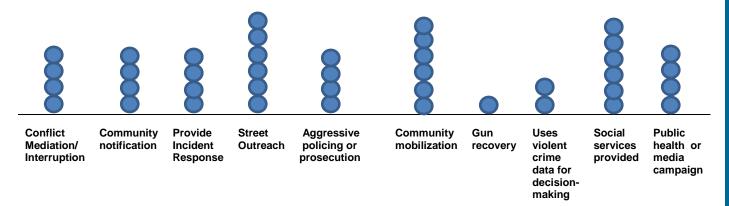
To further strengthen the study findings, they included a control variable they did not expect to be impacted by CIRV: non-gang homicide incidents. Non-gang homicide incidents increased over the same period. CIRV was also associated with a 22% decline in violent firearms offenses at both 24 and 42 months. They also examined impacts of service provision and found no relationship between the amount and level of services received by targeted gang members and violence outcomes.

# Initiatives that targeted violence more broadly (non-List)

The remaining eight evaluations tested the impact of strategies that did not target a specific list of youthful violent or potentially violent offenders, but addressed neighborhoods or cities more broadly.

These included Operation CeaseFire in Boston and Chicago, Project Safe Neighborhoods in Chicago and Lowell (MA), the Stockton (CA) Operation Peacekeeper, Pittsburgh One Vision, Baltimore Safe Streets and Brooklyn (NY) Save Our Streets. Common intervention components across programs are shown in Figure 3, followed by specific descriptions of each program's evaluation results.

Figure 3. Number of non-list programs sharing common intervention components (n= 8)



### **Boston's Operation CeaseFire**

Boston's CeaseFire was a problem-oriented policing strategy targeting youth homicide and firearm violence in Boston beginning in 1996. Researchers and practitioners formed a partnership to analyze data from gun violence to create an intervention that would (1) direct a number of law-enforcement strategies toward curbing the illicit firearms traffickers supplying youth with guns; and (2) generate a strong deterrent to gang violence. Strategies for deterring gangs included reaching out directly to members (in community meetings, at secure juvenile facilities with members who were locked up, and through the gang outreach workers) and sending a message that gang violence would not be tolerated and that all strategies legally available would be used to address any violent activity.

At the same time, street outreach workers, probation and parole officers and religious leaders and community groups offered gang members services and other kinds of help (Braga et al. 2001). No formal list of gang members was identified, but Operation CeaseFire was especially active after a violent gang incident, with saturation patrols, aggressive policing of minor offenses, revocation of probation and parole when possible, and vigorous prosecution. Nearly all efforts were targeted toward gang members age 24 and younger, who drove the retaliatory shootings that were responsible for the majority of youth homicides and gun violence.

Braga et al. (2001) conducted an interrupted time series analysis of monthly counts of youth homicides (ages 24 and younger) in Boston during 1991-1998, with the

intervention beginning in 1996. They also examined the impact on monthly counts of citizen calls to the police 911 dispatcher about "gunshots" and official gun assault incident reports, 1991-1997. To reduce time on data collection, they also focused on gun assault data in District B-2 in Boston, which covers a substantial majority of city gang activity and 33% of all homicide victims.

Braga et al. (2001) report a 63% reduction in youth homicides, 32% decrease in calls for service about gunshots, 25% decline in monthly citywide gun assault incidents, and a 44% fall in youth gun assaults in District B-2. To further strengthen the findings, Braga and his colleagues (2001) used time series analysis to examine monthly youth homicide counts over the same time period in 39 of the largest cities in the United States (Boston is 20<sup>th</sup>).

Only four other cities had a statistically significant drop in youth homicides; Boston's was largest of the five. Additional analyses seemed to confirm that Boston's drop was unique and not part of an underlying national trend. In addition, researchers examined youth homicide rates in 11 other cities in Massachusetts, and confirmed that

Boston's drop was not part of a statewide trend.

## Stockton (CA) Operation Peacekeeper

Operation Peacekeeper was implemented in 1998-2002 to respond to gang-related violence. An interagency working group, led by the Stockton Police Department, analyzed gang-related homicides and determined to stop the violence that was mostly caused, according to their data, from retaliation by gang members. The interagency working group oversaw the implementation of an initiative that combined aggressive police patrols and law enforcement tactics following a violent gang incident. Meetings were held with gang members to let them know they "were under the microscope" due to their violence and that the interagency group would use "whatever legal means necessary" to stop the violence. This included community meetings and group forums with gang members, promising strong enforcement but offering services for gang members wanting to get away from violent lifestyles.

The program combined aggressive law enforcement with provision of services, utilizing gang outreach workers who offered services and opportunities to gang

members. Efforts were made to enlist the community, including religious leaders, to support the initiative and help with messaging.

To determine impact, Braga (2008) conducted an interrupted time series on monthly homicides due to gun violence from 1990-2005 to determine if there were reductions when Operation Peacekeepers was implemented in 1998. He reported a 42% reduction in monthly homicides due to gun violence, over the 7 year follow-up period. To substantiate the findings, he conducted time series analyses of the monthly homicides due to gun violence in eight other California cities. Only one of the eight cities (Oakland) had a statistically significant reduction in homicides during the same time period as Stockton. Braga speculated that Oakland was also implementing aggressive violence reduction strategies during the same time period as Stockton, although this was not officially documented by police. He also noted that the effect "decayed" over time, that is, the effect on homicide was strongest just after Operation Peacekeeper was implemented.

### Chicago's Operation CeaseFire

Now known as Cure Violence, Chicago's Operation CeaseFire was launched in 1999. Strategies include a public health campaign, mobilizing the community to stand against violence, and provision of services to gang members and at-risk youth, such as education, employment, anger-management counseling, and drug or alcohol treatment.

Over 25 different CeaseFire sites were launched by 2004. A major part of the initiative is the "violence interrupters" who are the street outreach workers (usually former gang members) who build relationships with gang leaders and other atrisk youth, mediate conflict, and offer nonviolent alternatives to rival gang members.

Skogan and colleagues (2009) conducted an interrupted time series design evaluation, comparing CeaseFire sites to seven comparable areas in Chicago that did not have the program. Analyzing 17 years of data (including an average of 59 months of data post-intervention), they reported average declines in shootings of 16-28% in four of the seven program sites studied. In four sites, "hotspots" where shootings were more frequent also declined. Gang killings

declined in two sites. Retaliatory gang killings also decreased in treatment areas compared to control areas.

## Chicago, Project Safe Neighborhoods

Chicago's Project Safe Neighborhoods (PSN) was initiated in 2002. The U.S. Department of Justice funded several Project Safe Neighborhoods programs in urban areas across the country, including Chicago. PSN programs bring federal, state, and local law enforcement together with researchers and community agencies to devise context-specific strategies for reducing gun violence.

In Chicago, a multiagency taskforce of police and community agencies implemented PSN and set as its goals the reduction of demand among young gun offenders, reduction of supply by identifying and intervening in illegal gun markets, and preventing the onset of gun violence.

Although many strategies were involved in the Chicago PSN, four key components were studied: 1) offender notification meetings; (2) federal prosecutions for gun offenses; 3) federal prison sentences, and 4) multiagency gun recoveries.

This program has less in common with SSYI than other initiatives, but the offender notification meetings did include presentations by ex-offenders and local service providers about the programs available for gang members and others involved in illicit firearms.

Papachristos, et al. (2007) conducted a quasi-experimental design, comparing 30 police beats (from two districts) with 24 matched (using propensity score matching) police beats (from two districts) not receiving PSN services. Control beats had to be similar in violence and demographics to the PSN beats, but geographically distinct enough to avoid contamination. They analyzed the effects of PSN on quarterly counts of homicides, aggravated batteries, and assaults.

The researchers reported that the treatment beats experienced a 37% drop in quarterly reports of homicides, which was not experienced in the comparison beat areas. Further analyses indicated that the percent of offenders in a beat who attend a community notification forum is the component associated with the greatest decline in homicides. The study did not report any statistically significant effect for

PSN on aggravated battery or assaults. The authors cautioned that Chicago's version of Operation CeaseFire was also operating during the same time period; they conducted analyses that seemed to indicate that the PSN effect enhanced the gains made by CeaseFire.

# The Lowell (MA) Project Safe Neighborhoods

Project Safe Neighborhoods was implemented in 2002. An interagency partnership comprised of justice organizations, community-based groups, and social service organizations was created based on gun violence data to focus law enforcement resources on violent gang members who were driving the gun violence problem in Lowell, Massachusetts. Many of those in this partnership had worked together on the "Safety First" initiative in the mid-1990s in Lowell.

A pulling levers strategy was implemented that focused prevention, intervention, and enforcement activities on gang members that were involved in violent conflicts. The PSN communicated that violence would no longer be tolerated, promising that "every lever legally available would be pulled" to respond to violence. They did this through

community meetings, public service announcements, bus placards, and billboards. There was no "list", but actions by the Task Force were triggered by incidents of violence.

Enforcement efforts including aggressive policing of disorderly or minor offenses, probation and parole revocation, serving outstanding arrest warrants, and disrupting street level drug markets. Street outreach workers assisted the PSN effort by reaching out directly to gangs, reinforcing the no violence message, and offering services to members who wanted to get out of the violent lifestyle. The PSN Task Force especially focused enforcement on the small number of "impact players" or dangerous gang members that did not want social intervention and needed to be removed from the streets.

To evaluate the Lowell PSN, Braga et al. (2008) conducted a time series analysis on monthly counts of assaultive gun violence incidents from 1996-2005, including homicide and aggravated assault. Braga and colleagues reported a 43% reduction in monthly assaultive gun violence incidents. Homicides are rare in Lowell, but the researchers report that gang-related

murders dropped from 3 per year in the preintervention period to 1 per year during the post-intervention period.

To further substantiate findings, Braga and his team examined statewide trends as well as data from seven other Massachusetts cities with populations over 60,000 and who had gun violence problems. Massachusetts and the other seven cities all experienced increases in monthly assaultive gun violence incidents, while Lowell decreased.

## The Pittsburgh One Vision

The One Vision program was a response to a record number of homicides. Using a problem-solving approach, a coalition of community leaders recognized that a small group of chronic offenders in just a few areas were responsible for a large share of murders. They developed a six-point plan to stop shootings, including street outreach workers to mediate gang conflict, provide alternatives to those most at risk, create a strong community coalition that provides a unified message of "no shootings," respond to all shootings, and implement programs for youth at-risk for violence.

One Vision is community-driven and is not led by the police as in many other initiatives

examined in this review. Street outreach workers respond to every gun violence incident and also attempt to connect youth to services. One Vision also worked to build broadbased sustainable partnerships in the community to expand services to persons in the most distressed neighborhoods, and linking residents to services and each other.

Wilson and Chermak (2001) examined changes in monthly counts of homicide, aggravated assaults and gun assaults in three Pittsburgh areas (Northside, Hill District, Southside) representing 32 neighborhoods, during 1997-2007, and compared results to a set of 55 matched neighborhoods (using propensity score matching) that did not receive the One Vision intervention.

Researchers reported that One Vision did not lead to reductions in homicide, and that aggravated assault and gun assault rates increased in targeted areas. They compared results for One Vision's 32 treatment areas with 17 similar neighborhoods that program staff contended were most similar to target neighborhoods; the results were nearly identical.

They also conducted a spillover analysis to see if One Vision had impact on neighborhoods just bordering targeted areas, and reported that neighborhoods adjacent to the Hill District reported a reduction in aggravated assaults, but an increase in assaults was seen in neighborhoods by the Southside.

#### **Baltimore Safe Streets**

Safe Streets is a community mobilization and outreach program designed to combat shootings and homicides. This intervention targets high-risk youth ages 14 to 25, through outreach and service connection. It targets the community through a media campaign and mobilization efforts. The intervention emphasizes coalition building, street outreach to at-risk youth, public education, clergy involvement and collaboration with law enforcement. Street outreach workers (usually ex-offenders) also mediate conflicts between gang members.

Webster and his colleagues (2013) used a quasi-experimental regression controlled design to examine the impact of Safe Streets on monthly homicides and nonfatal shooting incidents. They examined these data in four intervention neighborhoods or police posts and compared them to data

from 29 police posts that experienced high violence similar to the treatment areas but did not receive the Safe Streets intervention. Webster's team examined these monthly data from 2003-2010, and also investigated whether there were spillover effects in adjacent police posts. In one police post (Cherry Hill), there were substantial declines in monthly homicides (56% reduction) and non-fatal gun shootings (34% reduction). Cherry Hill also had the greatest spillover effects, with fewer homicides and non-fatal shootings in adjacent areas.

In another site (McElderry Park) researchers reported a 26% reduction in homicides and 22% reduction in non-fatal shootings. In the third site (Ellwood Park), there was no statistically significant difference in monthly homicide counts, but a 34% reduction in non-fatal shootings. Finally, Madison-Eastend had the most varied findings: a homicide rate 2.7 times higher than comparison areas, but a 44% decrease in non-fatal shootings. Findings were essentially replicated when only the top 10 comparison sites on homicides and nonfatal shootings during the pre-intervention period were used. Researchers concluded that Safe Streets prevented five homicides and 35 non-fatal shootings during the 112

months of program implementation.

Implementation data seemed to indicate that the largest reductions in homicide may have

been associated with the frequency of conflict mediations between rival gangs.

### Brooklyn's Save Our Streets (SOS)

SOS is a community-based initiative targeting gun violence in the Crown Heights section of Brooklyn. It is based on Operation CeaseFire in Chicago, and the primary components are street outreach and conflict mediation directed towards persons at high risk for gun violence, combined with broader community mobilization and public education efforts. Street outreach and conflict mediation is done by "credible messengers" with experience in the targeted neighborhoods and knowledge of gangs and local conflicts, who act as "violence interrupters."

The program does not use a list but focuses on a small number of high-risk individuals who are responsible for the majority of gun violence. The program emphasizes a public health approach, to change community norms about the acceptability of gun violence. Community mobilization efforts gained the support of leaders, clergy, residents and police to change perceptions of gun violence through events and vigils. Researchers used an interrupted time series design to analyze the impact of SOS on gun violence (Picard-Fritsche and Cerniglia, 2013). They included a comparison group of three adjacent police precincts with similar demographics and baseline violence rates. The research team analyzed monthly shooting rates for 39 months (18 months pre-intervention and a 21 month period following SOS). They reported that average monthly shooting rates in Crown Heights decreased by 6%, while increasing in the comparison areas by an average of 18-28%; the net gain was 20%, and statistically significant.

#### **Effectiveness**

Ten of the eleven evaluations report large decreases on some violence outcomes, including homicides and non-fatal shootings, and according to our criteria would be considered "effective". The exception is the Pittsburgh One Vision evaluation which in a few cases, observed higher rates of violence in treatment areas. The Philadelphia Youth Violence Reduction Partnership (YVRP) reported no statistically significant outcomes in program areas; however, did report reductions for individual violence among YVRP youth.

Figure 4. Direction of gun-related outcomes in evaluated programs (n = 11)

INITIATIVES WITH CONSISTENTLY POSITIVE (GREEN) RESULTS (n = 7)**Indianapolis Violence Reduction** Homicides decreased 34-38%, with fewer deaths among African-American males (from 145.2 to 54.1 per 10,000 at risk population) Partnership (uses targeted "list") 25% decrease in gun assaults and 63% decrease in youth homicides **Boston Operation CeaseFire** 42% decrease in monthly homicides **Stockton Operation Peacekeeper** 16-28% decrease in shootings within 4 of 7 program sites **Chicago Operation CeaseFire** 43% reduction in monthly gun related assaults Lowell (MA) Project Safe Neighborhoods 20% reduction in monthly shootings **Brooklyn Save our Streets** Decrease in gang-related homicides Cincinnati Initiative for Reduction of Violence (uses a targeted "list") INITIATIVES WITH NO IMPACT (YELLOW) POSITIVE (GREEN)) OR NEGATIVE (RED) RESULTS (n = 4) No change in aggravated 37% drop in quarterly



# Cross-walk of Effective Practice and SSYI Practice

SSYI is a unique program in the violence reduction literature. SSYI offers many different programs and services that were not mentioned in the evaluation reports. For example, addressing past trauma is discussed at length in SSYI documents, but not mentioned in any of the evaluation reports of initiatives included in this REA. Family services are another type of intervention provided by SSYI sites, but mentioned only once by evaluations of other initiatives (Braga, 2008).

Some of the more effective initiatives heavily involved police and justice agencies using whatever legal means available following a violent incident (Braga, et al. 2001; Braga 2008; Braga, et al. 2008). In the original statewide SSYI plans, the police enforcement role in using suppression and other tactics receives little attention, although individual funded cities may vary by if and how the police are involved with the SSYI population.

The core components that are used most frequently by effective programs in this review are street outreach workers and the provision of services to high risk persons.

We caution that this does not mean these were the key ingredients associated with success across the initiatives. In fact, our findings here do not detail the different types of programs or services offered to youth who are at high risk for violence because the details contained in the evaluation reports about services were often very limited, other than services were provided (e.g., "employment, education and other services were offered").

The "crosswalk" between the SSYI program and the ten urban violence reduction strategies identified as "effective" by the REA (excluding the Pittsburgh One Vision program) shows how many elements SSYI has in common with these documented effective strategies. Overall SSYI contains one-third of the intervention characteristics from the programs evaluated, and which we found to be effective. However, the evaluations were not constructed, with a few exceptions, to identify the components that were most associated with reductions in violence. As such, we can make no valid judgment on whether SSYI is using components that should lead to similar outcomes in Massachusetts, if implemented as they were in these other interventions.

Table 1. Crosswalk of effective practice characteristics compared with SSYI intervention characteristics

Program	List	Aggressive policing and justice strategies	Intensive probation supervision	Street outreach workers	Community notification to targeted offenders	Provision/offer of services to targeted persons	Response after violent incident	Public health/media campaign	Community Mobilization
SSYI Massachusetts	X			X		X			
Indianapolis Violence Reduction Partnership	x	x			x	x			
Philadelphia Youth Violence Reduction Partnership	x		x	x		x			
Cincinnati Initiative for Reduction of Violence	x	x		x	x	x			х
Boston Operation CeaseFire		х		х	х	х	х		х
Stockton Operation Peacekeeper		х		х	х	x	х		х
Chicago Operation CeaseFire				x		х		х	х
Chicago Project Safe Neighborhoods		х			х	x			
Lowell (MA) Project Safe Neighborhoods		х		х	х	х	x		x
Baltimore Safe Streets				X		X		X	X

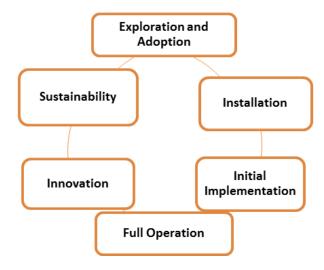
## Implementation Quality

Implementation research is a relatively new research field (10 years) that has started to generate a solid collection of peer reviewed, rigorous studies demonstrating that when human service programs, practices, and policies are implemented effectively, the likelihood of achieving optimal results is enhanced in the short-term and sustained in the long-term (Fixsen & Blase, 1993). When studies have focused on the quality and consistency of programmatic or policy implementation they have typically found that even the most heralded programs, policies, and practices don't stand a chance of living up to their promise when implementation practices fall short of the mark (Leschied, et al., 2001; Fixsen & Blase, 1993; Institute of Medicine, 2001; Washington State Institute for Public Policy, 2002). As our REA analysis discovered, those programs that produced negative or mixed results often suffered from poor implementation quality.

The implementation cycle (Figure 5) includes recognizable pieces of work that agencies typically focus on, namely program installation, initial implementation, and full operation. However, the *full* implementation cycle must be attended to with equal effort

and quality, if agencies want to achieve the most meaningful and long-lasting benefits of any program, policy or practice they adopt. Several key organizational variables are associated with success at each phase of the implementation cycle.

Figure 5. Program implementation cycle (adapted from Fixsen, et al. 2005)



## **Steps in the Implementation Cycle**

Exploration and Adoption: In response to a perceived need or gap that must be filled, agencies and practitioners scan their environment, within and outside the organization, for potential solutions to the problems they are trying to solve.

Organizations often look to other similarly-situated organizations (ones that do the same work as they do) for ideas and strategies that have already been tested

and have some track record of success (DiMaggio & Powell, 1983). Once decision-makers have completed their exploration into the alternatives available that match their needs and fit within their resource framework, the policy, program, or practice is formally adopted as one that will be put into place.

### What can go wrong?

- Limited access to information or poor quality information on current needs and gaps.
- Environmental scan limited by political or social pressure, scanner's point of view, time available, legal constraints, expertise and experience of the scanner, poverty of innovation or resources in surrounding environment.
- Tendency to emulate other similarlysituated organizations can put pressure on agencies to conform to the norm even when it is against their best interests (e.g. creating a youth drug court, when are very few drugrelated juvenile incidents in the jurisdiction).

Installation: Once the decision is made to create or adopt a new program, policy, or practice a series of preparatory steps must be taken before initial implementation can occur. If a program is being installed, resources must be secured to run the program such as space, staff, and materials.

If a policy is being installed, the policy must be written and communicated to staff and other stakeholders and appropriate enforcement supports must be put in place. New practices must be preceded by staff training as well as any required changes to technology, management structures, or communication protocols.

### What can go wrong?

- Limited resources available, perhaps insufficient to adequately support new program, practice, or policy.
- Staff and stakeholders may need time for buy-in, to develop trust, or learn the new way of doing things, which may stall the installation timeline.
- Time, legal, political, or financial pressures may shorten or alter the installation process, resulting in less preparation than is needed to have implementation success.

Initial Implementation: In the early stages of implementing a new program, policy, or practice there is uncertainty generated that this new way of doing things will work, just as there is untested optimism that this new ways of doing things will work. Staff often struggle with new roles they are now in or new behaviors they are expected to

demonstrate and stakeholders may expect to see changes as a result of the new operation much faster than is feasible. If the change is substantial enough, there could also be cultural chasms that develop between the old way of doing things and the new way of doing things, as people start to realize that this new reality is here to stay, threatening the long-standing order of things.

What can go wrong?

- Fear of change may keep staff from fully committing to the new way of doing things to such an extent that the implementation process is stymied and progress through the cycle eventually ends with the new program, policy, or practice being discontinued or simply ignored.
- The time needed to get through this early phase to work out the wrinkles, may cause frustration among stakeholders or management who expect rapid outcomes and who then put pressure on line staff to make things change more quickly than is possible.
- Staff and stakeholders, depending on their support for the new way, may try to use early data findings to support or question the new program, policy, or practice. However, data produced during this initial implementation period is less reliable than data

produced later in the implementation cycle, since the implementation process is still in flux.

**Full Operation:** When the new program, policy, or practice is in full operation, all staff and stakeholders are accepting the new way of doing things as "business as usual". If the operation is programmatic, client referrals are flowing in and clients are completing the program with regularity, and according to schedule. If a policy is being implemented, there would be very few, if any, deviations from following the policy once it is in its full operational stage. Practices that are fully operational not only work according to protocol, but start to become ingrained as a part of the staff and agency's culture, with few mentioning the old way of doing things or challenging the new order.

### What can go wrong?

- As confidence levels build and more is expected from the new program, policy, or practice, staff may start to overcompensate in areas where the new process is not working well, just to keep up appearances.
- If the new process starts to experience success and praise from outsiders, pressure may build to expand the scope or purpose of the

- program, policy, or practice and dilute its effectiveness.
- As people become more comfortable in the new process they may start to develop their own way of doing things without documenting these as actual innovations (things that improve performance) or deviations (things that impair performance) that should be detailed and later analyzed to determine impact on outcomes.

Innovation: If the new program, policy, or practice is being documented during the implementation process, it will be possible to see areas of innovation that improve processes or outcomes as well as deviations that detract from the desired purpose or goal. Even an evidence-based practice that comes with a full training module, experienced staff, and researched curricula will experience implementation fluctuations as site conditions, population characteristics, and external events, influence the process or results produced.

## What can go wrong?

It's sometimes difficult to accurately distinguish between deviations, or drift, and innovations that measurably improve results or process, especially if one-time factors (weather, staffing

- shortage, legal changes, etc.) influenced the need to alter the implementation process.
- Proper documentation of the implementation process is needed to accurately capture and assess the measureable impact of any innovations, as well as embed the innovation in future iterations of the program, policy, or practice.
- It can sometimes be difficult to judge where specific innovations end and an entirely new program, practice, or policy begins; when extensive innovations impact an established evidence based practice or program, the innovations must be shared with the developer of the original program or practice and explained in any reports about the local site's implementation.

Sustainability: In order to sustain a new program, policy, or practice a number of supports must be available at the local level that are also aligned with support at the systems level, across agencies and sites. If a new program is to be sustained, there must be adequate funding to continue to provide the space, staffing, and materials required to deliver the program according to quality standards. If a practice is to be sustained, it must be regularly producing demonstrable outcomes that make the practice more efficient and effective than the

practice it replaced. And if a policy is to be sustained it must not only be producing the desired outcomes, but the policy must be followed in a uniform manner by staff and enforced in a fair and reasonable manner by management and other stakeholders.

To maximize sustainability of any single program, policy, or practice, each should have the support of the other two (i.e., program needs to be supported by/aligned with policy and practices). For example, if a detention center has a program to provide youth with access to school tutors, but there is no practice developed to ensure that youth are properly identified and connected with these tutors, or there is a policy that that would keep youth from tutoring sessions if they disrespect staff at the detention center, then the tutoring program is unlikely to be a success.

### What can go wrong?

- A common problem is failing to think about sustainability from the beginning, waiting until a program runs out of money, or a practice is primed for removal as a new leader takes over the organization.
- Alignment between program, policies, and practices is often overlooked as efforts are made to improve these system features separately, often in

- the siloed departments or funding streams that created them.
- Often overlooked is the need to build capacity and readiness to sustain the value of the work, even when the system or organization experiences temporary losses of funding, staff, or other resources that make it difficult to keep the actual program alive.<sup>6</sup>

## **Capacity + Motivation = Readiness**

The readiness to implement any type of service or program with quality rests upon a combination of factors inside the organization and within the context in which the organization operates. Before deciding to implement a program, organizational readiness should be assessed to identify any areas that need strengthening before taking on an effort that may not be feasible under existing conditions.

## **General Capacity**

An organization needs general capacity to implement any work projects in a responsible manner. Organizations that are sound in this way typically perform better when implementing a new program (Goodman, Becker, Wright, Shada, & Lempa, 2004; Greenhalgh et al., 2004; Livet & Wandersman, 2005; MacDonald & Green, 2001) General

capacity refers to having appropriate infrastructure, such as building space or computer equipment, management resources such as financial and human resources systems, and experience such as knowledge of the service population or ability to write successful grant applications.

### Specific Capacity

The implementation of a new program typically requires a specific skill or type of experience, which is sometimes accomplished by hiring new staff but usually builds upon existing strengths within the organization. For example, If an organization is implementing a cognitive behavioral therapy program (CBT), specific skills are needed in cognitive behavioral techniques used by trained and experienced staff who conduct the CBT sessions. In addition to whatever credentials the organization might require to deliver this program, there may be professional licensing requirements, government standards, or stipulations that come with the program model from its developers. In addition to staff requirements to implement the CBT program, there must be access to private rooms in which to conduct sessions, secure places to store confidential therapy documentation, and an understanding of all

the other aspects of running a successful CBT program from the engagement of potential participants to successful case closure.

# Specific Capacity for Implementing Effective Juvenile Justice Programs

Research on reducing delinquency has shown that interventions are more likely to be effective if they align with the following areas (Loeffler-Cobia & Campie, 2011):

- Purposeful Targeting. The intervention is clearly focused on bringing about changes in behavior, attitudes, or skill deficits that research has linked to delinquency.
- Proven Strategy. The intervention employs strategies that feature action-oriented learning techniques along with skill-building and cognitive behavioral approaches that have been proven effective.
- Firm Structure. The intervention is structured and standardized— through specifying such things as intervention frequency, duration, setting/group size, written curricula, and fixed incentives for successful completion—to ensure consistency.
- Reliable Delivery. Staff is appropriately prepared and supported—with training, supervision, monitoring and feedback—to deliver the intervention as designed.
- Continuous Quality Improvement The implementation and results—

including participation, completion and outcomes—are documented over time and used to make continuous quality improvements in the intervention, its design and delivery.

#### Motivation

It turns out that just having the capacity to implement a program well isn't enough to ensure high quality service and desired outcomes for participants. No less important to program success is the internal culture of the organization itself.

- Does staff believe in the work they are being asked to do?
- Is the work aligned with the organization's mission?
- Does the organization encourage or stifle learning and the use of data?
- Does staff feel supported to take on new responsibilities without fear of it impacting their job security?
- Are there financial or lifestyle disincentives that keep staff from "buying –in", such as requiring work on nights or weekends?

Organizational factors such as importance of connections to the community, cultural competence, and the motivation to intervene directly in community problems can often be the difference in helping a program succeed (Eng & Parker, 1994).

## Discussion

The Rapid Evidence Assessment identified 11 initiatives that were evaluated in studies that met the eligibility criteria. In some sense, these were programs that were most similar, at least in the published literature, to the SSYI program. Despite those similarities, we were unable to identify any evaluations of programs identical to SSYI. In addition, all of the evaluations were focused on a single city, or neighborhoods, areas, or groups of youth within the city.

Despite some differences between the evaluated programs covered in this REA and SSYI, there is substantial overlap in the characteristics of the initiatives. Most of the initiatives included multi-agency efforts, community mobilization, and the use of street outreach workers. At least three created a list of high-risk individuals to target for suppression and social services.

The overwhelming number of positive results in 10 of the 11 evaluations, including substantial reductions in outcomes such as homicides, gang-related homicide incidents, shootings, non-fatal shooting and calls to police about gunshots provide confidence that these initiatives have positive impacts. Adding to the confidence is that although

most of the studies are dominated by the use of interrupted time series designs of monthly counts of homicide or other violent crimes, comparisons to similar cities in the same state, region or nation generally supported that the decline observed after the start of the initiative was unique and not part of overall trends. Moreover, the use, in at least two studies (Corsaro & McGarrell, 2006, 2009, 2010; Engel et al. 2011), of non-gang related homicide incidents as a "control variable" strengthened the conclusion that the specific targeting of high-risk gang-members was having an impact on gang-related killings that was not part of an overall homicide reduction trend.

Given the consistency of the results reported here, the Pittsburgh One Vision program stands alone as an outlier. Why did Vision One researchers not observe the kind of declines witnessed across the other 10 studies in this review? Wilson and Chermak (2011) summarized their response to why One Vision had such effects:

Because the study did not include randomization of neighborhoods, it is possible that the results are due to factors that were not controlled by the evaluation design;

- The program, by necessity, deviated from ideal implementation because of lack of written documentation:
- Community coordinators (street outreach workers) often focused more on those in need of services rather than those most at risk of violence; and
- The program did not do much to address gangs generating violence.

The effective programs contained eight themes that can be instructive for guiding efforts to improve SSYI's ongoing implementation and to evaluate impacts.

#### 1. Sustainability

Some of these initiatives reported large decreases in violence but the extent to which such gains are sustained has not been studied extensively. One exception was in Cincinnati, where the CIRV program resulted in substantial decreases in gun violence at 24 months, and this effect repeated again at 42 months (Engel et al. 2011).

#### 2. Focus on the Most Violent Offenders

Although each city is different, a consistent finding in the foundational research on gun violence (conducted in some of the sites prior to the intervention being implemented and the evaluation being conducted)

indicates that a small number of high-risk youth are responsible for the vast majority of shootings. Braga (2008) and McClanahan, et al. (2012) would underscore the importance of programs like SSYI to focus on youth at greatest risk for serious violence, and not to try to tackle the entire gang problem. As Wilson and Chermak (2011) noted in Pittsburgh, the street outreach workers began to focus on youth who needed services rather than the persons who were most at risk for serious violence.

#### 3. New Cohorts of Violent Youth

A finding across the evaluations that conducted foundational research on gun violence before implementing their evaluations is that a small percentage of high-risk youth are responsible for a majority of gun violence incidents. In his famous study following persons from birth to adulthood in Philadelphia, Marvin Wolfgang and colleagues (1972) reported that seven percent of youth committed 61 percent of all offenses, 65 percent of all aggravated assaults, 60 percent of homicides, 75 percent of rapes, and 73 percent of robberies. However, each year, a new "birth cohort" reaches the age where criminality is possible. Strategies like the SSYI and the

violence reduction efforts described here have to address the "coming cohorts" by providing prevention services and being prepared, at least in the short-term, for the program caseloads to grow.

#### 4. Limit Potential Backfire Effects

Wilson and Chermak (2011) cautioned that street outreach workers need to be careful about how they interact and work with gangs. They cited Klein's (1971) notable gang research, which indicated (at least in the early part of the study) that attention by outreach workers led to increased cohesion among gang members; in turn, gang cohesiveness was correlated with members engaging in delinquent acts.

#### 5. Challenges with Scaling Up

McClanahan and her colleagues (2012) noted that the Philadelphia YVRP experienced problems as it scaled up from one district to several in the city. The program grew without any concurrent increases in its staff. In addition, core management functions (including finance and project coordination) were not institutionalized. The use of data to inform decision-making declined over time, which may have hurt the quality of implementation in the later sites. To assist with scaling up,

they recommend using sites that have strong organizational capacity and can implement high-quality, data-driven program implementation. They also highlight a major problem in the implementation of any effect or promising program: how to adapt core program components so that they are sensitive to the community context but do not lose the key ingredients that make the program worthwhile to implement.

#### 6. Credible Messaging

Braga (2008) underscored the importance of sending a credible message to gang members. Whether this message is delivered at community notification meetings in which gang members are invited, or through public service campaigns, via street outreach workers, or other dissemination methods, both the enforcement message ("any legal means necessary to end gang violence") and the services message (alternatives and opportunities) needs to be communicated.

# 7. Interagency Leadership and Coordination

To combat a problem as broad as youth violence requires a multi-agency effort.

Braga et al. (2001) and Braga (2008) are among those evaluators who emphasized

the importance of a leadership team that could oversee coordination of the initiative and insure that different city departments are collaborating. In Cincinnati, a novel approach involved city agency officials who asked Proctor and Gamble business leaders to help set up such an interagency leadership team.

## 8. The Role of Data and Analysis

Some of the more successful initiatives have conducted foundational research on gun violence that has fed into the creation of the strategy (e.g., Braga, et al. 2001). In other examples, the data analysis and information generation continued throughout the program, usually facilitated by researcher-practitioner partnerships (e.g., Braga et al. 2008). Braga (2008) cautioned that analysis must be prioritized so the initiative is constantly grounded in good data (this can be quantitative or qualitative where appropriate), and that initiatives like Stockton's Operation Peacekeeper required substantial investment in analysis.

#### SSYI Implementation Quality

Preliminary data from the self-assessments collected in the process evaluation indicate that SSYI sites have a high degree of motivation to implement the program with quality and in large part the organizations involved in these sites are community-based agencies with deep roots in the communities where SSYI participants live.

Staff running the interventions at each site are generally well-prepared for their work, either from their own residency in the community, their status as former young offenders, their preexisting relationships serving the target population (which is one reason they were chosen for SSYI), or the specific education, training, and expertise they apply to SSYI program components, such as housing, employment, education, law enforcement, or counseling supports.

The overall capacity to implement SSYI also appears strong within each organization. Where there are perceived challenges they appear to be felt external to each organization, mostly from uncertainty in the state funding environment. Programs have also faced difficulty resulting from insufficient local resources, such as lack of transportation, inadequate safe housing,

and poor availability of jobs for former offenders.

SSYI relies on a range of customized strategies, whose implementation process is difficult to consistently measure as one would typically do using protocol adherence or program fidelity techniques. Instead, measures of quality will need to be developed for SSYI using principles that undergird the social ecological framework that supports SSYI's theory of change.

The quality of coordination, collaboration, and communication among SSYI partnering organizations is also critical to implementation success. These partners must work together to share resources such as information on where a transient youth may be living and be willing to embrace the success and challenges of the initiative as a team, rather than as individual organizations with their own agendas to achieve.

# Limitations

Best practice reviews like this frequently suffer from lack of access to complete information about any study that has been conducted, principally because it takes an average of 17 years for studies to go from completion to publication (Morris, Wooding, and Grant, 2011). Adding to the problem is the fact that non-academic evaluations funded by government dollars often have no requirement for publication after the study concludes-which means there are no financial resources available for the researcher to turn their final evaluation report into a professional peer-reviewed publication.

One caution with REA methods is that because of the limited search strategies, potentially some relevant studies may have been missed. In addition, REA, like any synthesis of prior research, is dependent on the quality of published materials. The "descriptive validity" of the evaluations in this area may be lacking. As Engel, et al. (2011) noted, "...in-depth descriptions of the differences across initiatives, and a clear understanding of the issues surrounding

implementation and sustainability are generally lacking in this literature..." This particular review is investigating a relatively new approach to addressing urban violence by including a wider array of intervention points, involving the community in the process, and expanding the age range to prevent violent crime among individuals historically thought of as adults (i.e., those who 18 and older). The newness of this approach is reflected in the research literature as well as in the strategies communities are using and funders are supporting. As a result, there is not an overwhelming amount of evidence for any one approach to the problem.

The implementation science literature is heavily focused on single organizations implementing interventions and has not developed as much around the notion of collaborative intervention structures, like SSYI. The organizational research literature is well-developed on what it takes to have effective collaboration, coordination, and communication between organizations. But that literature has not yet been linked to the implementation science literature that studies how program effectiveness is tied to implementation quality.

## **Endnotes**

<sup>1</sup> Proven risk youth are defined in SSYI as

- perpetrators of shooting and stabbing violence;
- youth who are in a leadership role of a street gang and are engaging in serious violence;
- youth who have already engaged in violent behavior or are engaged in persistent anti-social behavior;
- repeat juvenile offenders released from supervision by the state or county, or who are under minimal supervision, and are considered a continued risk to reoffend; and youth and young adults who are victims of violence and may retaliate.

<sup>&</sup>lt;sup>2</sup> Number of youth served in last quarter of 2012 at SSYI sites

Boston	Brockton	Chelsea	Fall River	Holyoke	Lawrence	Lowell	Lynn	New Bedford	Springfield	Worcester
230	94	150	70	94	135	218	90	69	154	104

<sup>&</sup>lt;sup>3</sup> The effectiveness of this strategy was determined through the www.Crimesolutions.gov rating system.

<sup>&</sup>lt;sup>4</sup> The Appendix contains more detailed documentation of this methodology.

<sup>&</sup>lt;sup>5</sup> Focused deterrence strategies (also referred to as "pulling levers" policing) are problem-oriented policing strategies that follow the core principles of deterrence theory. The strategies target specific criminal behavior committed by a small number of chronic offenders who are vulnerable to sanctions and punishment.

For example, a program that provides new police recruits with training on adolescent development that allows them to improve their interactions with young people they encounter can retain the value of that program even if the program itself is not sustained. Graduates of the program can be used to mentor incoming recruits or the training elements can be institutionalized within the routine training all new officers receive.

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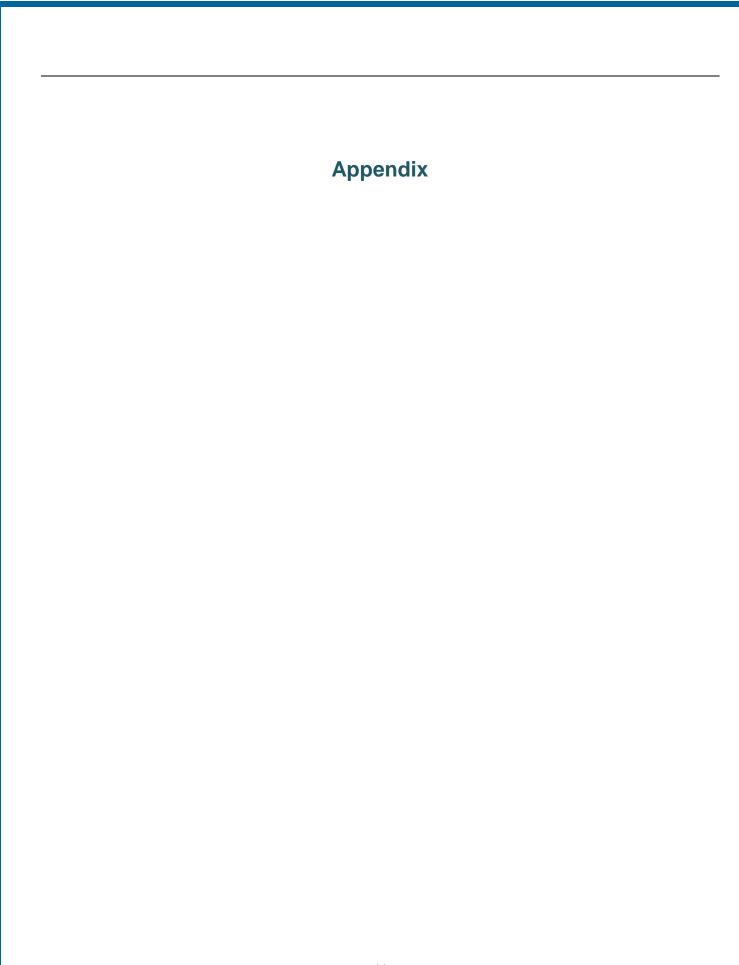
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# **Methodology Notes**

- Database searches. To find eligible reports, we conducted searches of the abstracts contained by five bibliographic databases: Criminal Justice Abstracts, Medline, National Criminal Justice Reference Service abstracts, Psychological Abstracts (Psychlnfo), and Sociological Abstracts (Sociofile).
- 2. Evidence-based registries on violence and crime prevention. A number of evidence-based registries have cropped up that identify particular programs and policies, rate the effectiveness of the program according to the available evidence, and provide the rating and the evidence supporting it. We searched the following registries to identify relevant programs: (1) the U.S. Department of Justice's Crime Solutions (www.crimesolutions.gov); (2) the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Programs Guide (http://www.ojjdp.gov/mpg); (3) Blueprints for Healthy Youth Development (http://www.blueprintsprograms.com); (4) the Substance Abuse and Mental Health Services Administration (SAMSHA) National Registry of Evidence-based Programs and Practices (NREPP) (http://www.nresamhsa.gov); and (5) the World Health Organization's (WHO)

Violence Prevention Evidence database (http://www.preventviolence.info).