

**Chief Probation Officers of California Foundation** 

# **Smarter Probation:**

## **Tools to Improve Service Delivery**

June 17, 2014 Sacramento, CA

STC Certification #: 0767-074154

**Course Materials** 



Chief Probation Officers of California Foundation

Smarter Probation: Tools to Improve Service Delivery

June 17, 2014

#### Agenda

- Welcome and Introductions
- Building Blocks of Data Driver Decision

Making

- Networking Lunch
- Effective Presentation of Research and Data
- Creative Debrief
- Wrap up and Evaluations

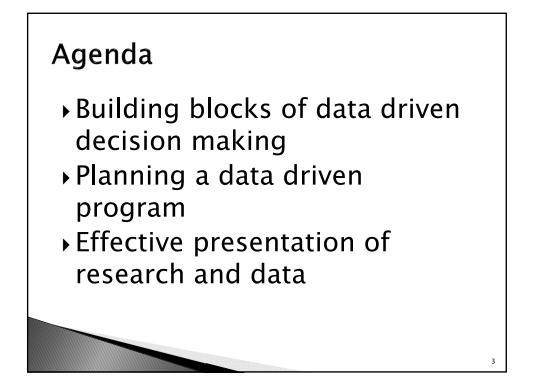
Chief Probation Officers of California Foundation 1415 L Street, Suite 1000 Sacramento, CA 95814 Phone: 916-447-2762 Fax: 916-442-0850

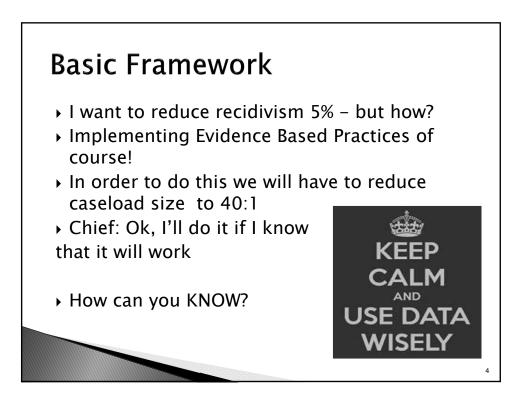
## Smarter Probation: Tools for Data Driven Decision Making

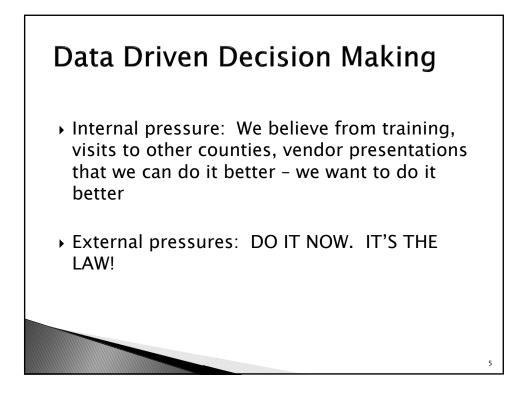
June 17, 2014 Presented by: Dr. Natalie Pearl and Kevin O'Connell

# Think about Data, Research, Information



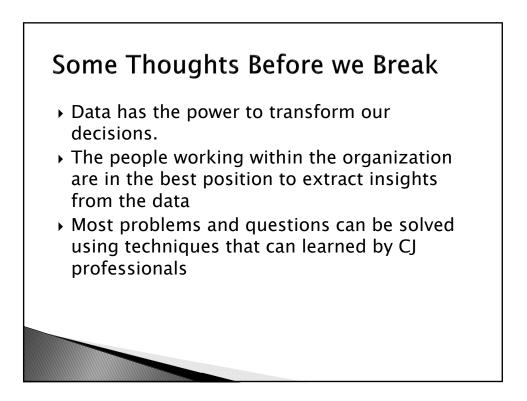


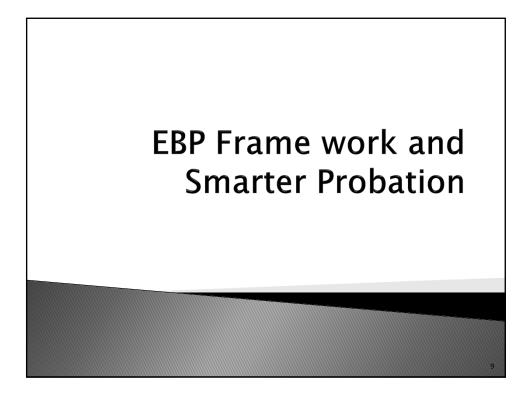


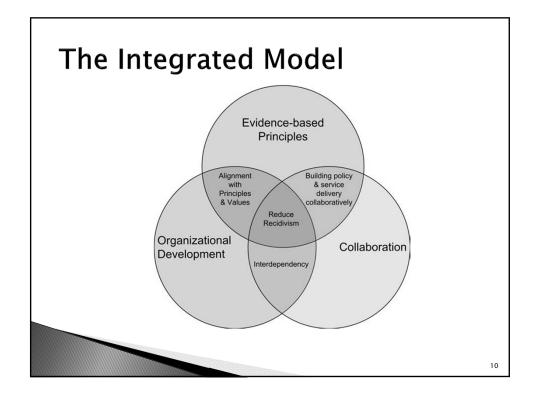


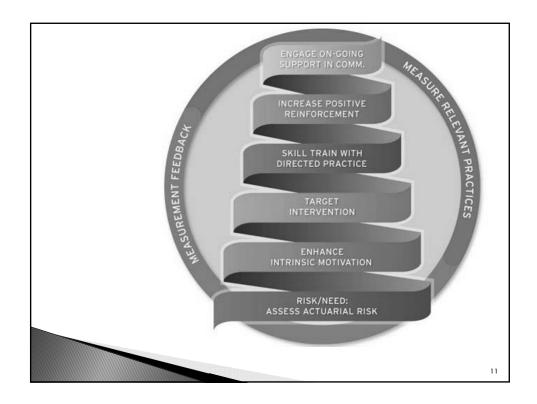


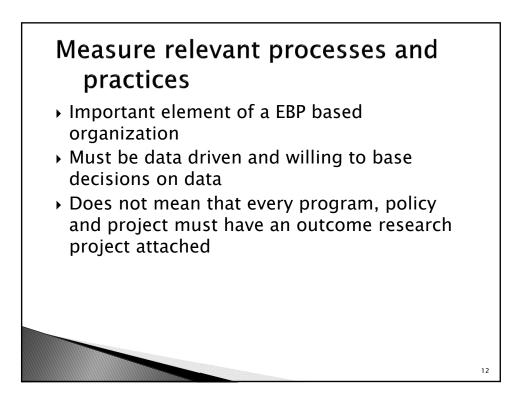


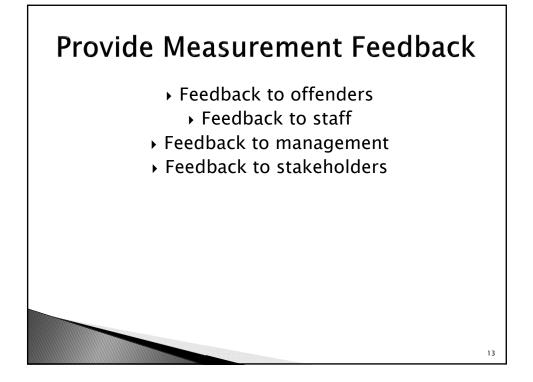






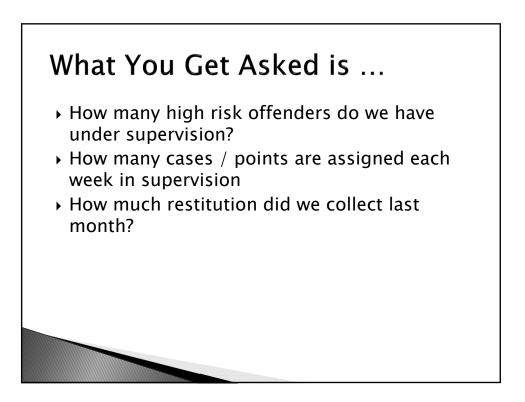


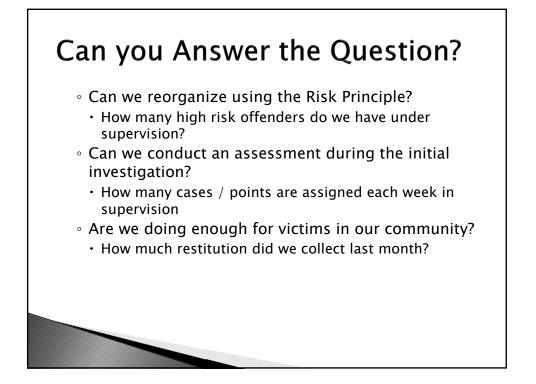


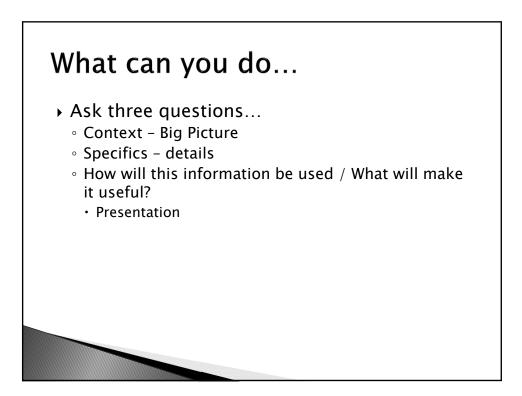


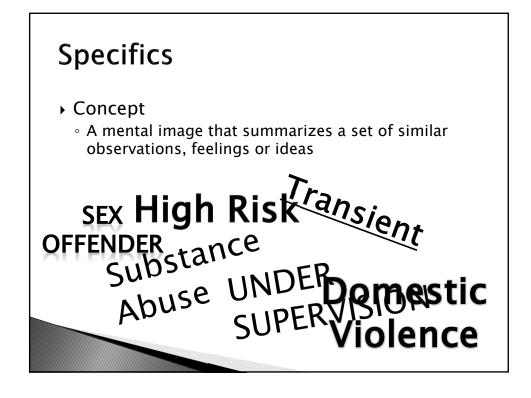
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2 Assessment	Bar Chart   Actions •   Filter •					
Summary Assessment		Overall Risk Potential				
Narrative Personalized Narratives	0		Potential			
Bar Chart	Risk					
Supervision Recommendation	Violent Recidivism Risk Medium General Recidivism Risk Lon					
	Pretrial Release Risk High					
	Decile 1	2 3	4	5 6 7	8 9 1	
	Crin	ninogenic N	eed Scale	s		
		-				
	Criminal Involvement					
	History of Non-Compliance High					
	History of Violence Medium Current Violence High					
	Current Violence High					
	Relationships/Lifestyle					
	Criminal Associates/Peers Probable Criminal Opportunity Unlikely					
	Leisure and Recreation Highly Proba	ble				
	Social Isolation Highly Proba	ble				
	Substance Abuse Highly Proba	ble				
	Personality/Attitudes					
	Criminal Personality Highly Proba					
	Criminal Thinking Self Report Highly Proba Cognitive Behavioral Highly Proba					
	Family		_			
	Family Criminality Unlikely Socialization Failure Unlikely					
	Social Exclusion Financial Probable					
	Financial Probable Vocational/Education Probable					
	Residential Instability Highly Proba					
	Social Adjustment Problems Highly Proba Social Environment Highly Proba					
Northpointe Suite version 8.1.19.13		10		10 Alerts	< Previous Next	





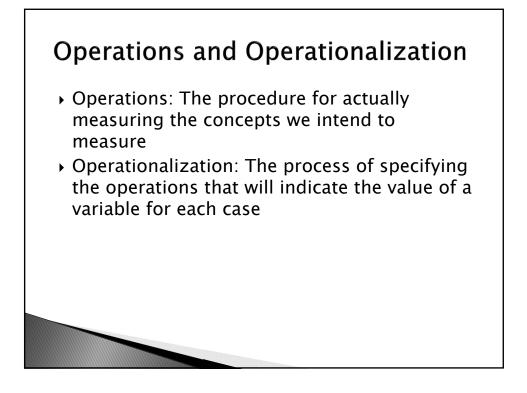




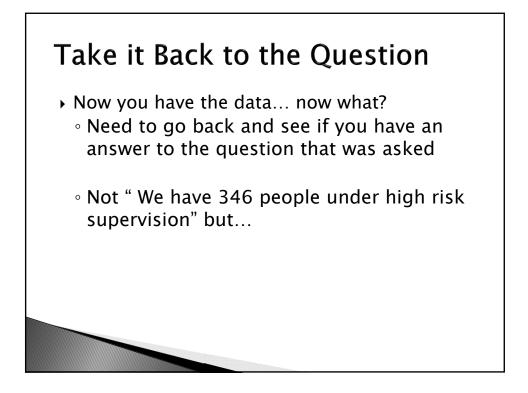


### Conceptualization

- The process of specifying what we mean by a term
  - Helpful to think about how the information will be used
  - Think through the assumptions
    - Are they shared?
    - Do they have to be explained and justified?
    - · Are they unduly complicated?

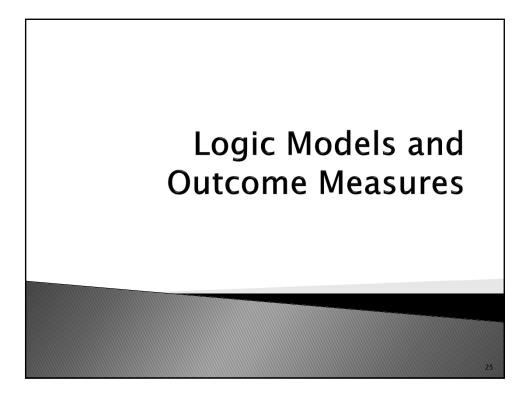


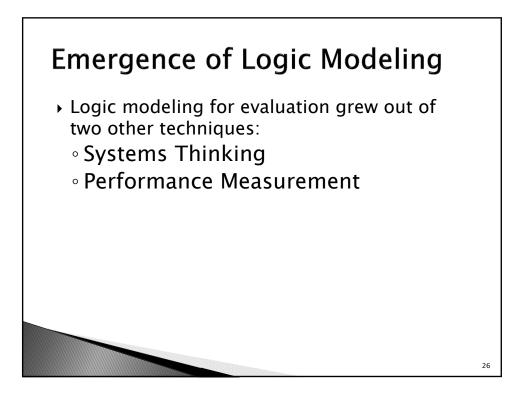
Concept	Operationalization	Variable and Values
Under Supervision	A person on any active status (not on warrant status) who is assigned to a case carrying officer	Warrant Status = N
Qs: What if they are awaiting Jurisdictional Transfer? What if they are still in custody?		Qs: What if more than one active status? What if assigned to SPO caseload?

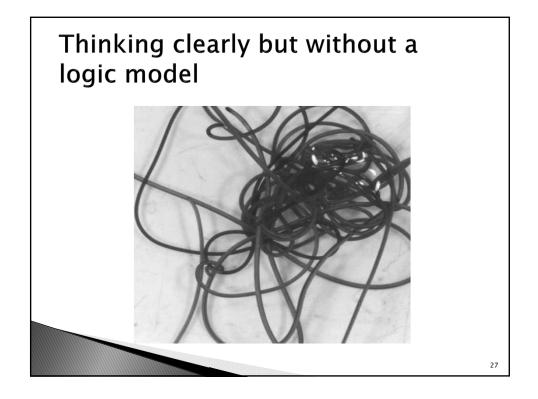


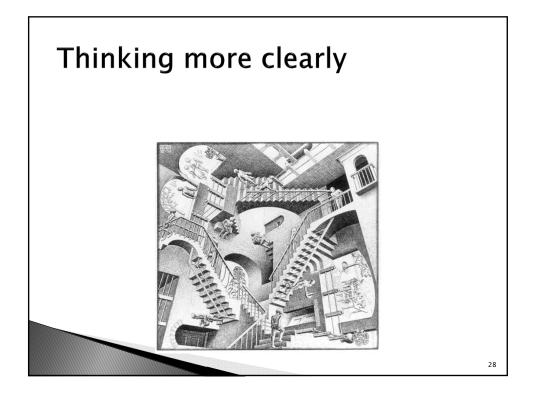
#### The Answer

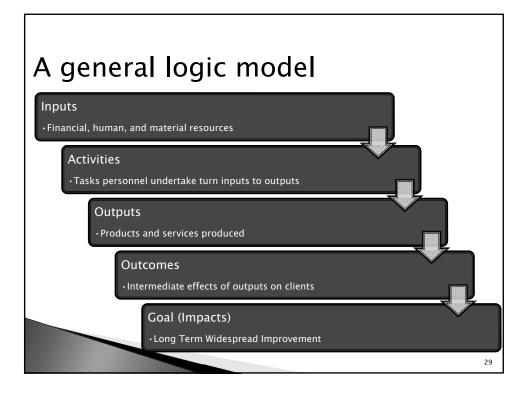
"If we reorganize using the risk principle we would need 7 officers to supervised 346 High risk offenders at a caseload of 50:1; 10 officers to supervise 1500 medium risk offenders at 150:1; and 2 officers to manage a low risk bank."

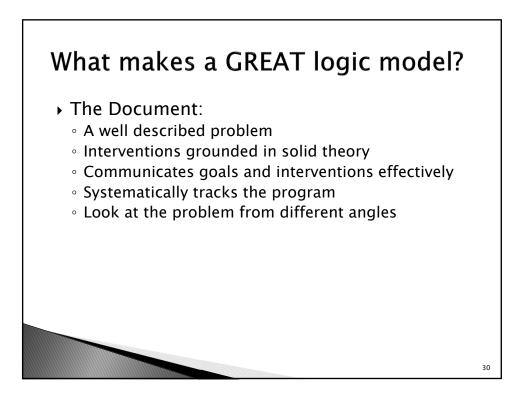


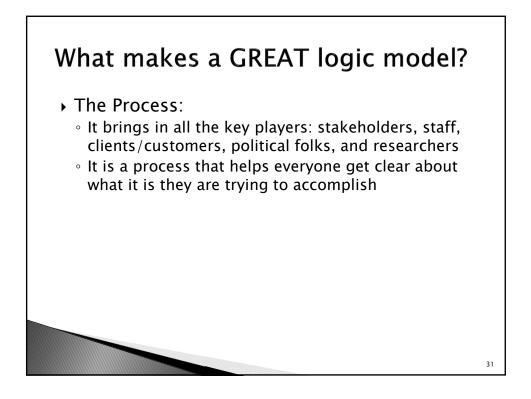


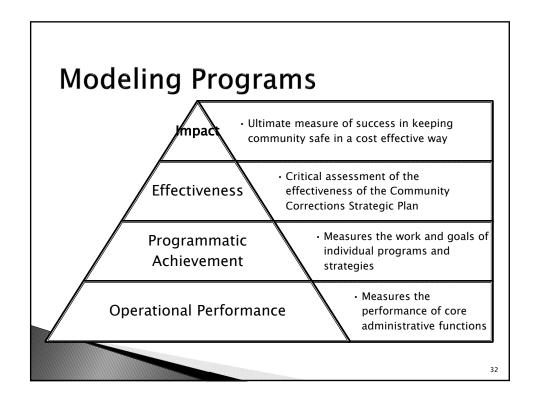


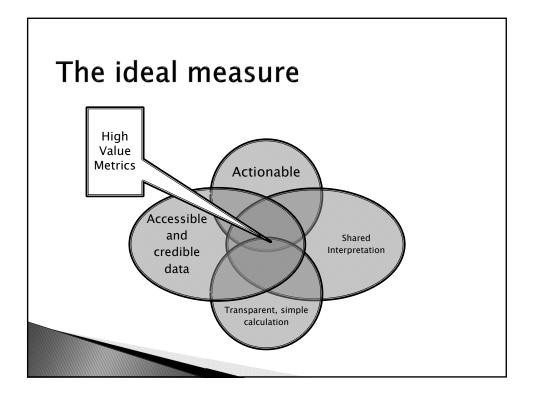


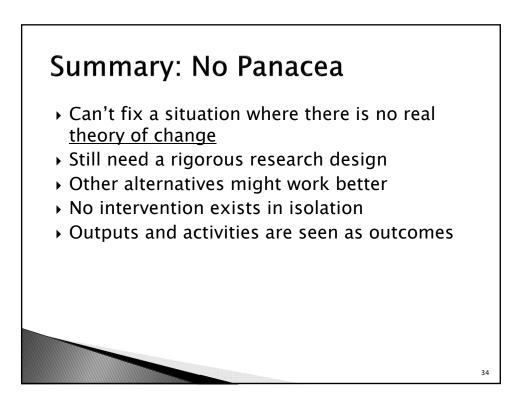


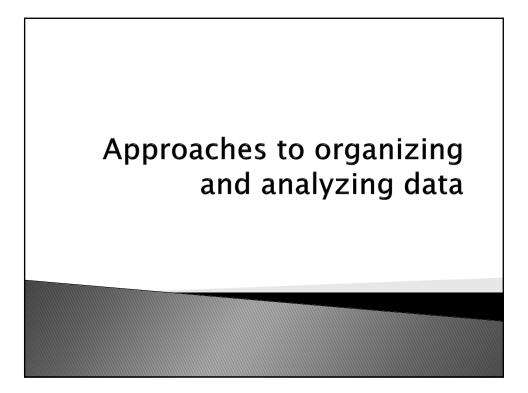


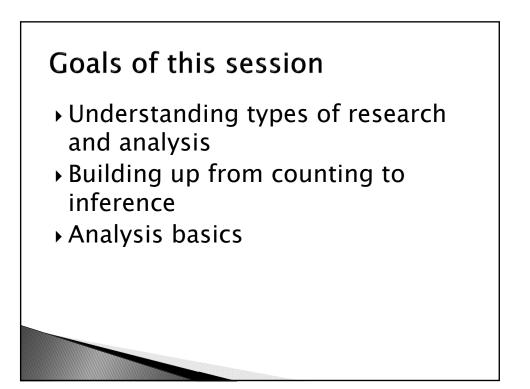












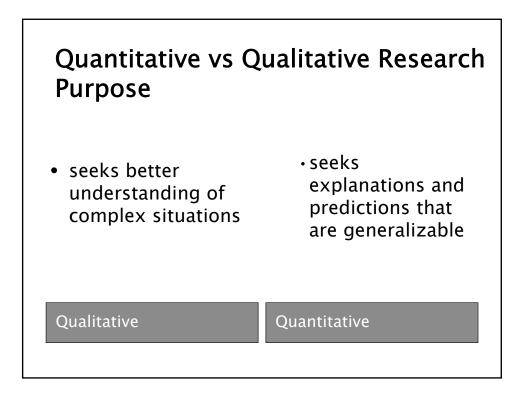
# What kind of research are you doing?

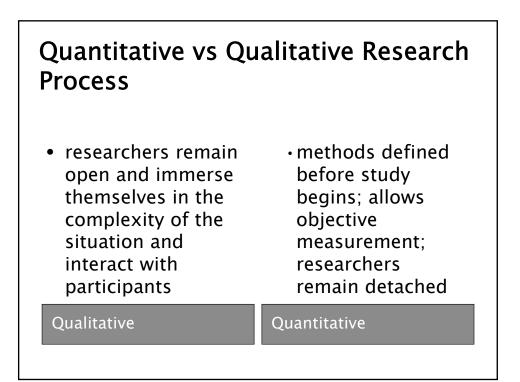
- Experimental
   Subjects are randomly assigned to experimental conditions.
- Non-Experimental
  - does not provide evidence concerning cause-andeffect relationships

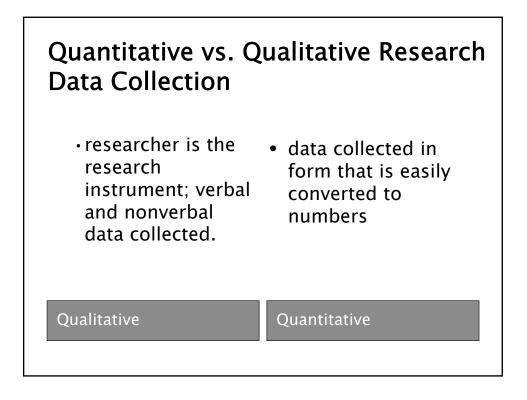
# Quantitative vs. Qualitative Approaches

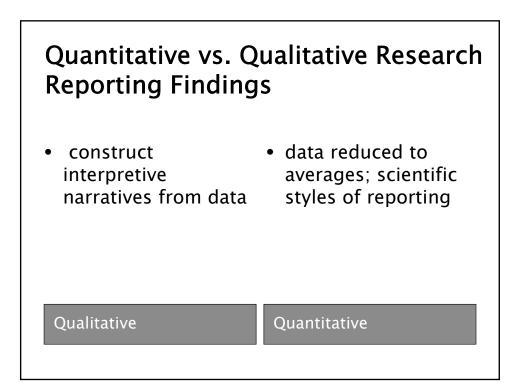
• <u>Quantitative Research</u>: involves looking at amounts, or quantities, of one or more variables of interest. Researchers attempt to measure variables in some way.

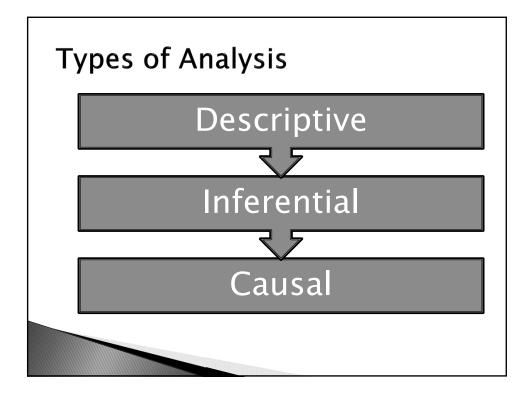
• <u>Qualitative Research</u>: involves looking at characteristics, or qualities, that cannot easily be reduced to numerical values. Researchers attempt to examine nuances and complexities of a particular phenomenon.

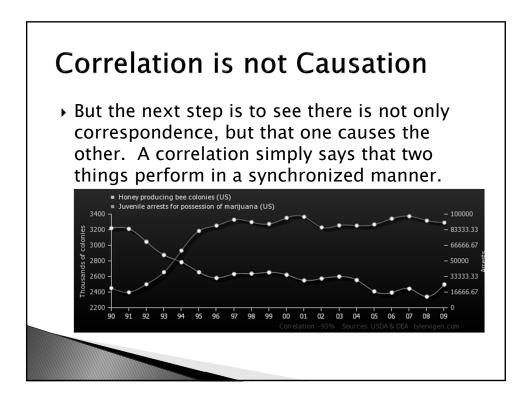


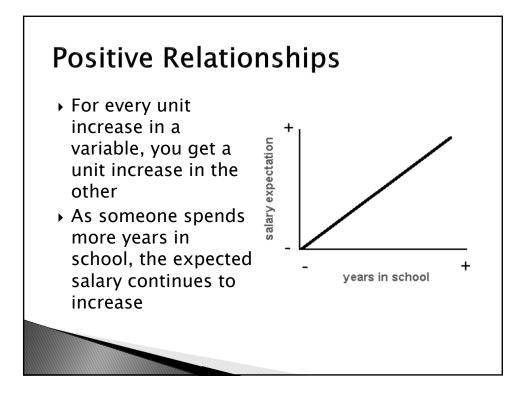


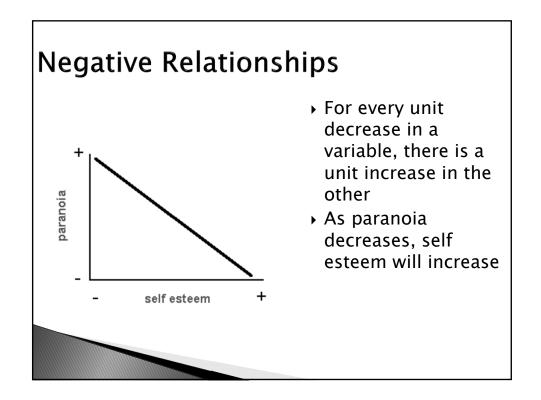


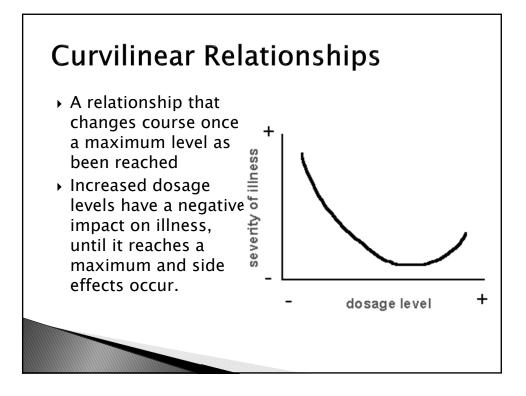


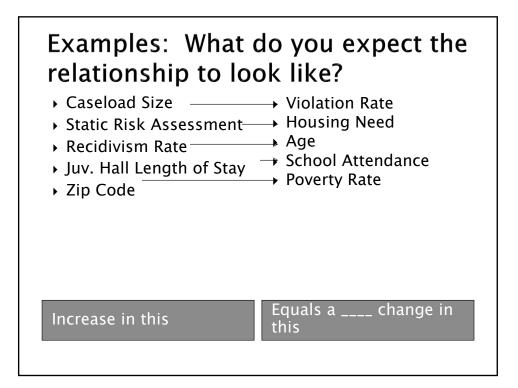


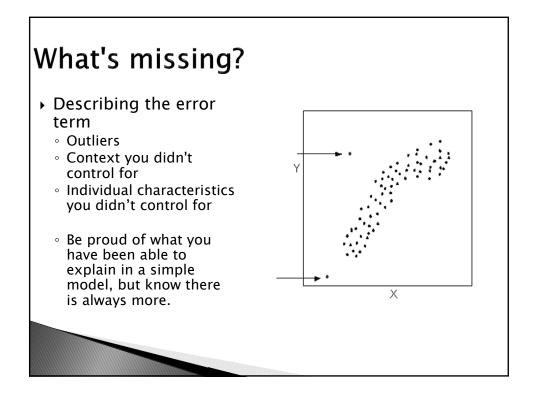


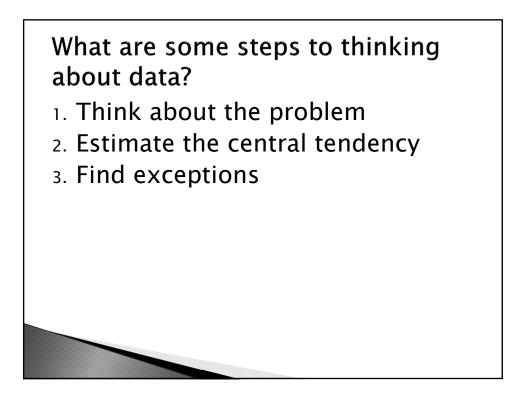


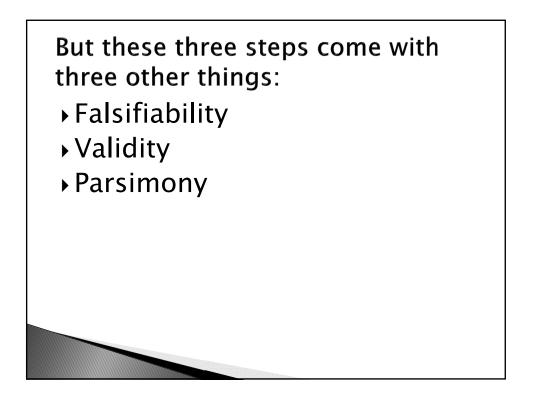


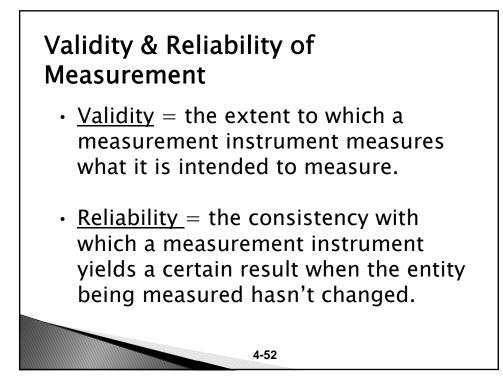


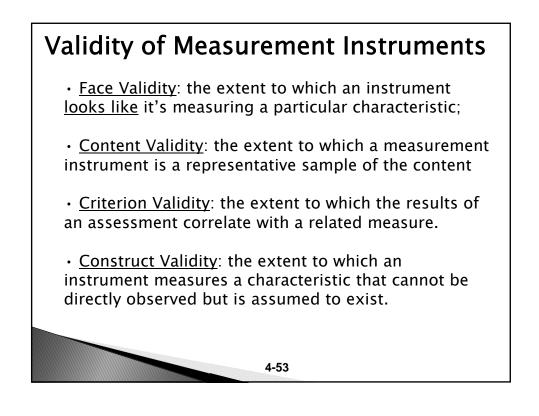












## Determining the Reliability of a Measurement Instrument Inter-rater reliability: the extent to which two or more individuals give identical judgments. Internal consistency reliability: the extent to which

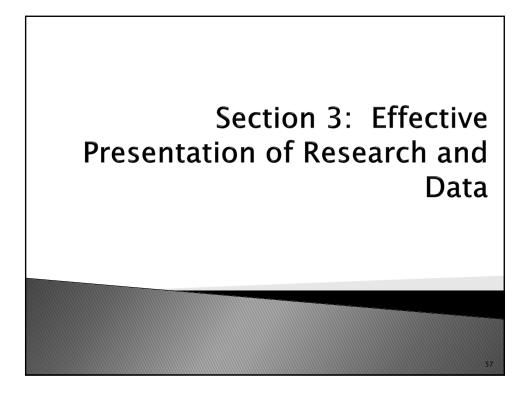
- <u>Internal consistency reliability</u>: the extent to which all of the items within a single instrument yield similar results.
- <u>Equivalent forms reliability</u>: the extent to which two different versions of the same instrument yield similar results.
- <u>Test-retest reliability</u>: the extent to which a single instrument yields the same results for the same people on two different occasions.

#### Forms of Interview

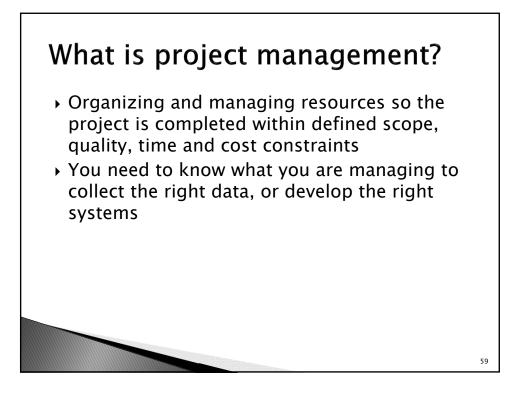
- Structured the researcher asks a standard set of questions and nothing more;
- Semi-structured the researcher may follow the standard questions with one or more individually tailored questions to get clarification or probe a person's reasoning.

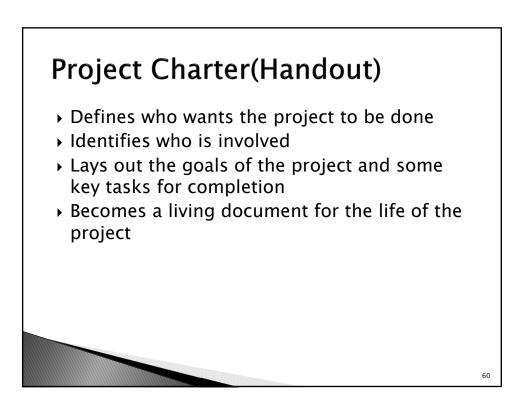
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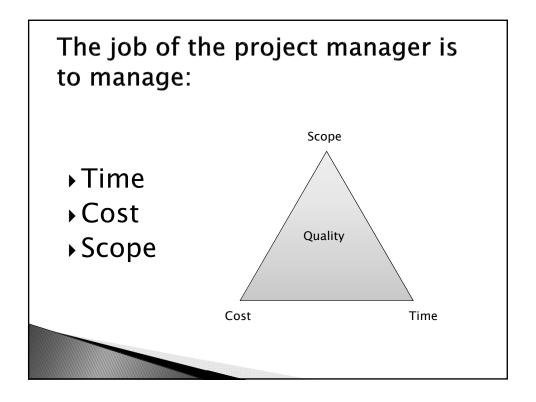
# Lunchtime • Please be back by 1pm

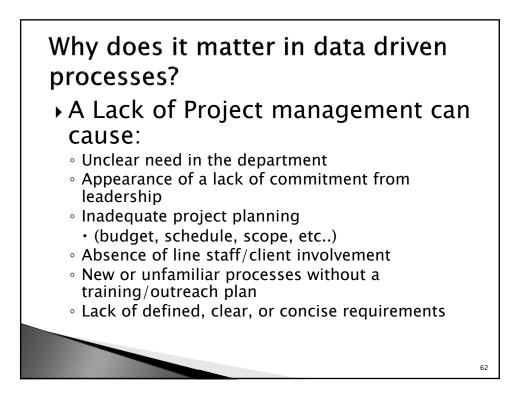


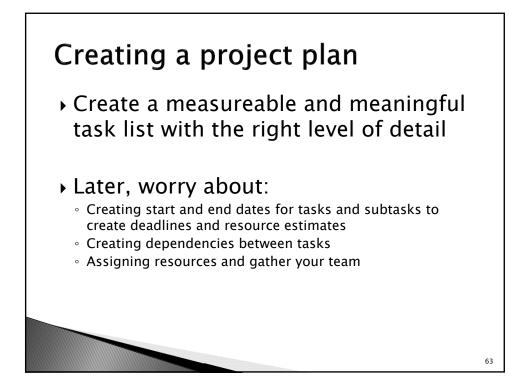


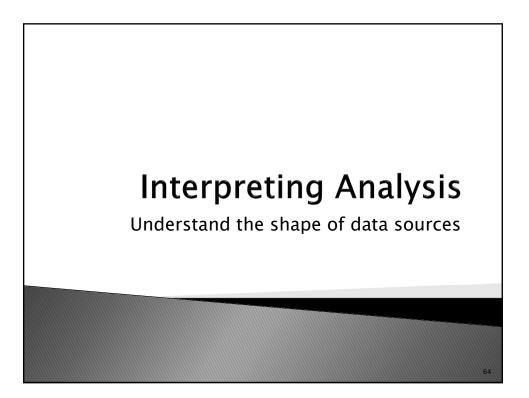










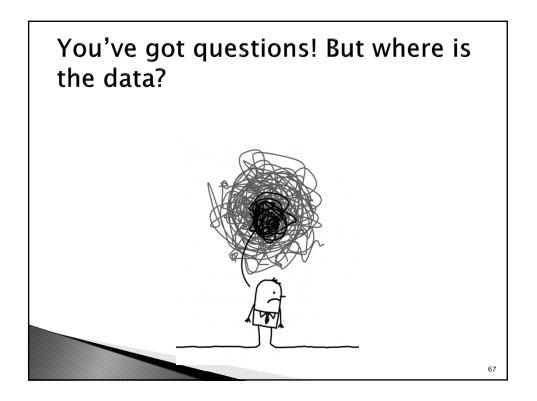


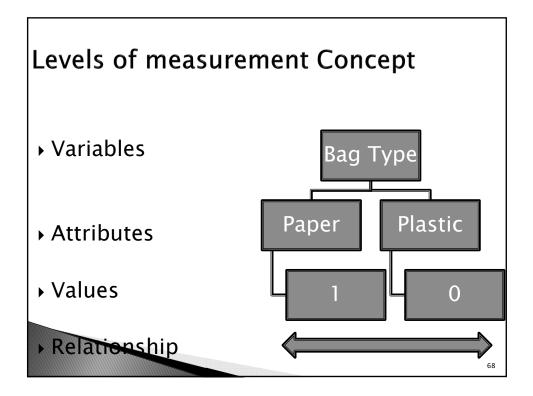
# Goals of this session

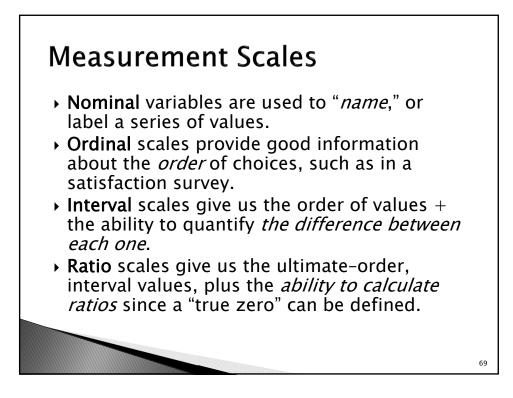
- Frameworks for "Rules of Evidence" for data analysis
- Levels of measurement, and how to move between them

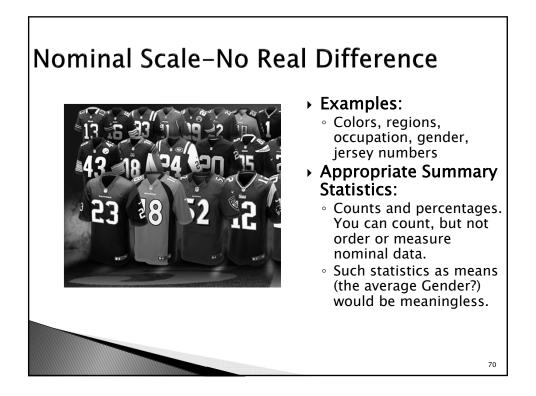
# What is data analysis?

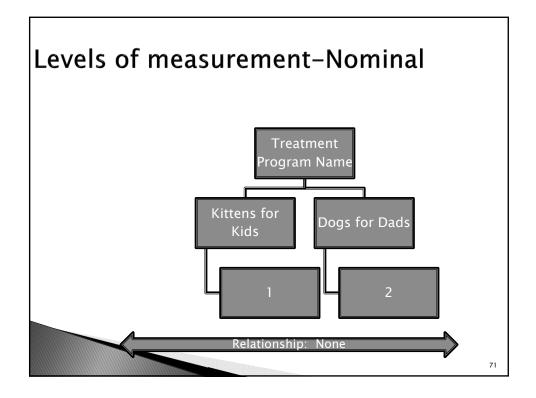
- Data analysis is a body of methods that:
  - Helps describe what we see around us
  - Helps detect patterns
  - Develop explanations
  - Test theories and hypothesis

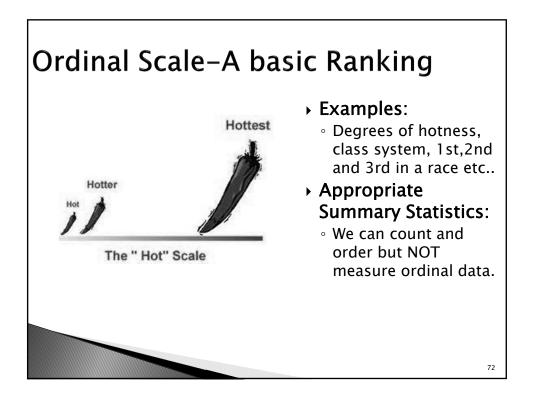


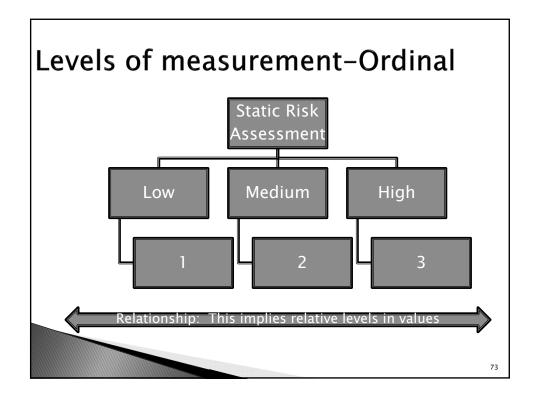


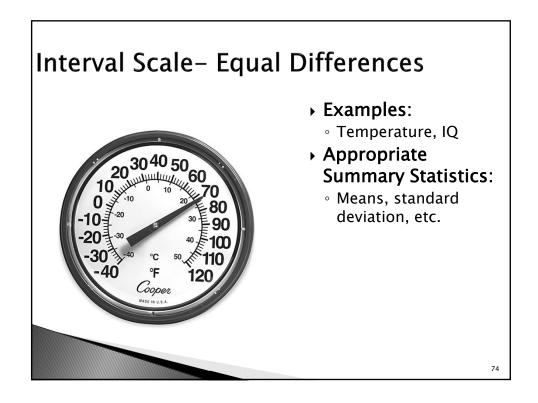


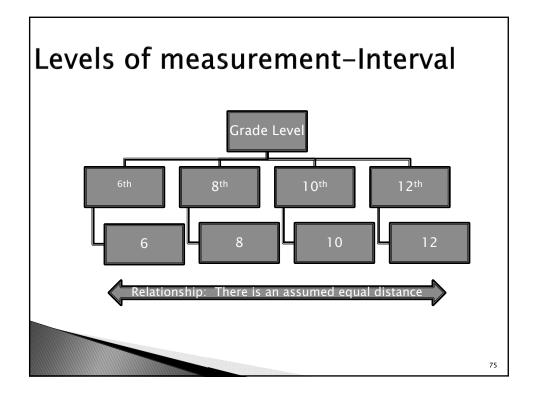


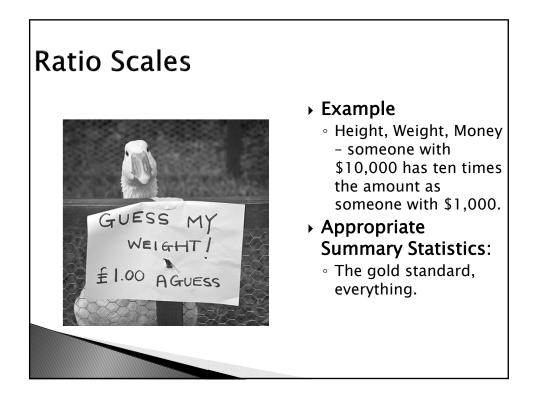


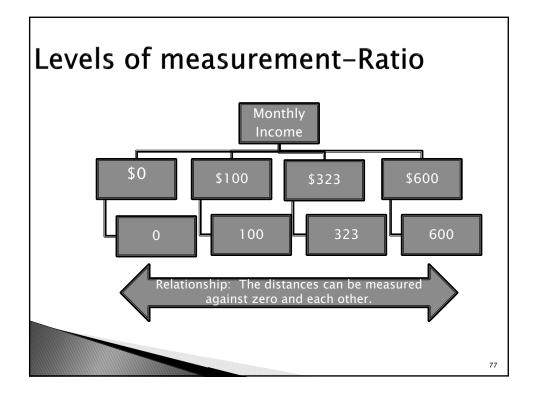


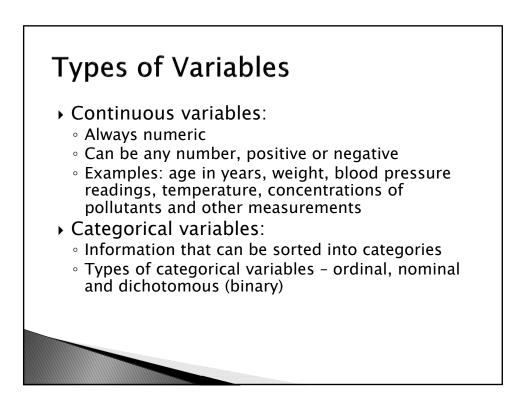






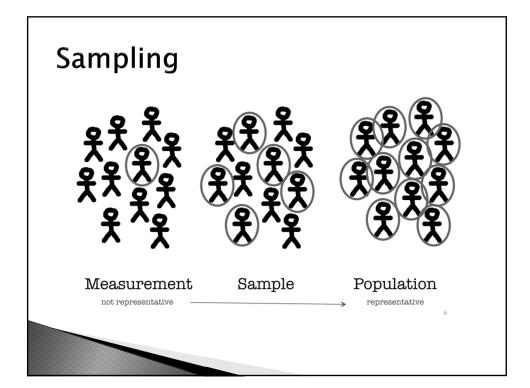


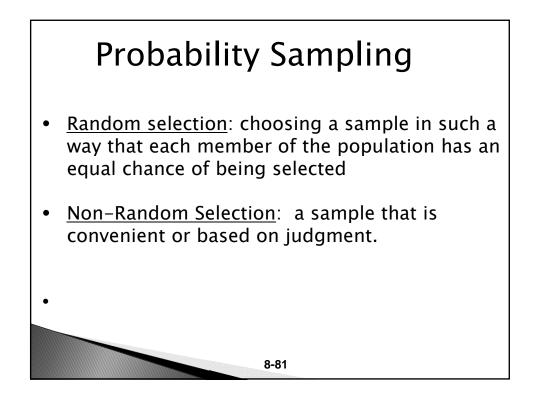


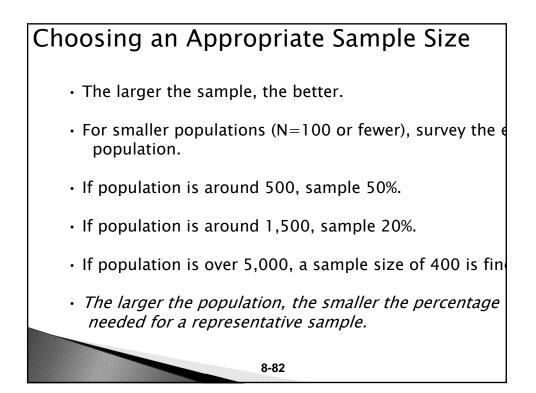


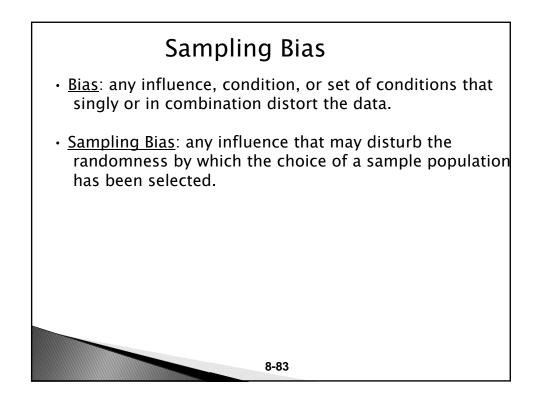
# Data sources and approaches

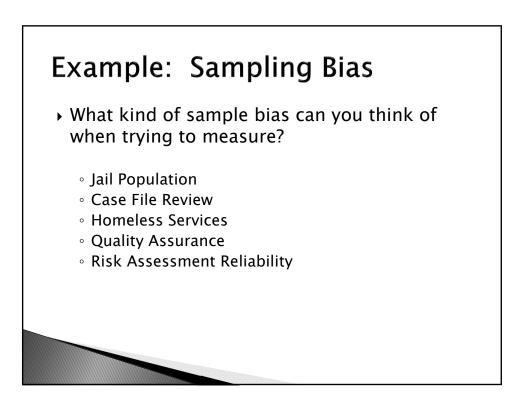
- Case Management Systems
- Risk and Needs Assessment
- Excel Sheets
- Program Logs
- Case Files
- But happens when you cant pull all the information...?

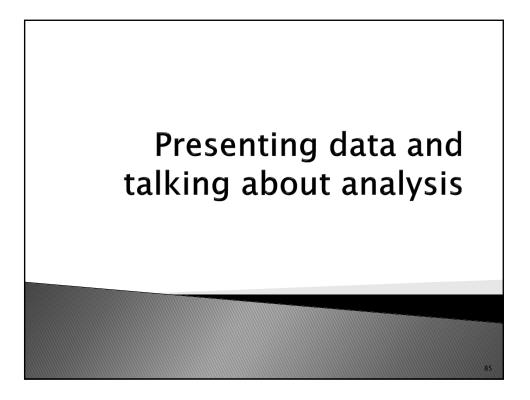


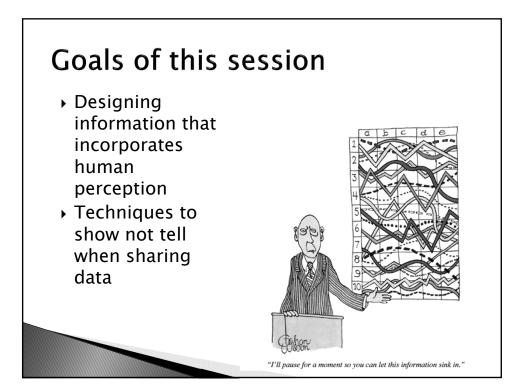


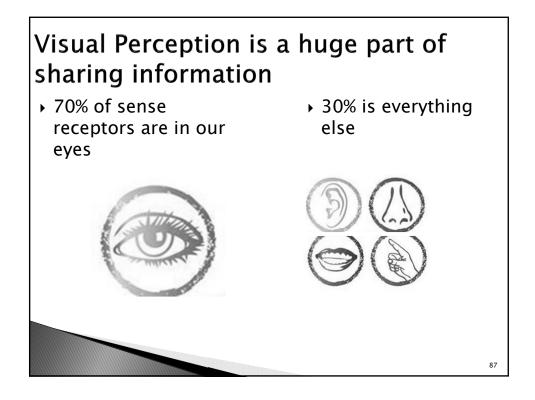


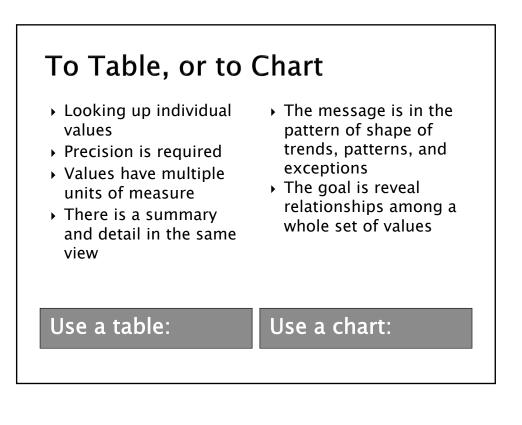


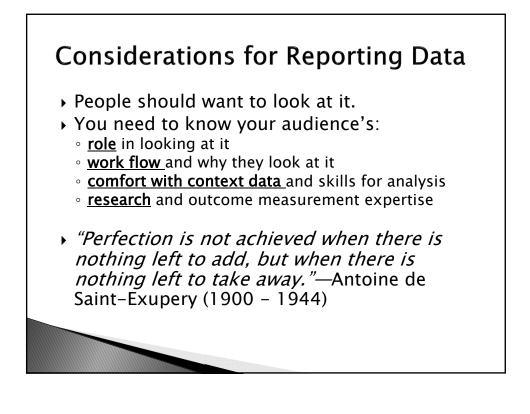








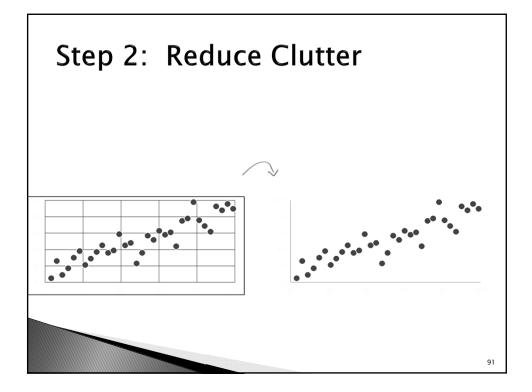


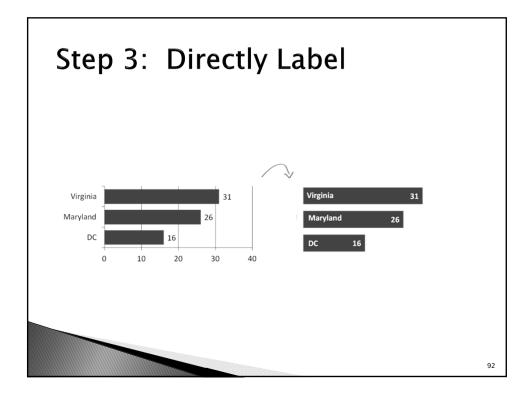


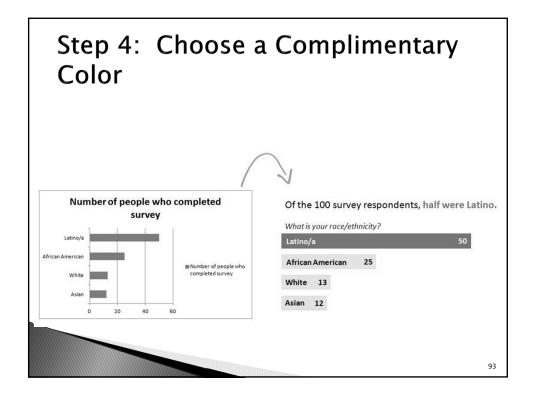
## Step 1: Choose a message for your chart

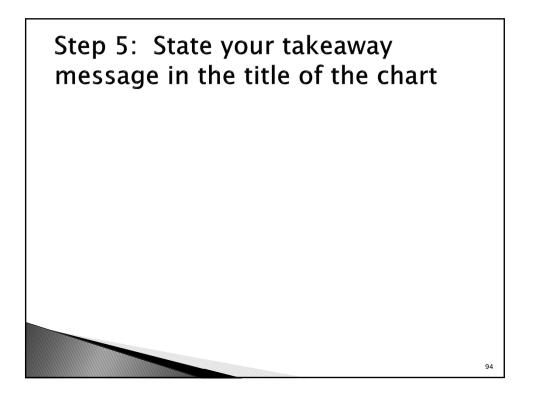
- Who is my audience?
- Which chart is right for my data?
- How much precision is necessary?

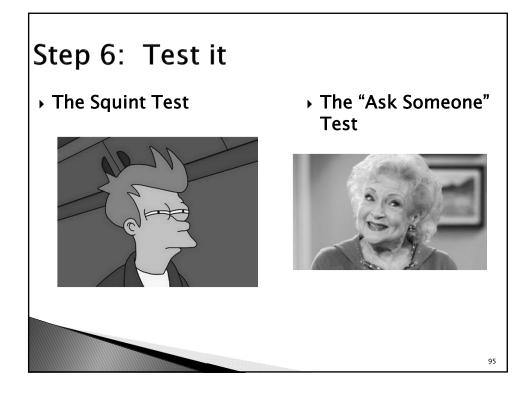
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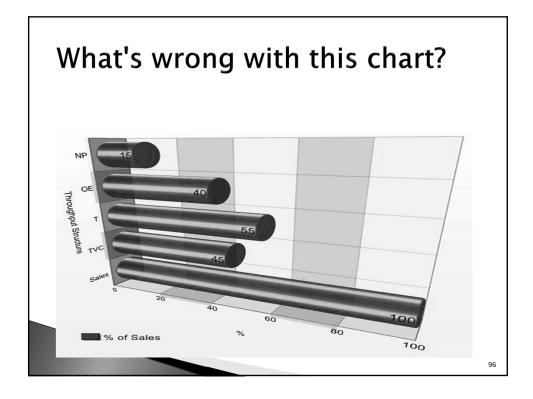


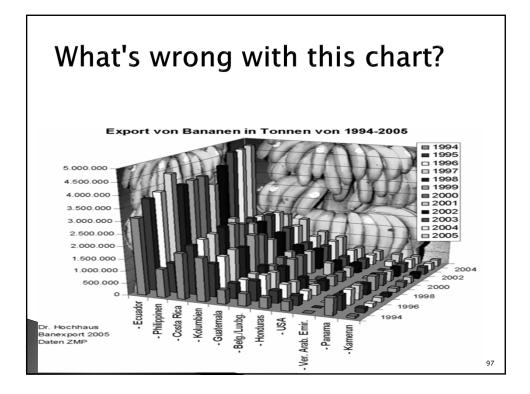


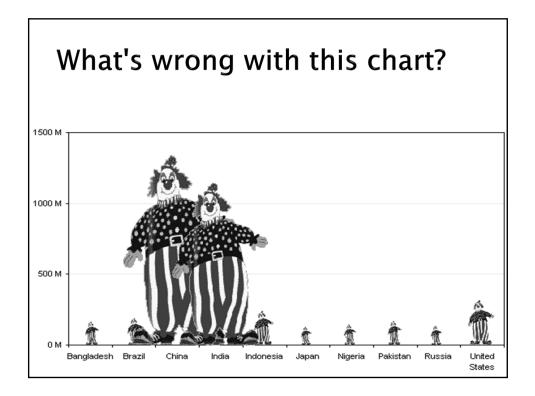


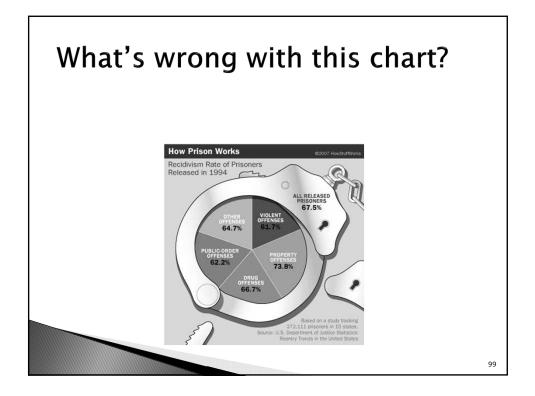


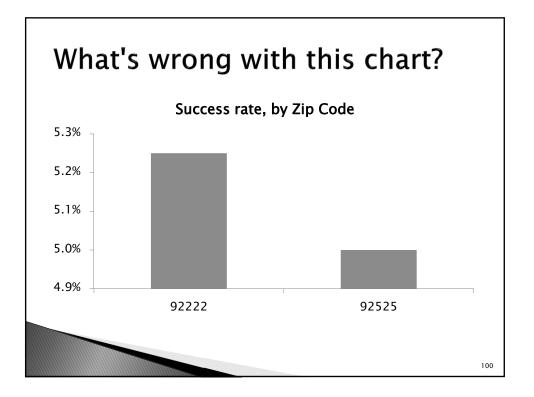


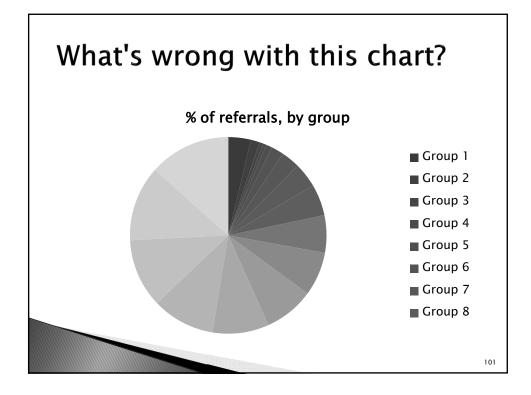




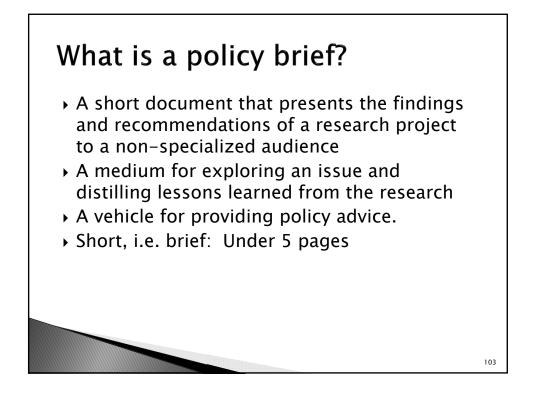


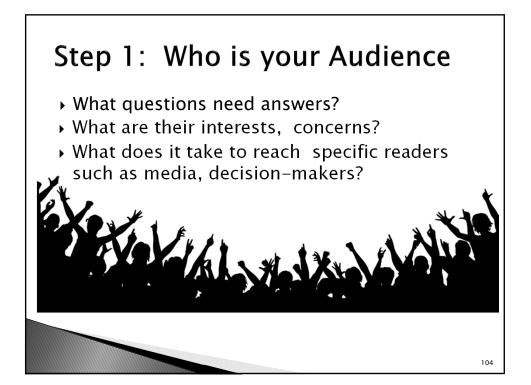


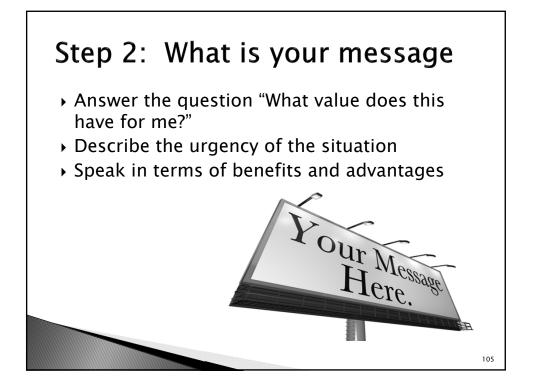


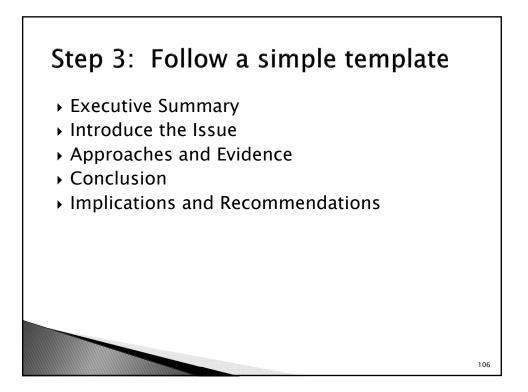












# Step 4: Conduct a 20-second test

- Did my primary message standout?
- Is it user friendly?
- Is it jargon-y or have undefined terms?
- Is the use of statistics appropriate?
- Check arguments, proof, persuasion









# CHIEF PROBATION OFFICERS OF CALIFORNIA

VOLUME 1 / ISSUE

# **Mandatory Supervision:**

# The Benefits of Evidence Based Supervision under Public Safety Realignment

State prison and probation are two ends of the response continuum traditionally available to judges who sentence felony offenders in California. Realignment has given the courts the additional tool of "split sentencing." A split sentence allows a judge to split the time of a sentence between a jail term and a period of supervision by a probation officer known as "mandatory supervision."

Mandatory supervision is defined as a court ordered period of time in the community under the supervision of the county probation department. Felony probation, mandatory supervision, and post release community supervision (PRCS) are all types of supervision that fall under the mandate of Probation Departments to enhance public safety and reduce recidivism.

Probation officers use validated assessment tools to hold offenders accountable and connect offenders to community services and programs that provide a greater chance of success. Opinion polls show that the public prefers community corrections and other alternatives to incarceration, seeing them as ways to improve community safety.<sup>1</sup>

CPOC's Second Realignment Perspectives Issue Brief will examine split sentences from a variety of angles, including its use around the state, how enhanced use could improve public safety, and the impact of current sentencing practices on county jails. The brief will also examine how evidence based strategies for supervision and interventions can help to improve community safety.

## What is Public Safety Realignment?

Enacted through California Assembly bills 109 and 117, realignment gave counties responsibility to manage two populations of offenders who have been the responsibility of the California Department of Corrections and Rehabilitation (CDCR). Post Release Community Supervision (PRCS) and local prison offenders (1170h) share the fact they have been convicted of a felony offense that is non-serious, non-violent, and non-sexual .

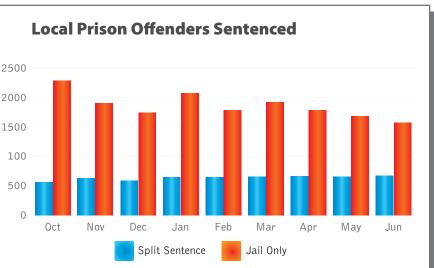
For more information, go to: http://www.cpoc.org/realignment

## Local Prison or PC1170 (h) (5)

is a prison term served in counties. It allows judges to impose a straight sentence of incarceration, or a split sentence of incarceration followed by a mandatory term of supervision for offenders convicted of a non-serious, non-violent and non-sexual offense.

## Split Sentencing in California under Realignment

Since the inception of realignment in October of 2011, there have been over 21,500 felony offenders sentenced to local prison terms using this new sentencing tool known in legal terms as a Penal Code section 1170(h)(5) sentence. This code section refers to those individuals who are now receiving local prison terms served through a combination of local jail and/or mandatory supervision. To date, approximately 5,000, or 23% of offenders sentenced to local prison terms have received split sentences (Figure 1).



#### **FIGURE 1**

The number of split-sentenced offenders has averaged 560 per month since the new sentencing options went into effect. However, the use of split sentencing is varied across the state, with some counties using it for nearly all local prison offenders, and some using it very rarely. Research shows that when a person is released from a confinement or incarcerated setting, a re-entry plan that ensures an individually targeted transition from jail to structured programs and supervision will provide the best opportunity to lower recidivism rates. Further, research "supports the conclusion that rehabilitation treatment is capable of reducing the re-offense rates of convicted

Continued on Page 3

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offenders and that it has greater capability for doing so than correctional sanctions."<sup>2</sup>

While statewide, 23% of total local prison sentences are split, the 10 largest counties use of split sentencing is only 20%, which makes this number somewhat misleading. Excluding these large counties shows that the remaining 48 counties use split sentences at 40%. Regionally, Central Valley, Bay Area, and Sacramento area counties have used split sentencing at nearly 40%, while Southern and Northern counties use it nearly 20 percent of the time.

Since Realignment began, approximately 16,500 offenders have been sentenced to a period of custody time (often referred to as "straight time,") with no mandatory supervision to follow. Once their local prison time is served, they must be released, with no supervision during the critical transition period, and no assistance reintegrating into the community. This

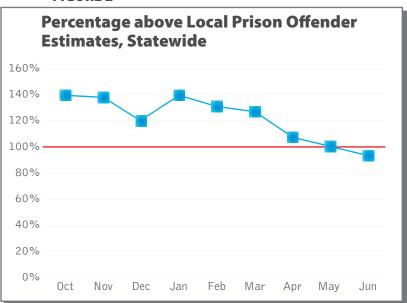
is the period when recidivism is most likely, and the research is clear – these offenders will have a higher likelihood of committing more crimes than those who were given a split sentence. These facts have two conclusions. First, sentencing offenders to straight time increases capacity need in our jails. Secondly and more importantly, based on research, people coming out of incarceration without any treatment have a lower likelihood of succeeding and are more likely to recidivate than those who are supervised and case managed.<sup>3</sup>

## **Impact on Jail Capacity**

The new local prison population under Realignment has caused additional stress to local jails, many of which were struggling with jail overcrowding before realignment. Many Sheriffs are directing Realignment funds to building additional jail beds or plan on applying for jail expansion funds to address the capacity issues. As counties planned for Realignment, documents published by the California Department of Corrections and Department of Finance estimated the number of additional inmates each county could expect. However, the number of local prison sentences is above estimates by 20% with a variety of experiences across the state that was primarily driven by early high amounts of local prison sentencing (Figure 2). Actuals have begun to approach projections in recent months, but still represent 4,000 more sentenced offenders than anticipated. The jail population statewide is 11% higher than the same period in 2011.<sup>4</sup>

Continued on Page 4

#### **FIGURE 2**



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Given this impact to jails, local justice systems are implementing a variety of fiscally responsible methods to manage jail and criminal justice populations while preserving public safety. Programs like supervised pre-trial release as well as post-sentence alternatives to custody like electronic monitoring can mitigate jail capacity issues. Maximizing the use of mandatory supervision under split sentencing is another option that helps mitigate the impact on jail capacity. It is also good for public safety and long term crime control in that it can provide maximum opportunity to implement evidence based interventions that reduce an offender's risk of recidivism. Split sentences allow for pre and post release planning and coordination with probation that creates a seamless and successful jail release to mandatory supervision. The transition from jail custody to supervision happens in a variety of ways.

Some county probation departments are assessing offenders while still in the jail for criminogenic needs (factors associated with recidivism that help determine appropriate interventions and case plans) and risk. This process leads to better re-entry services and ultimately better outcomes. When sentenced inmates are released from local jail, probation planning, followed by evidence based interventions and probation supervision will assist in achieving a positive re-entry into society by avoiding high recidivism rates and increase the chances of success.<sup>5</sup>

## **Probation Supervision Works**

National research shows that the most effective methods to reduce recidivism combine probation supervision with treatment and programs that address criminal behavior. When local prison offenders do not receive a split sentence they are released to the community at the end of their sentence and opportunities to change criminal behavior for this population are usually lost.<sup>6</sup> Split sentencing would diminish this risk to success by incorporating supervision by the probation officer into supervision and treatment plans.

As of June 30, 2,000, or 40% of people who received split sentences in the first 9 months of realignment had ended their custody term and are now supervised in the community by county probation officers. Probation supervises over 320,000 felony offenders in California, including 29,000 realigned offenders on Post Release Community Supervision (PRCS). California probation departments have made a commitment to, and have invested heavily in evidence based practices.

Continued on Page 5

### Post Release Community Supervision (PRCS)

are eligible offenders who would have previously been under parole supervision and will now be supervised by Probation after release from prison. PRCS can last for up to 3 years, but can end earlier if the offender does not violate terms of supervision resulting in a return to custody.

#### Continued from Page 4

Probation has reduced caseload sizes of high risk offenders to ensure proper levels of supervision by officers; implemented tools for assessing risks and needs; and trained officers in techniques proven to increase chances of successful supervision, and reduce recidivism. These investments have led to probation's demonstrated success in supervising California's felony offenders. California Probation Departments have made a commitment to the use of evidence based practices to match offender's actual needs with appropriate services and structure supervision around an offenders risk to reoffend.<sup>7</sup> These improvements and techniques should also be successful with the new realigned populations, but the entire justice system must be addressed in order to make the system successful and our communities safer.

The balanced approach of incarceration followed by a period of supervision using targeted interventions based on offender needs will do more to reduce recidivism than straight jail or incarceration sentences alone. National evidence supports the balanced approach of probation supervision as being more effective than a model focusing only on surveillance or only on therapeutic interventions to manage offender behavior.<sup>8</sup> Realignment is an opportunity to get the balance right between incarceration and supervision for both of these populations.

Split sentences are an important public safety tool that is currently being underutilized in some areas of California. Plea bargaining and sentencing practices vary, but the research is clear that a period of supervision following incarceration, rather than just incarceration will lead to reduced recidivism. Probation Departments have the tools and experience with felony offenders to effectively balance community safety with rehabilitation. The Chief Probation Officers of California believe, based on years of research and experience that California citizens are better served with increased use of split sentencing.

### What is Evidence Based Supervision?

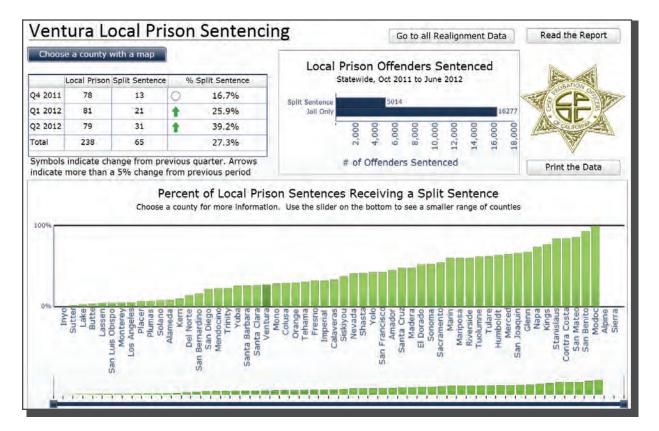
• Officers assess offender risk to re-offend and criminogenic needs using a validated assessment tool.

• The highest risk offenders are contacted and drug tested more often, as well as being more likely to have their homes searched.

• Officers work with offenders to create individualized case plans resulting in referrals to appropriate community based services.

Swift and Certain incentives and sanctions are used to motivate offender change

## To interact with the statewide data from this report: http://www.cpoc.org/assets/Realignment/splitsentencedashboard.swf



For questions about this report, please contact: Cpoc@cpoc.org, or visit our website at http://www.cpoc.org/realignment

ROBATIC

CALIFOR

CPOC would like to thank The James Irvine Foundation for its support of data collection and the publication of this report

<sup>1</sup>Pew Center on the States, Public Opinion on Sentencing and Corrections Policy in America. 2012. <u>http://www.pewstates.org/uploadedFiles/PCS\_Assets/2012/PEW\_NationalSurveyResearchPaper\_FINAL.pdf</u> <sup>2</sup>Lipsev, Mark W. and Cullen, Francis Y. 2007. The Effectiveness of Correctional Rehabilitation: A Review of Systematic Reviews. Annual Review of Law and Social Science. 3:297–320.

<sup>3</sup>Bonta, James et al., 2008. Exploring the Black Box of Corrections. Journal of Offender Rehabilitation, Vol. 47(3): 248–270.

<sup>4</sup>Board of State and Community Corrections, Quarterly Jail Survey, Quarter 2, 2012. <u>http://www.bscc.ca.gov/download.php?f=/2012\_2nd\_Qtr\_JPS\_full\_report.pdf</u>

<sup>5</sup>Bonta, 251-252.

<sup>6</sup>Taxman, Faye S., Douglas Young, James Byrne, Alexander Holsinger, and Donald Anspach. 2002. "From Prison Safety to Public Safety: Innovations in Offender Reentry." College Park, MD: University of Maryland, College Park. <sup>7</sup>Latessa, Edward J., Cullen, Francis T, and Gendreau, Paul. 2002. Beyond Correctional Quackery—Professionalism and the Possibility of Effective Treatment. Federal Probation. 66(2): 43-49. <sup>8</sup>Skeem, Jennifer, 2008. Back to the Future: From Klockars' Model of Effective Supervision to Evidence-Based Practice in Probation. Journal of Offender Rehabilitation; Vol. 47 (3): 220-247.

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# Imple The F

## Implementing Evidence-Based Practice in Community Corrections:

**The Principles of Effective Intervention** 



*Project Vision:* To build learning organizations that reduce recidivism through systemic integration of evidence-based principles in collaboration with community and justice partners.

## Introduction and Background

Until recently, community corrections has suffered from a lack of research that identified proven methods of reducing offender recidivism. Recent research efforts based on meta-analysis (the syntheses of data from many research studies) (McGuire, 2002; Sherman et al, 1998), cost-benefit analysis (Aos, 1998) and specific clinical trials (Henggeler et al, 1997; Meyers et al, 2002) have broken through this barrier and are now providing the field with indications of how to better reduce recidivism.

This research indicates that certain programs and intervention

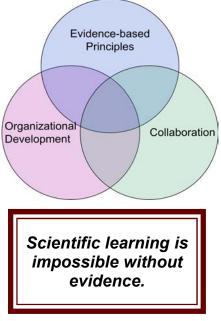
strategies, when applied to a variety of offender populations, reliably produce sustained reductions in recidivism. This same research literature suggests that few community supervision agencies (probation, parole, residential community corrections) in the U.S. are using these effective interventions and their related concepts/principles.

The conventional approach to supervision in this country emphasizes individual accountability from offenders and their supervising officers without consistently providing either with the skills, tools, and resources that science indicates are necessary to accomplish risk and recidivism reduction. Despite the evidence that indicates otherwise, officers continue to be trained and expected to meet minimal contact standards which stress rates of contacts and largely ignore the opportunities these contacts have for effectively reinforcing behavioral change. Officers and offenders are not so much clearly directed what to do, as what not to do.

An integrated and strategic model for evidence-based practice is necessary to adequately bridge the gap between current practice and evidence supported practice in community corrections. This model must incorporate both existing research findings and operational methods of implementation. The biggest challenge in adopting better interventions isn't identifying the interventions with the best evidence, so much as it is changing our existing systems to appropriately support the new innovations. Identifying interventions with good research support and realigning the necessary organizational infrastructure are both fundamental to evidence-based practice.

Specificity regarding the desired outcomes is essential to achieving system improvement. -Harris, 1986; O'Leary & Clear, 1997





## Evidence-Based Practice (EBP)

Evidence-based practice is a significant trend throughout all human service fields that emphasize outcomes. Interventions within corrections are considered effective when they reduce offender risk and subsequent recidivism and therefore make a positive long-term contribution to public safety.

This document presents a model or framework based on a set of principles for effective offender interventions within federal, state, local, or private community corrections systems. Models provide us with tangible reference points as we face unfamiliar tasks and experiences. Some models are very abstract, for example entailing only a set of testable propositions or principles. Other models, conversely, may be quite concrete and detail oriented.

The field of community corrections is beginning to recognize its need, not only for more effective interventions, but for models that integrate seemingly disparate *best practices* (Bogue 2002; Carey 2002; Corbett et al. 1999; Gornik 2001; Lipton et al. 2000; Taxman and Byrne 2001).

As a part of their strategy for facilitating the implementation of effective interventions, the National Institute of Correction (NIC), Community Corrections Division has entered into a collaborative effort with the Crime and Justice Institute to

(Continued on pg 2) Page 1

## Evidence-Based Practice (EBP) (con't.)

(Continued from pg 1)

develop a model for implementing evidence-based practice in criminal justice systems. This *Integrated Model* emphasizes the importance of focusing equally on evidence-based practices, organizational change, and collaboration to achieve successful and lasting change. The scope of the model is broad enough that it can be applied to all components of the criminal justice system (pretrial, jail, probation, parole, private/public, etc.) and across varying jurisdictions (local, county, state, etc.).

Community corrections will only develop into a "science" as it increases its commitment to measurable outcomes.

This model recognizes that simply expounding on scientific principles is not sufficient to guide the ongoing political and organizational change necessary to support implementation of evidence-based principles in a complex system. While this paper focuses on the evidence-based principles, there are two additional papers that focus on the other model components (organizational development and collaboration).

The evidence-based principles component of the integrated model highlights eight principles for effective offender interventions. The organization or system that is most successful in initiating and maintaining offender interventions and supervision practices consistent with these principles will likely realize the greatest recidivism reductions.

I		5
I	Clarifying Terms:	
i	The terms <i>best practices</i> , <i>what works</i> , and <i>evidence-based practice</i> (EBP) are often used interchangeably. While these <i>buzz words</i> refer to similar notions, pointing out the subtle distinctions between them helps to clarify the distinct meaning of <i>evidence-based practices</i> .	
	For example, <i>best practices</i> do not necessarily imply attention to outcomes, evidence, or measurable standards. Best practices are often based on the collective experience and wisdom of the field rather scientifically tested knowledge.	
	<i>What works</i> implies linkage to general outcomes, but does not specify the kind of outcomes desired (e.g. just desserts, deterrence, organizational efficiency, rehabilitation, etc.). Specificity regarding the desired outcomes is essential to achieving system improvement (Harris 1986; O'Leary and Clear 1997).	
	In contrast, <i>evidence-based practice</i> implies that 1) there is a definable outcome(s); 2) it is measurable; and 3) it is defined according to practical realities (recidivism, victim satisfaction, etc.). Thus, while these three terms are often used interchangeably, EBP is more appropriate for outcome focused human service disciplines (Ratcliffe et al, 2000; Tilley & Laycock, 2001; AMA, 1992; Springer et al, 2003; McDonald, 2003).	

Any agency interested in understanding and improving outcomes, must reckon with managing the operation as a set of highly interdependent systems.

Two fundamentally different approaches are necessary for such an alteration in priorities.

(See Appendix A.)

(See Appendix B.)

The current research on offender rehabilitation and behavioral change is now sufficient to enable corrections to make meaningful inferences regarding what works in our field to reduce recidivism and improve public safety. Based upon previous compilations of research findings and recommendations (Burrell, 2000; Carey, 2002; Currie, 1998; Corbett et al, 1999; Elliott et al, 2001; McGuire, 2002; Latessa et al, 2002; Sherman et al, 1998; Taxman & Byrne, 2001), there now exists a coherent framework of guiding principles. These principles are interdependent and each is supported by existing research. *(see Appendix A)* Page 2

## Evidence-Based Practice (EBP) (con't.)

The following framework of principles is listed in developmental order and they are all highly interdependent. For example, offender assessments must consider both risk to reoffend and criminogenic needs, in that order. Research indicates that resources are used more effectively when they are focused on higher-risk rather than lower-risk offenders, therefore considering offenders' risk to reoffend prior to addressing criminogenic needs allows agencies to target resources on higher-risk offenders (*see Appendix B*).

## Eight Evidence-Based Principles for Effective Interventions

1. Assess Actuarial Risk/Needs.

- 2. Enhance Intrinsic Motivation.
- 3. Target Interventions.
  - a. Risk Principle: Prioritize supervision and treatment resources for higher risk offenders.
  - b. Need Principle: Target interventions to criminogenic needs.
  - c. *Responsivity Principle*: Be responsive to temperament, learning style, motivation, culture, and gender when assigning programs.
  - d. Dosage: Structure 40-70% of high-risk offenders' time for 3-9 months.
  - e. Treatment: Integrate treatment into the full sentence/sanction requirements.
- 4. Skill Train with Directed Practice (use Cognitive Behavioral treatment methods).
- 5. Increase Positive Reinforcement.
- 6. Engage Ongoing Support in Natural Communities.
- 7. Measure Relevant Processes/Practices.
- 8. Provide Measurement Feedback.

#### 1) Assess Actuarial Risk/Needs.

Develop and maintain a complete system of ongoing offender risk screening / triage and needs assessments. Assessing offenders in a reliable and valid manner is a prerequisite for the effective management (i.e.: supervision and treatment) of offenders. Timely, relevant measures of offender risk and need at the individual and aggregate levels are essential for the implementation of numerous principles of best practice in corrections, (e.g., risk, need, and responsivity). Offender assessments are most reliable and valid when staff are formally trained to administer tools. Screening and assessment tools that focus on dynamic and static risk factors, profile criminogenic needs, and have been validated on similar populations are preferred. They should also be supported by sufficiently detailed and accurately written procedures.

#### **Questions to Ask:**

- Does the assessment tool we're using measure for criminogenic risk and need?
- How are officers trained to conduct the assessment interview?
- What quality assurance is in place to ensure that assessments are conducted appropriately?
- How is the assessment information captured and used in the development of case plans?

Offender assessment is as much an ongoing function as it is a formal event. Case information that is gathered informally through routine interactions and observations with offenders is just as important as formal assessment guided by instruments. Formal and informal offender assessments should reinforce one another. They should combine to enhance formal reassessments, case decisions, and working relations between practitioners and offenders throughout the jurisdiction of supervision.

(Andrews, et al, 1990; Andrews & Bonta, 1998; Gendreau, et al, 1996; Kropp, et al, 1995; Meehl, 1995; Clements, 1996)

#### 2) Enhance Intrinsic Motivation.

Staff should relate to offenders in interpersonally sensitive and constructive ways to enhance intrinsic motivation in offenders. Behavioral change is an *inside job*; for lasting change to occur, a level of intrinsic motivation is needed. Motivation to change is dynamic and the probability that change may occur is strongly influenced by interpersonal interactions, such as those with probation officers, treatment providers, and institution staff. Feelings of ambivalence that usually accompany change can be explored through motivational interviewing, a style and method of communication used to help people overcome their ambivalence regarding behavior changes. Research strongly suggests that motivational interviewing techniques, rather than persuasion tactics, effectively enhance motivation for initiating and maintaining behavior changes.

#### **Questions to Ask:**

- Are officers and program staff trained in motivational interviewing techniques?
- What quality assurance is in place?
- Are staff held accountable for using motivational interviewing techniques in their day-to-day interactions with offenders?

(Miller & Rollnick, 2002; Miller & Mount, 2001; Harper & Hardy, 2000; Ginsburg, et al, 2002; Ryan & Deci, 2000)

#### 3) Target Interventions.

- A. RISK PRINCIPLE: Prioritize supervision and treatment resources for higher risk offenders.
- B. NEED PRINCIPLE: Target interventions to criminogenic needs.
- C. RESPONSIVITY PRINCIPLE: Be responsive to temperament, learning style, motivation, gender, and culture when assigning to programs.
- D. DOSAGE: Structure 40-70% of high-risk offenders' time for 3-9 months.

E. TREATMENT PRINCIPLE: Integrate treatment into the full sentence/sanction requirements.

#### a) Risk Principle

Prioritize primary supervision and treatment resources for offenders who are at higher risk to re-offend. Research indicates that supervision and treatment resources that are focused on lower-risk offenders tend to produce little if any net positive effect on recidivism rates. Shifting these resources to higher risk offenders promotes harm-reduction and public safety because these offenders have greater need for pro-social skills and thinking, and are more likely to be frequent offenders. Reducing the recidivism rates of these higher risk offenders reaps a much larger *bang-for-the-buck*.

Successfully addressing this population requires smaller caseloads, the application of well developed case plans, and placement of offenders into sufficiently intense cognitive-behavioral interventions that target their specific criminogenic needs.

(Gendreau, 1997; Andrews & Bonta, 1998; Harland, 1996; Sherman, et al, 1998; McGuire, 2001, 2002)

#### b) Criminogenic Need Principle

Address offenders' greatest criminogenic needs. Offenders have a variety of needs, some of which are directly linked to criminal behavior. These criminogenic needs are dynamic risk factors that, when addressed or changed, affect the offender's risk for recidivism. Examples of criminogenic needs are: criminal personality; antisocial attitudes, values, and beliefs; low self control; criminal peers; substance abuse; and dysfunctional family. Based on an assessment of the offender, these criminogenic needs can be prioritized so that services are focused on the greatest criminogenic needs.

(Andrews & Bonta, 1998; Lipton, et al, 2000; Elliott, 2001; Harland, 1996)

(Continued on pg 5)

#### (Continued from pg 4)

#### c) Responsivity Principle

Responsivity requires that we consider individual characteristics when matching offenders to services. These characteristics include, but are not limited to: culture, gender, motivational stages, developmental stages, and learning styles. These factors influence an offender's responsiveness to different types of treatment.

The principle of responsivity also requires that offenders be provided with treatment that is proven effective with the offender population. Certain treatment strategies, such as cognitive-behavioral methodologies, have consistently produced reductions in recidivism with offenders under rigorous research conditions.

Providing appropriate responsivity to offenders involves selecting services in accordance with these factors, including:

a) Matching treatment type to offender; and

b) Matching style and methods of communication with offender's stage of change readiness.

(Guerra, 1995; Miller & Rollnick, 1991; Gordon, 1970; Williams, et al, 1995)

#### d) Dosage

Providing appropriate doses of services, pro-social structure, and supervision is a strategic application of resources. Higher risk offenders require significantly more initial structure and services than lower risk offenders. During the initial three to nine months post-release, 40%-70% of their free time should be clearly occupied with delineated routine and appropriate services, (e.g., outpatient treatment, employment assistance, education, etc.) Certain offender subpopulations (e.g., severely mentally ill, chronic dual diagnosed, etc.) commonly require strategic, extensive, and extended services. However, too often individuals within these subpopulations are neither explicitly identified nor provided a coordinated package of supervision/services. The evidence indicates that incomplete or uncoordinated approaches can have negative effects, often wasting resources.

(Palmer, 1995; Gendreau & Goggin, 1995; Steadman, 1995; Silverman, et al, 2000)

e) Treatment Principle

Treatment, particularly cognitive-behavioral types, should be applied as an integral part of the sentence/sanction process.

#### **Questions to Ask:**

- How do we manage offenders assessed as low risk to reoffend?
- Does our assessment tool assess for criminogenic need?
- How are criminogenic risk and need information incorporated into offender case plans?
- *How are offenders matched to treatment resources?*
- How structured are our caseplans for offenders, especially during the three to nine month period in the community after leaving an institution?
- How are staff held accountable for using assessment information to develop a case plan and then subsequently using that caseplan to manage an offender?

Integrate treatment into sentence/sanction requirements through assertive case management (taking a proactive and strategic approach to supervision and case planning). Delivering targeted and timely treatment interventions will provide the greatest long-term benefit to the community, the victim, and the offender. This does not necessarily apply to lower risk offenders, who should be diverted from the criminal justice and corrections systems whenever possible.

(Palmer, 1995; Clear, 1981; Taxman & Byrne, 2001; Currie, 1998; Petersilia, 1997, 2002, Andrews & Bonta, 1998)

#### 4) Skill Train with Directed Practice (using cognitive-behavioral treatment methods).

Provide evidence-based programming that emphasizes cognitivebehavioral strategies and is delivered by well trained staff. To successfully deliver this treatment to offenders, staff must understand antisocial thinking, social learning, and appropriate communication techniques. Skills are not just taught to the offender, but are practiced or role-played and the resulting pro-social attitudes and behaviors are positively reinforced by staff. Correctional agencies should prioritize, plan, and budget to predominantly implement programs that have been scientifically proven to reduce recidivism.

(Mihalic, et al, 2001; Satchel, 2001; Miller & Rollnick, 2002; Lipton, et al, 2000; Lipsey, 1993; McGuire, 2001, 2002; Aos, 2002)

#### 5) Increase Positive Reinforcement.

When learning new skills and making behavioral changes, human beings appear to respond better and maintain learned behaviors for longer periods of time, when approached with *carrots* rather than *sticks*. Behaviorists recommend applying a much higher ratio of positive reinforcements to negative reinforcements in order to better achieve sustained behavioral change. Research indicates that a ratio of *four positive to every* 

#### **Questions to Ask:**

- How are social learning techniques incorporated into the programs we deliver?
- How do we ensure that our contracted service providers are delivering services in alignment with social learning theory?
- Are the programs we deliver and contract for based on scientific evidence of recidivism reduction?

#### Questions to Ask:

- Do we model positive reinforcement techniques in our day-to-day interactions with our co-workers?
- Do our staff understand and use the four-toone theory in their interactions with offenders?

*one negative* reinforcement is optimal for promoting behavior changes. These rewards do not have to be applied consistently to be effective (as negative reinforcement does) but can be applied randomly.

Increasing positive reinforcement should not be done at the expense of or undermine administering swift, certain, and real responses for negative and unacceptable behavior. Offenders having problems with responsible self-regulation generally respond positively to reasonable and reliable additional structure and boundaries. Offenders may initially overreact to new demands for accountability, seek to evade detection or consequences, and fail to recognize any personal responsibility. However, with exposure to clear rules that are consistently (and swiftly) enforced with appropriate graduated consequences, offenders and people in general, will tend to comply in the direction of the most rewards and least punishments.

This type of extrinsic motivation can often be useful for beginning the process of behavior change.

(Gendreau & Goggin, 1995; Meyers & Smith, 1995; Higgins & Silverman, 1999; Azrin, 1980; Bandura et al, 1963; Bandura, 1996)

#### 6) Engage On-going Support in Natural Communities.

Realign and actively engage pro-social supports for offenders in their communities. Research indicates that many successful interventions with extreme populations (e.g., inner city substance abusers, homeless, dual diagnosed) actively recruit and use family members, spouses, and supportive others in the offender's immediate environment to positively reinforce desired new behaviors. This Community Reinforcement Approach (CRA) has been found effective for a variety of behaviors (e.g., unemployment, alcoholism, substance abuse, and marital conflicts). In addition, relatively recent research now indicates the efficacy of twelve step programs, religious activities, and

#### **Questions to Ask:**

- Do we engage community supports for offenders as a regular part of case planning?
- How do we measure our community network contacts as they relate to an offender?

restorative justice initiatives that are geared towards improving bonds and ties to pro-social community members.

(Azrin, & Besalel, 1980; Emrick et al, 1993; Higgins & Silverman, 1999; Meyers & Smith, 1997; Wallace, 1989; Project MATCH Research Group, 1997; Bonta et al, 2002; O'Connor & Perryclear, 2003; Ricks, 1974; Clear & Sumter; 2003; Meyers et al, 2002)

#### 7) Measure Relevant Processes/Practices.

Accurate and detailed documentation of case information, along with a formal and valid mechanism for measuring outcomes, is the foundation of evidence-based practice. Agencies must routinely assess offender change in cognitive and skill development, and evaluate offender recidivism, if services are to remain effective.

In addition to routinely measuring and documenting offender change, staff performance should also be regularly assessed. Staff that are periodically evaluated for performance achieve greater fidelity to program design, service delivery principles, and outcomes. Staff whose performance is not consistently monitored, measured, and subsequently reinforced work less cohesively, more frequently at cross-purposes and provide less support to the agency mission.

(Henggeler et al, 1997; Milhalic & Irwin, 2003; Miller, 1988; Meyers et al, 1995; Azrin, 1982; Meyers, 2002; Hanson & Harris, 1998; Waltz et al, 1993; Hogue et al, 1998; Miller & Mount, 2001; Gendreau et al, 1996; Dilulio, 1993)

#### **Questions to Ask:**

- What data do we collect regarding offender assessment and case management?
- How do we measure incremental offender change while they are under supervision?
- What are our outcome measures and how do we track them?
- How do we measure staff performance? What data do we use? How is that data collected?

#### 8) Provide Measurement Feedback.

Once a method for measuring relevant processes / practices is in place (principle seven), the information must be used to monitor process and change. Providing feedback to offenders regarding their progress builds accountability and is associated with enhanced motivation for change, lower treatment attrition, and improved outcomes (e.g., reduced drink/drug days; treatment engagement; goal achievement).

The same is true within an organization. Monitoring delivery of services and fidelity to procedures helps build accountability and maintain integrity to the agency's mission. Regular performance audits and case reviews with an eye toward improved outcomes, keep staff focused on the ultimate goal of reduced recidivism through the use of evidence-based principles.

#### **Questions to Ask:**

- How is information regarding offender change and outcomes shared with officers?
   With offenders?
- With whom do we share information regarding outcome measures?
- How is staff performance data used in the performance evaluation process?

(Miller, 1988; Project Match Research Group, 1997; Agostinelli et al, 1995; Alvero et al, 2001; Baer et al, 1992; Decker, 1983; Luderman, 1991; Miller, 1995; Zemke, 2001; Elliott, 1980)

## Conclusion

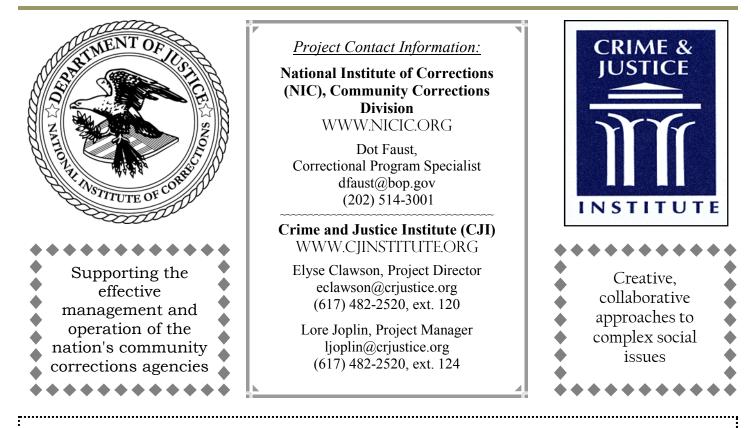
Aligning these evidence-based principles with the core components of an agency is a consummate challenge and will largely determine the impact the agency has on sustained reductions in recidivism. In order to accomplish this shift to an outcome orientation, practitioners must be prepared to dedicate themselves to a mission that focuses on achieving sustained reductions in recidivism. The scientific principles presented in this document are unlikely to produce a mandate for redirecting and rebuilding an agency's mission by themselves. Leadership in organizational change and collaboration for systemic change are also necessary.

The framework of principles and the developmental model they comprise can and should be operationalized at three critical levels: 1) the individual case; 2) the agency; and 3) the system. At each of these levels thorough, comprehensive, and strategic planning will be necessary in order to succeed. Identifying, prioritizing, and formulating well-timed plans for addressing such particular issues are tasks requiring system collaboration and a focus on organizational development.

A final caveat here is a caution about implementation; the devil's in the details. Though the track record for program implementation in corrections may not be especially stellar, there is helpful literature regarding implementation principles. Prior to embarking on any implementation or strategic planning project, a succinct review of this literature is recommended (Mihalic & Irwin, 2003; Ellickson et al, 1983; Durlak, 1998; Gendreau et al, 1999; Gottfredson et al, 2000; Henggeler et al, 1997; Harris & Smith, 1996).

Initial assessment followed by motivational enhancement will help staff to prepare for the significant changes ahead. (See Appendix C.) At an organizational level, gaining appreciation for outcome measurement begins with establishing relevant performance measurement (See Appendix D.)

Too often programs or practices are promoted as having research support without any regard for either the quality or the research methods that were employed. (See Appendix E.)



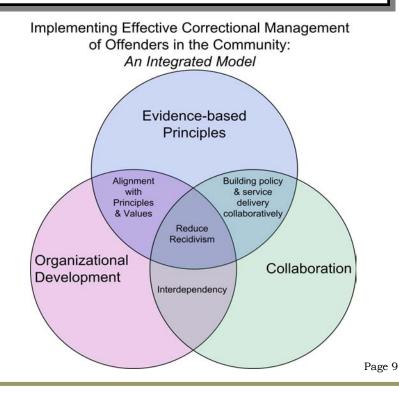
Special recognition and deepest thanks go to the following project team members who contributed to these documents:

Brad Bogue (primary author), Nancy Campbell, Mark Carey, Elyse Clawson, Dot Faust, Kate Florio, Lore Joplin, George Keiser, Billy Wasson, and William Woodward

The project team is committed to enhancing community corrections systems to better reduce recidivism using research-supported principles.

#### **List of Appendices**

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- Appendix B (pages 10-11): Implementing the Principles of Evidence-Based Practice
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## **Appendix A:** Components of Correctional Interventions

One way to deconstruct a community corrections treatment program for planning or evaluation purposes is to consider the separate aspects of the program experienced by an offender that might affect their outcome or potential for behavioral change. Researchers and practitioners are quick to recognize a number of common elements in all programs that have some potential impact on outcomes such as recidivism:

(The Skills of Staff)—a wide array of ongoing interpersonal relations specifically pertaining to the communication skills and interactions exercised between staff and offenders;	
(Decisions on Program Assignment)—continuous programmatic decisions that match offenders to varying levels and types of supervision conditions;	
$\ $ ( <b>Programming</b> ) – services, i.e. both treatment and monitoring interventions;	
(Sanctions)—determinations of accountability for assigned obligations and accompanying compliance consequences, i.e., both positive and negative reinforcements;	
(Community Linkages)—formal and informal interfaces with various community organiza- tions and groups;	
$ \begin{array}{c} \blacksquare \\ \blacksquare $	
(Organization)—internal (operational) and external (policy environment) organizational structures, management techniques, and culture.	

Each of these factors can be construed as separate processes that interact with each other continuously in any community corrections setting (e.g., probation, parole, outpatient treatment, residential, etc.). Depending on how well the processes are aligned and managed, they can either enhance or diminish successful outcomes. An agency, for example, might provide an excellent cognitive skill-building curriculum that has good research support but is delivered by staff with relatively limited clinical skills. Conversely, an agency might be structured so that there is no differentiation of services (one size fits all) and the programming has limited or negligible research support, but staff's overall skills are excellent. A broad interpretation of the existing research suggests that each of the above seven factors have their own independent effect on successful outcomes.

Any agency interested in understanding and improving outcomes, must reckon with managing the operation as a set of highly interdependent systems. An agency's ability to become progressively more accountable through the utilization of reliable internal (e.g., information) controls is integral to EBP. This approach is based on established business management practices for measuring performance objectives and achieving greater accountability for specified outcomes. Providing routine and accurate performance feedback to staff is associated with improved productivity, profit, and other outcomes.

## **Appendix B:** Implementing the Principles of Evidence-Based Practice

Implementing the principles of evidence-based practice in corrections is a tremendous challenge requiring strong leadership and commitment. Such an undertaking involves more than simply implementing a research recommended program or two. Minimally, EBP involves:

a) developing staff knowledge, skills, and attitudes congruent with current research-supported practice (principles #1-8);

- b) implementing offender programming consistent with research recommendations (#2-6);
- c) sufficiently monitoring staff and offender programming to identify discrepancies or fidelity issues (#7);
- d) routinely obtaining verifiable outcome evidence (#8) associated with staff performance and offender programming.

Implementing these functions is tantamount to revolutionizing most corrections organizations. Nevertheless, many agencies are taking on this challenge and have begun to increase their focus on outcomes and shift their priorities. Two fundamentally different approaches are necessary for such an alteration in priorities. One brings insights gleaned from external research evidence to bear on internal organizational practices. The other increases organizational capacity to internally measure performance and outcomes for current practice. When these two interdependent strategies are employed, an agency acquires the ability to understand what's necessary and practicable to improve its outcomes. The following describes how these approaches support EBP in slightly different ways.

## Outside (Evidence) — In Approach

Adopting research-supported program models fosters an outcome orientation and minimizes the syndrome of 'reinventing-the-wheel'. Insights, practices, and intervention strategies gleaned from external research can significantly improve the efficacy any program has if implemented with appropriate fidelity.

One approach to EBP is to pay strict attention to the external research and carefully introduce those programs or interventions that are supported by the best research evidence. There are a growing number of examples of internal promotion of external evidence-based programs. The Blueprint Project, conducted by the Center for the Study and Prevention of Violence uses independent outside research to promote the implementation of effective juvenile programs.

The National Institute of Justice commissioned research investigators to conduct similar reviews of both adult and juvenile offender programming, recommending programs according to the caliber of the research support (Sherman et al, 1998). The Washington State Institute for Public Policy regularly conducts and publishes similar reviews for adult and juvenile offender programming implemented in Washington (Aos, 1998).

What these strategies have in common is the promotion of researchsupported external program models within internal implementation and operations. These are *outside-in* applications striving to replicate proven models with fidelity. This approach is limited by the fact that environmental, cultural, and operational features vary between organizations and often have significant effect on program efficacy (Palmer 1995). Thus, the second *inside-out* approach to evidence-based practice attends to these internal factors.

## The Blueprint Project

The Blueprint Project, conducted by the Center for the Study and Prevention of Violence (CSPV), examined literature on over 500 different program interventions with at-risk or delinquent youth. Ten programs met CSPV's strict criteria for scientific support. These were labeled *Blueprint* programs, while programs that partially met the criteria were designated *Promising* (Mihalic et al. 2001).

CSPV documented the operational details of these programs and distributed the descriptions to practitioners, emphasizing the importance of maintaining fidelity to the program models.

Programs that were scientifically determined to produce systematic and significant results were identified and promoted through a central clearing-house.

### Appendix B: Implementing the Principles of Evidence-Based Practice (con't.)

### Inside (Evidence) — Out Approach

Developing and maintaining ongoing internal controls, particularly information controls related to key service components (e.g., treatment dosage, treatment adherence measures, etc.) ensures greater operational ability to effect outcomes.

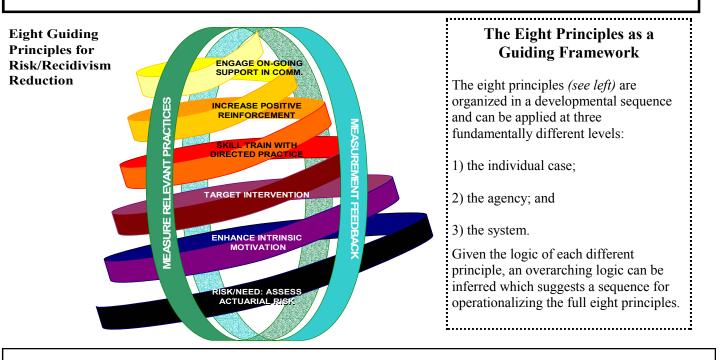
The program evaluation, performance, and audit research literature emphasizes that insufficient information controls not only hamper program assessment, but impede program performance (Mee-Lee et al, 1996; Burrell, 1998; Lipton et al, 2000; Dilulio, 1993). Such internal control issues appear not only in program evaluation research, but also in organizational development, business, and systems analysis.

Internal controls provide information and mechanisms for ensuring that an agency will accomplish its mission (i.e., recidivism reduction). Agencies with *custodial* corrections orientations that emphasize *just-desserts* applications rarely utilize the same level of sophisticated information controls required by outcome-oriented corrections (Burrell 1998; Dilulio 1993; Lipton et al. 2000). Therefore, developing new methods for gathering operational information and then sharing and learning from them is a large part of the transition from *custodial* to outcome orientation in corrections.

Information controls necessary for implementing new or *best* practices specifically focus on key components within the desired practices. They include an ongoing process of identifying, measuring, and reporting key operational processes and functions:

$\Rightarrow$ Offender measures:	$\Rightarrow$ Operational measures:	$\Rightarrow$ Staff measures:
-Risk Level -Criminogenic Needs	-Program Integrity	-Interpersonal skills -Abilities to discern anti-social thinking and behavior
-Motivation	-Program Quality Assurance Norms	

## Appendix C: Applying the Principles at the Case, Agency and System Levels



#### **Case Level**

At the case level, the logical implication is that one must assess (principle #1) prior to triage or targeting intervention (#3), and that it is beneficial to begin building offender motivation (#2) prior to engaging these offenders in skill building activities (# 4). Similarly, positively reinforcing new skills (#5) has more relevancy after the skills have been introduced and trained (#4) and at least partially in advance of the offender's realignment with pro-social groups and friends (#6). The seventh (measure relevant practices) and eighth (provide feedback) principles need to follow the activities described throughout all the proceeding principles. Assessing an offender's readiness to change as well as ability to use newly acquired skills is possible anywhere along the case management continuum. These last two principles can and should be applicable after any of the earlier principles but they also can be considered cumulative and provide feedback on the entire case management process.

#### **Agency Level**

The principles, when applied at the agency level, assist with more closely aligning staff behavior and agency operations with EBP. Initial assessment followed by motivational enhancement will help staff

to prepare for the significant changes ahead. Agency priorities must be clarified and new protocols established and trained. Increasing positive rewards for staff who demonstrate new skills and proficiency is straightforward and an accepted standard in many organizations. The sixth principle regarding providing ongoing support in natural communities can be related to teamwork within the agency as well as with external agency stakeholders. The seventh and eighth principles are primarily about developing quality assurance systems, both to provide outcome data within the agency, but also to provide data to assist with marketing the agency to external stakeholders.

#### **System Level**

The application of the Framework Principles at the system level is fundamentally no different than the agency level in terms of sequence and recommended order though it is both the most critical and challenging level. Funding, for most systems, channels through state and local agencies having either population jurisdiction or oversight responsibilities. Demonstrating the value of EBP is crucial at this level, in order to effectively engage the debate for future funding. However, as the scope and complexity increases with a system-wide application of these principles, the difficulties and challenges increase for communication, accountability, and sustaining morale. Therefore, in addition to adherence to a

coherent strategy for EBP, development of implementation plans is warranted. Another distinction in applying the principles at the system level is the need for policy integration. The principles for EBP must be understood and supported by policy makers so that appropriate policy development coincides effectively with implementation. Once a system decisively directs its mission towards an outcome such as sustained reductions in recidivism, it becomes incumbent on the system to deliberately rely upon scientific methods and principles.

## Appendix D: Seven Recommended Guidelines for Implementing Effective Interventions

#### Seven Recommended Guidelines for Implementing Effective Interventions

- *I* Limit new projects to mission-related initiatives.
- II. Assess progress of implementation processes using quantifiable data.
- III. Acknowledge and accommodate professional over-rides with adequate accountability.
- IV. Focus on staff development, including awareness of research, skill development, and management of behavioral and organizational change processes, within the context of a complete training or human resource development program.
- *V.* Routinely measure staff practices (attitudes, knowledge, and skills) that are considered related to outcomes.
- VI. Provide staff timely, relevant, and accurate feedback regarding performance related to outcomes.

VII. Utilize high levels of data-driven advocacy and brokerage to enable appropriate community services.

These recommended guidelines for implementing effective interventions are based on recent preliminary implementation research as well as some of the collective experience and wisdom of the field. They are not necessarily based on scientifically tested knowledge.

#### I. Limit new projects to mission-related initiatives.

Clear identification and focus upon mission is critical within business and the best-run human service agencies. When *mission scope creep* occurs, it has a negative effect on progress, morale, and outcomes.

(Harris & Smith, 1996; Currie, 1998; Ellickson et al, 1983)

II. Assess progress of implementation processes using quantifiable data.

Monitoring system implementations for current, valid information regarding progress, obstacles, and direction changes is pivotal to project success. These monitoring systems can not always be designed in advance but implementation plans should include provisions for obtaining this type of ongoing information.

(Harris & Smith, 1996; Burrell, 2000; Dilulio, 1993; Palmer, 1995; Mihalic & Irwin, 2003; Gottfredson et al, 2002)

## Appendix D: Seven Recommended Guidelines for Implementing Effective Interventions (con't.)

III. Acknowledge and accommodate professional over-rides with adequate accountability.

No assessment tool, no matter how sophisticated, can (or should) replace a qualified practitioner's professional judgment. In certain instances, only human judgment can integrate and make the necessary subtle distinctions to adequately recognize and reinforce moral or behavioral progress. All professional over-rides need to be adequately documented, defensible, and made explicit.

(Burrell, 2000; Clear, 1981; Andrews, et al, 1990; Kropp, et al, 1995; Gendreau et al, 1999)

# *IV. Focus on staff development, including awareness of research, skill development, and management of behavioral and organizational change processes, within the context of a complete training or human resource development program.*

Staff need to develop reasonable familiarity with relevant research. Beginning in the 1990's there has been tremendous growth in the volume and quality of corrections related research. Much of the more recent research is directly relevant to everyday operational practice, therefore it is incumbent on professionals in the field to keep abreast of this literature. The current research literature includes *in-house* investigations, internet resources, and other public sector articles, as well as professional and academic journal publications. This literature is also evolving and becoming more international and inter-disciplinary in scope.

It is the responsibility of agency leadership to assist in the successful dissemination of recent research findings relevant to respective classes of job performers. Informed administrators, information officers, trainers, and other organizational *ambassadors* are necessary to facilitate this function in larger agencies or systems. Effective fulfillment of this principle is essential to promoting *Learning Organizations*.

(Latessa, et al, 2002; Elliott, 1980; Harland, 1996; Andrews, 1989; Miller & Rollnick, 2002; Taxman & Byrne, 2001; Taxman, 2002; Baer, et al, 1999; Gendreau, et al, 1999; Durlak, 1998)

V. Routinely measure staff practices (attitudes, knowledge, and skills) that are considered related to outcomes.

Critical staff processes and practices should be routinely monitored in an accurate and objective manner to inform managers of the state of the operation. These measures occur at multiple levels (e.g., aggregate, for example: turnover and organizational cultural beliefs; and individual, for example: interviewing skills and ability to identify thinking errors) and should be organized accordingly and maintained in ongoing databases for the purposes of both supporting management and staff development.

(Gendreau, et al, 1999; Henggeler et al, 1997; Miller & Mount, 2001)

## Appendix D: Seven Recommended Guidelines for Implementing Effective Interventions (con't.)

## *VI. Provide staff timely, relevant, and accurate feedback regarding performance related to outcomes.*

Programs and agencies that want to produce better outcomes will ultimately learn to pay closer and more attention to what is involved in generating their own outcomes. Initially, agencies have much to learn and incorporate into policy from the generic research literature in corrections. Ultimately however, in order to achieve deeper adaptations and organizational support of effective practices, immediate, objective, and internal measures of the respective agency will be routinely required.

At an organizational level, gaining appreciation for outcome measurement begins with establishing relevant performance measures. Measuring performance implies a relationship between a given activity and a given output or outcome. These types of measures can be established at either the agency (aggregate) or individual job performer levels and there are several important issues related to establishing effective performance measures:

- 1) If a certain kind of performance is worth measuring, it's worth measuring right (with reliability and validity);
- 2) Any kind of staff or offender activity is worth measuring if it is reliably related to desirable outcomes;
- 3) If performance measures satisfy both the above conditions, these measures should be routinely generated and made available to staff and/or offenders, in the most user-friendly manner possible.

The primary ingredients of any correctional system or treatment program are staff and offenders. Therefore when a commitment emerges to develop greater focus on outcomes, it behooves management to learn how to better measure staff, offenders, and their related interactions. The latter is an evolutionary and ongoing process rather than change of operational components. Some examples of promising performance measures at the organizational level are: proportion of resource gaps at various treatment levels; degree of implementation and program fidelity; staff turnover; and organizational cultural norms. Examples of promising job performer level measures are: adequacy of communication (motivational interviewing) skills; consistency in certain functions (e.g., assessment, case planning, treatment referrals); and caseload average *gain* scores for offender dynamic risk indicators.

(Burrell, 1998; Lipton, et al, 2000; Carey, 2002; O'Leary & Clear, 1997; Bogue, 2002; Maple, 2000; Henggeler, 1997; Miller & Mount, 2001)

## *VII. Utilize high levels of data-driven advocacy and brokerage to enable appropriate community services.*

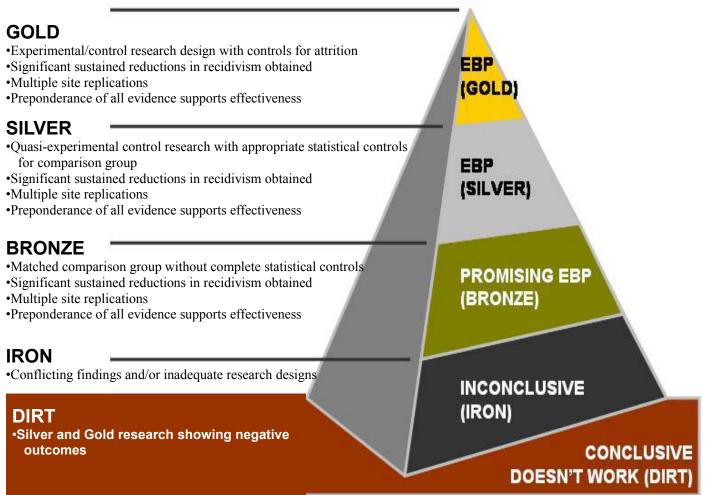
In terms of producing sustained reductions in recidivism, the research indicates that the treatment service network and infrastructure is the most valuable resource that criminal justice agencies can access. Collaborating and providing research and quality assurance support to local service providers enhances interagency understanding, service credibility, and longer-term planning efforts. It also contributes to the stability and expansion of treatment services.

(Corbette, et al, 1999; Gendreau & Goggin, 1995; Gendreau, et al, 1993; Meyers & Smith, 1995; Bogue, 2002; Maple, 1999)

## **Appendix E:** Levels of Research Evidence

This paper identifies eight principles from the research literature that are related to reduced recidivism outcomes. Research does not support each of these principles with equal volume and quality, and even if it did, each principle would not necessarily have similar effects on outcomes. Too often programs or practices are promoted as having research support without any regard for either the quality or the research methods that were employed. Consequently, we have established a research support gradient (*below*) indicating current research support for each principle. All of the eight principles for effective intervention fall between *EBP (Gold)* and *Promising EBP (Bronze)* in research support.

## **RESEARCH SUPPORT GRADIENT**



The five criteria listed above are similar to what has already been employed in a number of nationally recognized projects such as the Blueprints for Violence Prevention (Mihalic et al, 2001) and the National Institute of Justice's independent review of crime prevention programs (Sherman et al, 1998).

The highest quality research support depicted in this schema (gold level) reflects interventions and practices that have been evaluated with experimental/control design and with multiple site replications that concluded significant sustained reductions in recidivism were associated with the intervention. The criteria for the next levels of support progressively decrease in terms of research rigor requirements (silver and bronze) but all the top three levels require that a preponderance of all evidence supports effectiveness. The next rung lower in support (iron) is reserved for programs that have inconclusive support regarding their efficacy. Finally, the lowest level designation (dirt) is reserved for those programs that have research (utilizing methods and criteria associated with gold and silver levels) but the findings were negative and the programs were determined not effective.

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						<b>Operational Definition</b>
						Data Elements required/Calculation
						Data Source
						Validity Assessment?

- 1. Keep it short.
- 2. Keep the respondent's task simple.
- 3. Provide clear instructions.
- 4. Use simple, clear, unambiguous language.
- 5. Give a rationale for any item for which the purpose is unclear.
- 6. Check for unwarranted assumptions implicit in the question.
- 7. Word questions in ways that don't give clues about preferred or more desirable responses.
- 8. Determine in advance how you will code the responses.
- 9. Check for consistency.
- 10. Conduct one or more pilot tests to determine the validity of your questionnaire.
- 11. Scrutinize the almost-final product one more time to make sure it addresses your needs.
- 12. Make the questionnaire attractive and professional looking.

## A Brief Guide to Questionnaire Development

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## Introduction

Most people have responded to so many questionnaires in their lives that they have little concern when it becomes necessary to construct one of their own. Unfortunately the results are often unsatisfactory. One reason for this outcome may be that many of the questionnaires in current use have deficiencies which are consciously or unconsciously incorporated into new questionnaires by inexperienced developers. Another likely cause is inadequate consideration of aspects of the questionnaire process separate from the instrument itself, such as how the responses will be analyzed to answer the related research questions or how to account for nonreturns from a mailed questionnaire.

These problems are sufficiently prevalent that numerous books and journal articles have been written addressing them (e.g., see Dillman, 1978). Also, various educational and proprietary organizations regularly offer workshops in questionnaire development. Therefore, this booklet is intended to identify some of the more prevalent problems in questionnaire development and to suggest ways of avoiding them. This paper does not cover the development of inventories designed to measure psychological constructs, which would require a deeper discussion of psychometric theory than is feasible here. Instead, the focus will be on questionnaires designed to collect factual information and opinions.

## **Preliminary Considerations**

Some questionnaires give the impression that their authors tried to think of every conceivable question that might be asked with respect to the general topic of concern. Alternatively, a committee may have incorporated all of the questions generated by its members. Stringent efforts should be made to avoid such shotgun approaches, because they tend to yield very long questionnaires often with many questions relevant to only small proportions of the sample. The result is annoyance and frustration on the part of many responders. They resent the time it takes to answer and are likely to feel their responses are unimportant if many of the questionnaires and incomplete or inaccurate responses on questionnaires administered directly. These difficulties can yield largely useless results. Avoiding them is relatively simple but does require some time and effort.

The first step is mainly one of mental discipline. The investigator must define precisely the information desired and endeavor to write as few questions as possible to obtain it. Peripheral questions and ones to find out "something that might just be nice to know" must be avoided. The author should consult colleagues and potential consumers of the results in this process.

A second step, needed for development of all but the simplest questionnaires, is to obtain feedback from a small but representative sample of potential responders. This activity may

involve no more than informal, open-ended interviews with several potential responders. However, it is better to ask such a group to criticize a preliminary version of the questionnaire. In this case, they should first answer the questions just as if they were research subjects. The purpose of these activities is to determine relevance of the questions and the extent to which there may be problems in obtaining responses. For example, it might be determined that responders are likely to be offended by a certain type of question or that a line of questions misconstrues the nature of a problem the responders encounter.

The process just described should not be confused with a field trial of a tentative version of the questionnaire. This activity also is desirable in many cases but has different purposes and should always follow the more informal review process just described. A field trial will be desirable or necessary if there is substantial uncertainty in areas such as:

- 1) Response rate. If a field trial of a mailed questionnaire yields an unsatisfactory response rate, design changes or different data gathering procedures must be undertaken.
- 2) Question applicability. Even though approved by reviewers, some questions may prove redundant. For example, everyone or nearly everyone may be in the same answer category for some questions, thus making them unnecessary.
- 3) Question performance. The field-trial response distributions for some questions may clearly indicate that they are defective. Also, pairs or sequences of questions may yield inconsistent responses from a number of trial responders, thus indicating the need for rewording or changing the response mode.

## Writing the Questionnaire Items

#### **Open-Ended Questions**

While these seem easy to write, in most cases they should be avoided. A major reason is variation in willingness and ability to respond in writing. Unless the sample is very homogeneous with respect to these two characteristics, response bias is likely. Open-ended questions are quite likely to suppress responses from the less literate segments of a population or from responders who are less concerned about the topic at hand.

A reason frequently given for using open-ended questions is the capture of unsuspected information. This reason is valid for brief, informal questionnaires to small groups, say, ones with fewer than 50 responders. In this case, a simple listing of the responses to each question usually conveys their overall character. However, in the case of a larger sample, it is necessary to categorize the responses to each question in order to analyze them. This process is time-consuming and introduces error. It is far better to determine the prevalent categories in advance and ask the responders to select among those offered. In most cases, obscure categories applicable only to very small minorities of responders should not be included. A preliminary, open-ended questionnaire sent to a small sample is often a good way to establish the prevalent categories in advance.

Contrary to the preceding discussion, there are circumstances under which it may be better to ask the responders to fill in blanks. This is the case when the responses are to be hand entered into computer data sets and when the response possibilities are very clearly limited and specific. For example, questions concerning age, state of residence, or credit-hours earned may be more easily answered by filling in blanks than by selecting among categories. If the answers are numerical, this response mode may also enhance the power of inferential statistical procedures. If handwritten answers are to be assigned to categories for analysis, flexibility in category determination becomes possible. However, if the responders are likely to be estimating their answers, it is usually better to offer response categories (e.g., to inquire about body weight, grade-point average, annual income, or distance to work).

#### **Objective Questions**

With a few exceptions, the category "Other" should be avoided as a response option, especially when it occurs at the end of a long list of fairly lengthy choices. Careless responders will overlook the option they should have designated and conveniently mark the option "other." Other responders will be hairsplitters and will reject an option for some trivial reason when it really applies, also marking "other." "Other (specify)" or "other (explain)" may permit recoding these erroneous responses to the extent that the responders take the trouble to write coherent explanations, but this practice is time-consuming and probably yields no better results than the simple omission of "other." Of course, the decision not to offer the option "other" should be made only after a careful determination of the categories needed to classify nearly all of the potential responses. Then, if a few responders find that, for an item or two, there is no applicable response, little harm is done.

An exception to the foregoing advice is any case in which the categories are clear-cut, few in number, and such that some responders might feel uncomfortable in the absence of an applicable response. For example, if nearly all responders would unhesitatingly classify themselves as either black or white, the following item would serve well:

Race: 1) Black 2) White 3) Other

#### Also consider:

Source of automobile: 1) Purchased new 2) Purchased used 3) Other

"Other (specify)" should be used only when the investigator has been unable to establish the prevalent categories of response with reasonable certainty. In this case, the investigator is clearly obligated to categorize and report the "other" responses as if the question were open-ended. Often the need for "other" reflects inadequate efforts to determine the categories that should be offered.

## Issues

#### **Category Proliferation.**

A typical question is the following: Marital status: 1) Single (never married) 4) Divorced 2) Married 5) Separated 3) Widowed

Unless the research in question were deeply concerned with conjugal relationships, it is inconceivable that the distinctions among all of these categories could be useful. Moreover, for

many samples, the number of responders in the latter categories would be too small to permit generalization. <u>Usually, such a question reflects the need to distinguish between a conventional familial setting and anything else.</u> If so, the question could be:

Marital status: 1) Married and living with spouse 2) Other

In addition to brevity, this has the advantage of not appearing to pry so strongly into personal matters.

#### Scale Point Proliferation.

In contrast to category proliferation, which seems usually to arise somewhat naturally, scale point proliferation takes some thought and effort. An example is:

1) Never 2) Rarely 3) Occasionally 4) Fairly often 5) Often 6) Very often 7) Almost always 8) Always

Such stimuli run the risk of annoying or confusing the responder with hairsplitting differences between the response levels. In any case, psychometric research has shown that most subjects cannot reliably distinguish more than six or seven levels of response, and that for most scales a very large proportion of total score variance is due to direction of choice rather than intensity of choice. Offering four to five scale points is usually quite sufficient to stimulate a reasonably reliable indication of response direction.

Questionnaire items that ask the responder to indicate strength of reaction on scales labeled only at the end points are not so likely to cause responder antipathy if the scale has six or seven points. However, even for semantic differential items, four or five scale points should be sufficient.

#### Order of Categories.

When response categories represent a progression between a lower level of response and a higher one, it is usually better to list them from the lower level to the higher in left-to-right order, for example,

1) Never 2) Seldom 3) Occasionally 4) Frequently

This advice is based only on anecdotal evidence, but it seems plausible that associating greater response levels with lower numerals might be confusing for some responders.

#### **Combining Categories.**

In contrast to the options listed just above, consider the following: 1) Seldom or never 2) Occasionally 3) Frequently

Combining "seldom" with "never" might be desirable if responders would be very unlikely to mark "never" and if "seldom" would connote an almost equivalent level of activity, for example, in response to the question, "How often do you tell you wife that you love her?" In contrast, suppose the question were, "How often do you drink alcoholic beverages?" Then the investigator might indeed wish to distinguish those who never drink. When a variety of questions use the same response scale, it is usually undesirable to combine categories.

#### **Responses at the Scale Midpoint.**

Consider the following questionnaire item: *The instructor's verbal facility is:* 

1) Much below average 4) Above average

- 2) Below average 5) Much above average
- 3) Average

Associating scale values of 1 through 5 to these categories can yield highly misleading results. The mean for all instructors on this item might be 4.1, which, possibly ludicrously, would suggest that the average instructor was above average. Unless there were evidence that most of the instructors in question were actually better than average with respect to some reference group, the charge of using statistics to create false impressions could easily be raised. A related difficulty arises with items like:

The instructor grades fairly.

- 1) Agree 4) Tend to disagree
- 2) Tend to agree 5) Disagree
- 3) Undecided

There is no assurance whatsoever that a subject choosing the middle scale position harbors a neutral opinion. A subject's choice of the scale midpoint may result from:

Ignorance--the subject has no basis for judgment.

**Uncooperativeness**--the subject does not want to go to the trouble of formulating an opinion. **Reading difficulty**--the subject may choose "Undecided" to cover up inability to read. **Reluctance to answer**--the subject may wish to avoid displaying his/her true opinion. **Inapplicability**--the question does not apply to the subject.

In all the above cases, the investigator's best hope is that the subject will not respond at all. Unfortunately, the seemingly innocuous middle position counts, and, when a number of subjects choose it for invalid reasons, the average response level is raised or lowered erroneously (unless, of course, the mean of the valid responses is exactly at the scale midpoint).

The reader may well wonder why neutral response positions are so prevalent on questionnaires. One reason is that, in the past, crude computational methods were unable to cope with missing data. In such cases, non-responses were actually replaced with neutral response values to avoid this problem. The need for such a makeshift solution has long been supplanted by improved computational methods, but the practice of offering a neutral response position seems to have a life of its own. Actually, if a substantial proportion of the responders really do hold genuinely neutral opinions and will cooperate in revealing these, scale characteristics will be enhanced modestly by offering a neutral position. However, in most cases, the potential gain is not worth the risk.

In the absence of a neutral position, responders sometimes tend to resist making a choice in one direction or the other. Under this circumstance, the following strategies may alleviate the problem:

1) Encourage omission of a response when a decision cannot be reached.

2) Word responses so that a firm stand may be avoided, e.g., "tend to disagree."

3) If possible, help responders with reading or interpretation problems, but take care to do so impartially and carefully document the procedure so that it may be inspected for possible introduction of bias.

4) Include options explaining inability to respond, such as "not applicable," "no basis for judgment," "prefer not to answer."

The preceding discussion notwithstanding, there are some items that virtually require a neutral position. Examples are:

How much time do you spend on this job now? 1) Less than before 2) About the same 3) More time The amount of homework for this course was 1) too little. 2) reasonable. 3) too great.

It would be unrealistic to expect a responder to judge a generally comparable or satisfactory situation as being on one side or another of the scale midpoint.

#### **Response Category Language and Logic**

The extent to which responders agree with a statement can be assessed adequately in many cases by the options:

1) Agree 2) Disagree

However, when many responders have opinions that are not very strong or well-formed, the following options may serve better:

1) Agree 2) Tend to agree 3) Tend to disagree 4) Disagree

These options have the advantage of allowing the expression of some uncertainty. In contrast, the following options would be <u>undesirable in most cases</u>:

Strongly agree 2) Agree 3) Disagree
 Strongly Disagree

While these options do not bother some people at all, others find them objectionable. "Agree" is a very strong word; some would say that "Strongly agree" is redundant or at best a colloquialism. In addition, there is no comfortable resting place for those with some uncertainty. There is no need to unsettle a segment of responders by this or other cavalier usage of language.

Another problem can arise when a number of questions all use the same response categories. The following item is from an actual questionnaire:

Indicate the extent to which each of the following factors influences your decision on the admission of an applicant: Amount of Influence None Weak Moder Strong

SAT/ACT scores	
High school academic reco	ord
Extracurricular activities	
Personal interview	
Open admissions	

Only sheer carelessness could have caused failure to route the responder from a school with open admissions around the questions concerning the influence of test scores, etc. This point aside, consider the absurdity of actually asking a responder from an open admissions school to rate the influence of their open admissions policy. (How could it be other than strong?) Inappropriate response categories and nonparallel stimuli can go a long way toward inducing disposal rather than return of a questionnaire.

A subtle but prevalent error is the tacit assumption of a socially conventional interpretation on the part of the responder. Two examples from actual questionnaires are:

Indicate how you feel about putting your loved one in a nursing home.

1) Not emotional 2) Somewhat emotional

3) Very emotional

How strong is the effect of living at some distance from your family?

1) Weak 2) Moderately strong 3) Very strong

Obviously (from other content of the two questionnaires), the investigators never considered that many people enjoy positive emotions upon placing very sick individuals in nursing homes or beneficial effects due to getting away from troublesome families. Thus, marking the third option for either of these items could reflect either relief or distress, though the investigators interpreted these responses as indicating only distress. Options representing a range of positive to negative feelings would resolve the problem.

A questionnaire from a legislative office used the following scale to rate publications:

- *1*) Publication legislatively mandated
- 2) Publication not mandated but critical to agency's effectiveness
- 3) Publication provides substantial contribution to agency's effectiveness
- 4) Publication provides minor contribution to agency's effectiveness

This is a typical example of asking two different questions with a single item, namely: a) Was the publication legislatively mandated? and b) What contribution did it make? Of course, the bureaucrats involved were assuming that any legislatively mandated publication was critical to the agency's effectiveness. Note that options 3 and 4 but not 2 could apply to a mandated publication, thus raising the possibility of (obviously undesired) multiple responses with respect to each publication.

#### **Ranking Questions**

Asking responders to rank stimuli has drawbacks and should be avoided if possible. <u>Responders</u> cannot be reasonably expected to rank more than about six things at a time, and many of them misinterpret directions or make mistakes in responding. To help alleviate this latter problem, ranking questions may be framed as follows:

Following are three colors for office walls:

1) Beige 2) Ivory 3) Light green Which color do you like best? \_\_\_\_\_ Which color do you like second best? \_\_\_\_\_ Which color do you like least? \_\_\_\_\_

#### The "Apple Pie" Problem

There is sometimes a difficulty when responders are asked to rate items for which the general level of approval is high. For example, consider the following scale for rating the importance of selected curriculum elements:

1) No importance 3) Moderate importance

2) Low importance 4) High importance

Responders may tend to rate almost every curriculum topic as highly important, especially if doing so implies professional approbation. Then it is difficult to separate topics of greatest importance from those of less. Asking responders to rank items according to importance in addition to rating them will help to resolve this problem. If there are too many items for ranking to be feasible, responders may be asked to return to the items they have rated and indicate a specified small number of them that they consider "most important."

Another strategy for reducing the tendency to mark every item at the same end of the scale is to ask responders to rate both positive and negative stimuli. For example:

<i>My immediate supervisor:</i>	
handles employee problems well.	1) Agree 2) Disagree
works with us to get the job done.	1) Agree 2) Disagree
embarrasses those who make mistakes.	1) Agree 2) Disagree
is a good listener	1) Agree 2) Disagree
often gives unclear instructions	1) Agree 2) Disagree

Flatfooted negation of stimuli that would normally be expressed positively should be avoided when this strategy is adopted. For example, "does not work with us to get the job done" would not be a satisfactory substitute for the second item above.

#### **Unnecessary Questions**

A question like the following often appears on questionnaires sent to samples of college students: Age: 1) below 18 2) 18-19 3) 20-21 4) over 21

If there is a specific need to generalize results to older or younger students, the question is valid. Also, such a question might be included to check on the representativeness of the sample. However, questions like this are often included in an apparently compulsive effort to characterize the sample exhaustively. A clear-cut need for every question should be established. This is especially important with respect to questions characterizing the responders, because there may be a tendency to add these almost without thought after establishment of the more fundamental questions. The fact that such additions may lengthen the questionnaire needlessly and appear to pry almost frivolously into personal matters is often overlooked. Some questionnaires ask for more personal data than opinions on their basic topics.

In many cases, personal data are available from sources other than the responders themselves. For example, computer files used to produce mailing labels often have other information about the subjects that can be merged with their responses if these are not anonymous. In such cases, asking the responders to repeat this information is not only burdensome but may introduce error, especially when reporting the truth has a negative connotation. (Students often report inflated grade-point averages on questionnaires.)

#### **Sensitive Questions**

When some of the questions that must be asked request personal or confidential information, it is better to locate them at the end of the questionnaire. If such questions appear early in the questionnaire, potential responders may become too disaffected to continue, with nonreturn the likely result. However, if they reach the last page and find unsettling questions, they may continue nevertheless or perhaps return the questionnaire with the sensitive questions unanswered. Even this latter result is better than suffering a nonreturn.

## **Statistical Considerations**

It is not within the scope of this booklet to offer a discourse on the many statistical procedures that can be applied to analyze questionnaire responses. However, it is important to note that this step in the overall process cannot be divorced from the other development steps. A questionnaire may be well-received by critics and responders yet be quite resistant to analysis. The method of analysis should be established before the questions are written and should direct their format and character. If the developer does not know precisely how the responses will be analyzed to answer each research question, the results are in jeopardy. This caveat does not preclude exploratory data analysis or the emergence of serendipitous results, but these are procedures and outcomes that cannot be depended on.

In contrast to the lack of specificity in the preceding paragraph, it is possible to offer one principle of questionnaire construction that is generally helpful with respect to subsequent analysis. This is to arrange for a manageable number of ordinally scaled variables. A question with responses such as:

1) Poor 2) Fair 3) Good 4) Excellent

will constitute one such variable, <u>since there is a response progression from worse to better</u> (at least for almost all speakers of English).

In contrast, to the foregoing example, consider the following question: Which one of the following colors do you prefer for your office wall? 1) Beige 2) Ivory 3) Light green

There is no widely-agreed-upon progression from more to less, brighter to duller, or anything else in this case. Hence, from the standpoint of scalability, this question must be analyzed as if it were three questions (though, of course, the responder sees only the single question):

<b>A</b> (1)	•
Do you prefer beige?	1) yes 2) no
Do you prefer ivory?	1) yes 2) no
Do you prefer light green?	1) yes 2) no

These variables (called dummy variables) are ordinally scalable and are appropriate for many statistical analyses. However, this approach results in proliferation of variables, which may be undesirable in many situations, especially those in which the sample is relatively small. Therefore, it is often desirable to avoid questions whose answers must be scaled as multiple dummy variables. Questions with the instruction "check all that apply" are usually of this type. (See also the comment about "check all that apply" under Optical Mark Reader Processing of Responses below).

#### Anonymity

For many if not most questionnaires, it is necessary or desirable to identify responders. The commonest reasons are to check on nonreturns and to permit associating responses with other data on the subjects. If such is the case, it is a clear violation of ethics to code response sheets surreptitiously or secretly to identify responders after stating or implying that responses are anonymous. In so doing, the investigator has in effect promised the responders that their responses cannot be identified. The very fact that at some point the responses can be identified fails to provide the promised security, even though the investigator intends to keep them confidential.

If a questionnaire contains sensitive questions yet must be identified for accomplishment of its purpose, the best policy is to promise confidentiality but not anonymity. In this case a code number should be clearly visible on each copy of the instrument, and the responders should be informed that all responses will be held in strict confidence and used only in the generation of statistics. Informing the responders of the uses planned for the resulting statistics is also likely to be helpful.

#### Nonreturns

The possibilities for biasing of mailed questionnaire results due to only partial returns are all too obvious. Nonreturners may well have their own peculiar views toward questionnaire content in contrast to their more cooperative co-recipients. Thus it is strange that very few published accounts of questionnaire-based research report any attempt to deal with the problem. Some do not even acknowledge it.

There are ways of at least partially accounting for the effects of nonreturns after the usual followup procedures, such as postcard reminders. To the extent that responders are asked to report personal characteristics, those of returners may be compared to known population parameters. For example, the proportion of younger returners might be much smaller than the population proportion for people in this age group. Then results should be applied only cautiously with respect to younger individuals. Anonymous responses may be categorized according to postal origin (if mailed). Then results should be applied more cautiously with respect to under represented areas.

Usually, the best way to account for nonresponders is to select a random sample of them and obtain responses even at substantial cost. This is possible even with anonymous questionnaires, though, in this case, it is necessary to contact recipients at random and first inquire as to whether they returned the questionnaire. Telephone interviews are often satisfactory for obtaining the desired information from nonresponders, but it is almost always necessary to track down some nonresponders in person. In either case, it may not be necessary to obtain responses to all questionnaire items. Prior analyses may reveal that only a few specific questions provide a key to a responder's opinion(s).

#### **Format and Appearance**

It seems obvious that an attractive, clearly printed and well laid out questionnaire will engender better response than one that is not. Nevertheless, it would appear that many investigators are not

convinced that the difference is worth the trouble. Research on this point is sparse, but experienced investigators tend to place considerable stress on extrinsic characteristics of questionnaires. At the least, those responsible for questionnaire development should take into consideration the fact that they are representing themselves and their parent organizations by the quality of what they produce.

Mailed questionnaires, especially, seem likely to suffer nonreturn if they appear difficult or lengthy. A slight reduction in type size and printing on both sides of good quality paper may reduce a carelessly arranged five pages to a single sheet of paper.

Obviously, a stamped or postpaid return envelope is highly desirable for mailed questionnaires. Regardless of whether an envelope is provided, a return address should be prominently featured on the questionnaire itself.

### **Optical Mark Reader Processing of Responses**

If possible, it is highly desirable to collect questionnaire responses on sheets that can be machine read. This practice saves vast amounts of time otherwise spent keying responses into computer data sets. Also, the error rate for keying data probably far outstrips the error rate of responders due to misplaced or otherwise improper marks on the response sheets.

Obtaining responses directly in this manner is almost always feasible for group administrations but may be problematical for mailed questionnaires, especially if the questions are not printed on the response sheet. Relatively unmotivated responders are unlikely to take the trouble to obtain the correct type of pencil and figure out how to correlate an answer sheet with a separate set of questions. Some investigators enclose pencils to motivate responders.

On the other hand, machine readable response sheets with blank areas, onto which questions may be printed, are available. Also, if resources permit, custom machine-readable sheets can be designed to incorporate the questions and appropriate response areas. The writer knows of no evidence that return rates suffer when machine readable sheets with the questions printed on them are mailed. Anecdotally, it has been reported that responders may actually be more motivated to return machine readable response sheets than conventional instruments. This may be because they believe that their responses are more likely to be counted than if the responses must be keyed. (Many investigators know of instances where only a portion of returned responses were keyed due to lack of resources.) Alternatively, responders may be mildly impressed by the technology employed or feel a greater degree of anonymity. In planning for the use of a mark reader, it is very important to coordinate question format with reader capability and characteristics. This coordination should also take planned statistical analyses into consideration. Questions that need to be resolved in the development phase include:

- 1. What symbolic representation (in a computer readable data set) will the various response options have (e.g., numerals, letters, etc.)?
- 2. How will nonresponse to an item be represented?
- 3. How will non-codeable responses (e.g., double marks) be represented?

Most readers are designed (or programmed) to recognize only a single intended answer to a given question. Given the ubiquity of "mark all that apply" instructions in questionnaires, it is therefore necessary to modify such questions for machine-compatible responding. The following example shows how this may be accomplished:

12. In which of these<br/>leisure activities do you<br/>participate at least once<br/>a week (check all that apply):Questions 12-17 are a list<br/>of leisure activities. Indicate<br/>whether you participate in each<br/>activity at least once a week.

Swimming	12. Swimming 1) Yes 2) No
Gardening	13. Gardening 1) Yes 2) No
Golf	14. Golf 1) Yes 2) No
Bicycling	15. Bicycling 1) Yes 2) No
Tennis	16. Tennis 1) Yes 2) No
Jogging	17. Jogging 1) Yes 2) No

This procedure creates dummy variables suitable for many statistical procedures (see Statistical Considerations above).

Folding response sheets for mailing may cause processing difficulties. Folding may cause jams in the feed mechanisms of some readers. Another problem is that the folds may cause inaccurate reading of the responses. In these cases, sheet-size envelopes may be used for sending and return. Some types of opscan sheets can be folded, however, and these may be sent in business-size envelopes.

### **Sample Size**

Various approaches are available for determining the sample size needed for obtaining a specified degree of accuracy in estimation of population parameters from sample statistics. All of these methods assume 100% returns from a random sample. (See Hinkle, Oliver, and Hinkle, 1985.)

Random samples are easy to mail out but are virtually never returned at the desired rate. It is possible to get 100% returns from captive audiences, but in most cases these could hardly be considered random samples. Accordingly, the typical investigator using a written questionnaire can offer only limited assurance that the results are generalizable to the population of interest. One approach is to obtain as many returns as the sample size formulation calls for and offer evidence to show the extent of adherence of the obtained sample to known population characteristics (see Nonreturns, above).

For large populations, a 100% return random sample of 400 is usually sufficient for estimates within about 5% of population parameters. Then, if a return rate of 50% is anticipated from a mailed questionnaire and a 5% sampling error is desired, 800 should be sent. The disadvantage of this approach is that nonresponse bias is uncontrolled and may cause inaccurate results even though sampling error is somewhat controlled. The alternative is to reduce sample size (thus increasing sampling error) and use the resources thus saved for tracking down nonresponders. A compromise may be the best solution in many cases.

While total sample size is an important question, returns from subgroups in the population also warrant careful consideration. If generalizations to subgroups are planned, it is necessary to obtain as many returns from each subgroup as required for the desired level of sampling error. If some subgroup is relatively rare in the population, it will be necessary to sample a much larger proportion of that subgroup in order to obtain the required number of returns.

Small populations require responses from substantial proportions of their membership to generate the same accuracy that a much smaller proportion will yield for a much larger population. For example, a random sample of 132 is required for a population of 200 to achieve the same accuracy that a random sample of 384 will provide for a population of one million. In cases such as the former, it usually makes more sense to poll the entire population than to sample.

### References

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley.

Hinkle, D. E., Oliver, J. D., & Hinkle, C. A. (1985). How large should the sample be? Part II--the one-sample case. *Educational and Psychological Measurement*, 45, 271-280.

Article found at: http://www.ericae.net/ft/tamu/vpiques3.htm

S 4 ω 6 2 # year between 12-18 years of age **Operational Definition** % of total drug tests after program Successful: Alcohol or Drug Arrests after program participation Successful: Recidivism for any reason during the calendar who participated in the Youth who participated in the participation that are negative 20xx: All youth who left the program program for at least 60 days Program: Number of youth Abstinence -ID # for each youth who participated **Data Elements required/Calculation** -arrest type -Date of Birth -arrest date -arrests for each youth - reason for leaving the program -ID # for each youth who participated -Date of Birth -date of all drug tests -drug test results (all tests) -Date of program exit -Date of program entry -Date of program exit -Date of program entry Probation CMS spreadsheet Program tracking Probation CMS spreadsheet Program tracking **Data Source** Local CJ database will be selected. If a youth is included the number of drug test results. schedule on at least as many dates as who participated to be considered an arrest of the youth Arrest identification number must youth who left the program – is the are under supervision? entered treatment? How many youth program? How many individuals What is the total capacity of the Youth must be listed on drug testing invalid #1 and not here then data may be population from which the sample in #1 match youth on at least 4 dimensions Validity Assessment? Number should be the total number of

youth who did not participate?

Question: Were youth who participated in the XXX treatment program in 20xx more successful then

Quality Assurance	Continuous Quality Improvement
Driven by regulatory and accrediting agencies	Internally driven, empowers all personnel to make improvements
Tends to focus on finding who is responsible for errors	Focuses on improving the system
Relies on inspections to identify errors	Seeks to prevent errors by continuously clarifying and improving processes
	- - - - -
Periodically monitors quality	Continuously strives to improve quality
Management/Leadership top-to-bottom	Management/Leadership is shared governance role

- A shared list standardizing data content and data definitions within and between organizations
- A work group could define a data dictionary as a descriptive list of names, definitions, and attributes of data elements to be collected in an information system or database.

Steps in the process

- 1 Design a plan for the development, implementation, and continuing maintenance of the data dictionary.
- 2 Develop a data dictionary that integrates common data elements used across the organization or county.
- 3 Ensure collaborative involvement and buy-in of all key stakeholders when data requirements are being defined for an information system.
- 4 Develop an approvals process and documentation trail for all initial data dictionary decisions and for ongoing updates and maintenance.

<u>Variable</u>	Database Field Name	Data type	<u>Format</u>	<u>Database</u>
Probationer Last Name	PROB.person.lastname	String		Probation CMS
Probationer First Name	PROB.person.firstname	String		Probation CMS
Probation person ID	PROB.person_ID,	Unique ID		Probation CMS
Date of Birth	PROB.Person.DOB	date	YYYYMMDD	Probation CMS
Gender	PROB.Person.gender	category	1-Female, 2-Male	Probation CMS
Ethnicity	PROB.Person.ethnicity	category	1-Asian/PI, 2- African Am., 3- Hispanic, 4- Native Am., 5- White	Probation CMS
Event ID	PROB.event.ID	Unique ID		Probation CMS
Jail person ID	jail.bookings.jaiIID	Unique ID		Jail CMS
Jail Booking ID	jail.bookings.bookID	Unique ID		Jail CMS
Booking Reason	jail.booking.bookreason	category	1Fresh Arrest, 2-Hold, 3- Violation	Jail CMS
Booking date	jail.booking.bookdate	date	YYYYMMDD	Jail CMS
Release date	jail.release.releasedate	date	YYYYMMDD	Jail CMS
Release Reason	jail.release.releasereas on	category	1OR, 2time served, 3hold expired, 4 Jurisdiction Expired	Jail CMS
Date of Birth	jail.booking.DOB	date	YYYYMMDD	Jail CMS
Gender	jail.booking.gender	category	1-Female, 2-Male	Jail CMS
Ethnicity	jail.booking.ethnicity	category	1-Asian/PI, 2- African Am., 3- Hispanic, 4- Native Am., 5- White	Jail CMS

orient users around frameworks of measurement instead of particular definitions. These are all optional measures and counties. They look at measurement from a number of perspectives and "owners" of data. This document is set up to meant to be ideas for things to implement locally. These templates are meant as a resource for planning and structuring the measurement of strategies being used in

- A frame work for measuring and defining recidivism locally.
- Logic models and outcome measures for:
- O Jail and alternative to Custody
- O Intensive Supervision
- **O** Treatment Services
- **O** Victim Services
- **O** Day Reporting Centers and Re-Entry Facilities
- Additional subpopulations and events

## Recidivism Measurement Framework

time, and have a specific event to measure from. When measuring recidivism locally, its important to identify different populations of interest, as well as a specific comparable point in movement through the system, knowing what different definitions say is important in correctly comparing populations and situations. Recidivism can be monitored and tracked in a variety of ways. Since criminal justice populations have different attributes, and

Count of how many \_\_(A. population) were \_(B. event) within\_(# of days) days after their last (B. Event).

### (Population)

Pre-trial, Probationers (Felony or Misdemeanor ), Parole, 1170h, PRCS

### (Event)

- 1. Contacted by law enforcement
- 2. Freshly Arrested and Booked
- 3. Violations

a. Intermediately Sanctioned for a violation (without return to court)

- b. Violation filed with the court
- 4. Court Actions
- a. Charge Filed by DA
- b. Convicted by Court

- . Ω Post Sentence
- a. Completion of Supervision

- b. Release from Custody

Alternatives to Custody

Successionly complete Lin	-	Program
	Alternative to custody program	
b Percentage of offenders who	offenders placed on an	<ul> <li>Supervised OR/Pre-Trial</li> </ul>
commit a new crime while on EM	7 % of sentenced	<ul> <li>Jail Beds</li> </ul>
a Percentage of offenders who do not	OR	
3 <i>EM</i>	defendants released to supervised	
successfully complete work program	6 % of pre-trial	Associated Funded Strategies:
b Percentage of offenders who	Supervised OR	
program	Population of defendants on	monitoring.
commit a new crime while on work	5 Average Daily	program and electronic
a Percentage of offenders who do not	sentence	Maximize the use of work alternative
2 Work program	4 % of inmates pre-	space
court hearing	Population on work program	<ul> <li>Maximize and efficiently utilize jail</li> </ul>
supervised OR who appear for a	3 Average Daily	trial
b Percentage of defendants on	monitoring	<ul> <li>Safely manage defendants pending</li> </ul>
new crime while pending trial	Population on electronic	Goals
supervised OR who do not commit a	2 Average Daily	
a Percentage of defendants on	population in County jail	
1 Supervised OR	1 Average daily	allocated in a cost effective way
Outcomes	Outputs	Ensure incarceration resources are
	Strategy Metrics	Issue or Strategy

CPOC Smarter Probation Research Training June 17, 2014

Intensive Supervision of High Risk Offenders

Issue or Strategy	Strategy Metrics	
	Outputs	Outcome
Provision of services to high risk clients/offenders	1 # of Offenders needs Assessed 2 Breakdown of Needs assessment	1 Percentage of offenders who successfully complete plan
Associated Strategies (Funded):	scores and priority for active Population 3 Percentage of Offenders who are referred to treatment/interventions of	expectations 2 Percentage of offenders who
<ul> <li>Funding for correctional interventions and support services</li> </ul>	referrals indicated by their needs assessment	are employed/housed/sober after 1 year of completion
	4 Percentage of clients who accept referrals in the referred service areas 5 Percentage of clients who receive	depending on referral type
	(accept) referrals in the following possible services areas:	
	-Substance Abuse ==Outnatient	
	==Residential	
	-Housing ==Housing Assistance	
	==Emergency Homeless -Mental Health Case Management	
	-Cognitive Programs (Big 4 criminogenic Needs)	
	-General Education/Diploma	
	-Employment Assistance	

**Treatment Services** 

## Victims Services

Issue or Strategy	Strategy Metrics	
	Outputs	Outcomes
Provide services and support for the	1 # of people notified of their	1 % of Restitution collected
victims of crime	offender being released (PRCS,	2 % of victims who are re-
	1170h, probation, etc)	victimized
Associated Funded Strategies:	2 # of victims served by Victims	3 % of victims re-victimized by
<ul> <li>Staffing for DA's office of</li> </ul>	Service	the same person
victim services	3 Percentage of cases where	
	restitution is ordered	

# Day Reporting Center/Re-Entry Facility

Additional Sub-populations or events

specific business practices or concerns in the community. Once the basic measures are in place, measures can be subdivided by demography as well as other events to create measures that look at

Demography-Static	Demography -Dynamic	Law Enforcement Events	Probation Events (Unique ID for each
Unique Identifier	(Unique Identifier for	(Unique ID for each event,	referral for a term of probation, and
or the person)	each change in status	connected to a person by	event connected to a person by date)
DOB	with effective date,	date)	1 Probation start
Condor	connected to the	1 Booking into Jail	2 Termination type
	person)	a Violation	3 Warrant
Ethnicity	1 Address	b Fresh Arrest	4 Warrant Recalled
Risk Assessment	2 File status	2 New arrests by type of	5 VOP filed
data (static)	(Active/Inactive)	charge	6 Referral for treatment services
Needs Assessment	3 Caseload type	3 New convictions by type	
data (static)	4 Risk Assessment data	of charge	
	(dynamic)	4 Returns to custody (Flash,	
	5 Needs Assessment	etc)	
	data(dynamic)		
	<i>Demography-Static</i> <i>(Unique Identifier for the person)</i> 1 DOB 2 Gender 3 Ethnicity 4 Risk Assessment data (static) 5 Needs Assessment data (static)	ent Per ment	<i>tatic</i> Demography -Dynamic <i>(Unique Identifier for</i> <i>each change in status</i> <i>with effective date,</i> <i>connected to the</i> <i>person)</i> 1 Address 2 File status (Active/Inactive) 3 Caseload type 4 Risk Assessment data (dynamic) 5 Needs Assessment data(dynamic)

Task Id	Active	Name	Start date	Finish Date	Status	Dependency	Staff
A	Yes	Project Initation	1/1/2013	12/31/2013	complete		Bob
1	No	Develop preliminary project scope	11/1/2011	11/15/2011	complete		Bob
2	No	Identify business need	11/16/2011	12/31/2011	complete		Bob
ω	3 No	Develop preliminary budget	1/1/2012	12/31/2012	in progress		Bob
4	4 No	Identify preliminary return on investment	1/1/2012	12/31/2012	in progress		Bob
ъ	No	Complete project charter	1/1/2013	3/30/2013	not started		Bob
B	Yes	Project Planning	2/1/2012	4/30/2013	not started		Bob
1	No	Identify project team/resources	5/30/2012	12/31/2012	complete		Bob
2	2 No	Prepare draft project schedule	6/1/2012	10/1/2012	complete		Bob
ω	3 No	Conduct project kickoff meeting	6/1/2012	10/1/2012	complete		Luis
4	Yes	Develop project communication plan	10/1/2012	11/1/2012	in progress		Luis
IJ IJ	Yes	Develop cost management plan	11/1/2012	12/1/2012	in progress		Bob
6	6 No	Develop schedule management plan	12/1/2012	12/30/2012	not started		Bob
7	No	Finalize project budget	1/1/2013	3/30/2013	not started		Bob
8	No	Ongoing project management	4/1/2013	4/30/203	not started		Bob
С	No	Project Execution	7/1/2012	3/31/2013	not started	A and B	Bob
1	No	Develop training materials	7/1/2012	8/31/2012	not started		Jane
2	No	Execute communication plan	9/1/2012	12/31/2012	not started		Luis
ω	No	Develop software to track outcomes	1/1/2013	3/30/2013	not started		Harold
4	No	Develop new business processes	1/1/2013	3/30/2013	not started	Task C3	Bob
ъ	No	Deploy outcome tracking	1/1/2013	3/30/2013	not started	Task C4	Bob
<b>б</b>	No	Conduct training on new requirements	1/1/2013	3/30/2013	not started	Task C1	Jane
D	No	Project Closing	4/1/2013	4/30/2013	not started	C	Bob
1	No	Document all processess and materials	4/1/2013	4/30/2013	not started		Bob
2	No	Close out contracts	4/1/2013	4/30/2013	not started		Bob
ω	No	Finalize budget	4/1/2013	4/30/2013	not started		Bob
4	No	Conduct closure survey of participants	4/1/2013	4/30/2013	not started		Bob
Б	No	Conduct/document lessons learned	4/1/2013	4/30/2013	not started		Bob

### **Overall Goals**

- 1 Define a Data Governance Processes for county data
- 2 Make recommendations for a county-wide data infrastructure
- 3 Determine the feedback process for data between the Data and Analysis workgroup and other implementation workgroups or committees

### **Anticipated Outcomes**

- 1. A framework for communicating shared ideas about program outcomes and research.
- 2. Effective strategies for evaluating programs and services in XXX County

3. A process for identification and prioritization of infrastructure and technology to support data analysis

### Members:

Representatives from Probation, Sheriff, District Attorney's Office, Public Defender, Courts, Information Technology, and Treatment (Behavioral Health, Substance Abuse or other service providers)

### **Planned Work**

1. Determine what data is currently collected by agencies and how to access the data.

a. Identify the data systems that are currently available within each agency

b. Establish a framework for a standard data dictionary to be used across the County for high level reporting.

c. Establish a set of high-level county indicators that will be reported to the CCP on a regular basis.

2. Identify evaluation methods for all long-term planning strategies workgroups for which some type of outcome measure is needed.

a. Identify all Programs and activities

b. Identify the type of data that is currently available within the affected programs.3. Assist CCP in developing realistic outcome measures required to monitor Program effectiveness.

a. Assist in defining baseline measurements required to establish future Program outcome measures.

b. Define a repeatable process for sharing data needs between each agency and a data warehouse.

4. Identify data infrastructure needs to support data gathering and sharing across XXXX County organizations.

a. Identify current data systems currently existing within XXX County agencies and organizations.

b. Identify gaps between data system requirements and existing data systems.

c. Provide recommendations for data infrastructure needs to support ongoing data management of performance indicators across xxxx County.

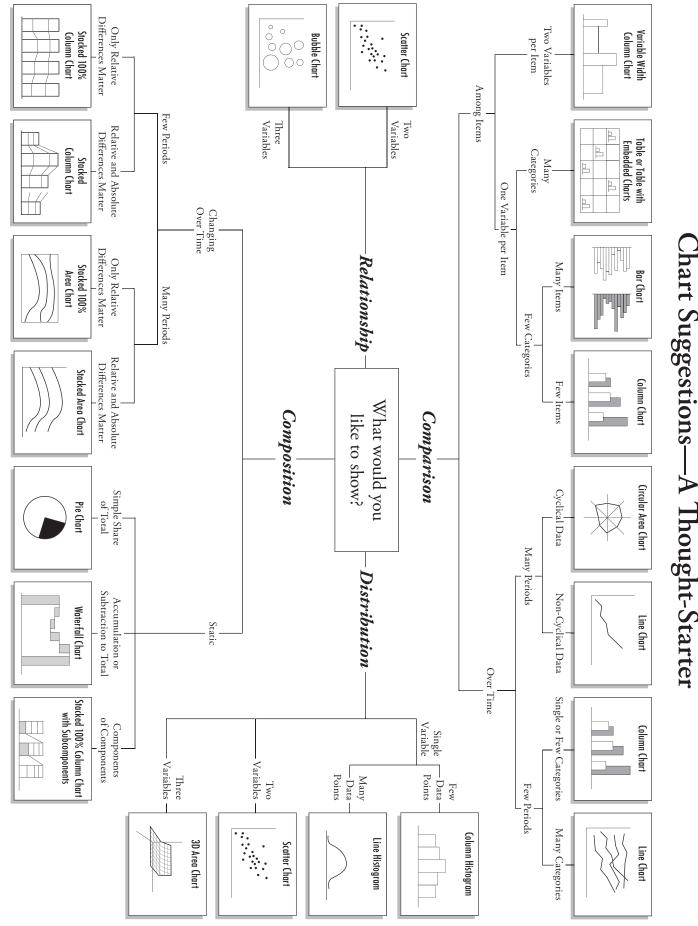
**Overall Goals** 

### **Anticipated Outcomes**

Members:

Representatives from

### **Planned Work**



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Tips for designing a dashboard or information display people will love (well, at least like)

### What is a dashboard?

"A dashboard is a visual display of the most important information needed to achieve one or more objectives that has been consolidated onto a single computer screen so it can be monitored at a glance."—Stephen Few

- 1) Know your target audience
- 2) Talk to your target audience
- 3) Know the strategic objective that you are trying to address with the dashboard
- 4) Don't use the existing dashboards and reports as your start point
- 5) Mock it up in a simple and sharable format
- 6) Build a prototype with real data, but don't get bogged down in the behind-the-scenes
- 7) Use strong, tested, visual design principles
- 8) Avoid gimmicks, clutter and random use of color
- 9) Accept that some people will initially dislike your dashboard
- 10) Make revisions and enhancements based on a shared plan

### Design Tips:

- 1) The upper left corner is the first place the eye goes. Value it highly.
- 2) Use concepts of hierarchy and eye flow to weave someone through the dashboard
- 3) Group similar things using fonts and color.
- 4) Make sure graphs convey the meaning you want (categories, proportion, time)
- 5) White Space is OK.
- 6) Know if your audience is exploring or looking for a single data point.

### Words to the wise:

"Not everything that can be counted counts, and not everything that counts can be counted"—Albert Einstein

"Perfection is Achieved Not When There Is Nothing More to Add, But When There Is Nothing Left to Take Away"-- French writer Antoine de Saint-Exupery

### Notes on Planning a Dashboard project

### Kevin O'Connell. koconnell@cpoc.org

- 1. Who is the audience?
  - a. Role- Structure the information to make it easy to answer basic questions
    - i. What decisions do they want to make
    - ii. What questions do they need answered
  - b. Work Flow-The form and display needs to fit an existing work flow. Mobile vs. desktop monitors
    - i. In what context will they be viewing the dashboard
    - ii. What information are they using on a daily basis?
    - iii. How much time do they have to review numbers?
    - iv. How do they get it out and in what form?
  - c. Data Comfort and Skills-The dashboards level of detail and analytical capabilities match the comfort zone
    - i. Are they proficient in excel or database design?
    - ii. Do they enjoy digging around in the raw data
    - iii. How sophisticated are they with using data?
  - d. Content Expertise-This determines the need for embedded explanations and use of natural language
    - i. How familiar are they with performance metrics
    - ii. Do they understand where the data comes from?
    - iii. Are they comfortable with the terminology or acronyms?
- 2. What kind of value will the user get from it?
  - a. Help define what is important
  - b. Educate people in the organization about the things that matter
  - c. Set goals and expectations for specific individuals or groups
  - d. Help executives sleep at night because they know what's going on
  - e. Encourage specific actions in a timely manner
  - f. Highlight exceptions and provide alerts when problems occur
  - g. Communicate progress and success
  - h. Provide a common interface for interacting with and analyzing important business data
- 3. What type of Dashboard am I creating?
  - a. Scope
    - i. Strategic/Broad-Displays information about the entire department or system
    - ii. Operational/Specific-Focuses on a specific function, process, or population
  - b. Time
    - i. Historical-Looking backwards to track trends
    - ii. Snapshot-Showing performance at a single point in time
    - iii. Real time-Monitoring activity as it happens
    - iv. Predictive-Using past performance to predict future performance
  - c. Customization
    - i. One size fits all-I am trying conveying a specific narrative with the data, or fitting it to another document.
    - ii. Customizable
  - d. Level of detail
    - i. High level
    - ii. Person or Officer Level
  - e. Point of View
    - i. Prescriptive-dashboard tells the user what it means and what to do
    - ii. Exploratory-User can interpret results as they see fit.

# **Data Visualization Checklist**

Data Visualization Anatomy Chart on the last page for guidance on vocabulary. be used frequently, but reserved for when the guideline truly does not apply. For example, a pie chart has no axes lines or tick marks to rate. Refer to the most appropriate number, where 2 points means the guideline was fully met, 1 means it was partially met, and 0 means it was not met at all. n/a should not This checklist is meant to be used as a guide for the development of high impact data visualizations. Rate each aspect of the data visualization by circling the

Guideline	Ra	Rating	5	
<b>6-12 word descriptive title is left-justified in upper left corner</b> Short titles enable readers to comprehend takeaway messages even while quickly skimming the graph. Rather than a generic phrase, use a descriptive sentence that encapsulates the graph's finding or "so what?" Western cultures start reading in the upper left, so locate the title there.	2	2 1 0 n/a	0	n/a
Subtitle and/or annotations provide additional information Subtitles and annotations (call-out text within the graph) can add explanatory and interpretive power to a graph. Use them to answer questions a viewer might have or to highlight one or two data points.	2	2 1 0 n/a	0	n/a
Text size is hierarchical and readable Titles are in a larger size than subtitles or annotations, which are larger than labels, which are larger than axis	2	2 1 0 n/a	0	n/a

text must encapsulate your message and pack a punch. Graphs don't contain

much text, so existing

Text

Labels are used sparingly 2	Data are labeled directly Position data labels near the data rather than in a separate legend (e.g., on top of or next to bars or pie slices, and next to lines in line charts). Eliminate/embed legends when possible because eye movement back and forth between the legend and the data can interrupt the brain's attempts to interpret the graph.	<b>Text is horizontal</b> Titles, subtitles, annotations, and data labels are horizontal (not vertical or diagonal). Line labels and axis labels can deviate from this rule and still receive full points.	<b>Text size is hierarchical and readable</b> Titles are in a larger size than subtitles or annotations, which are larger than labels, which are larger than axis labels, which are larger than source information. The smallest text - axis labels - are at least 9 point font size on paper, at least 20 on screen.
2 1 0 n/a	2	2	2
_	1 0 n/a	1 0 n/a	1 0 n/a
-	0	0	0
n/a	n/a	n/a	n/a

Focus attention by removing the redundancy. For example, in line charts, label every other year on an axis.

colorblindness.	Brewer to find color schemes suitable for	the USA. Use sites like Color	mind. For example, pink is highly associated with feminine qualities in	<b>Color</b> Keep culture-laden color connotations in		-	data visualization easier for a viewer to interpret.	of graph elements can confuse readers at best and mislead viewer at worst. Thoughtful arrangement makes a	Arrangement
<b>Text sufficiently contrasts background</b> Black/very dark text against a white/transparent background is easiest to read.	<b>Color is legible for people with colorblindness</b> Avoid red-green and yellow-blue combinations when those colors touch one another.	<b>Color is legible when printed in black and white</b> When printed or photocopied in black and white, the viewer should still be able to see patterns in the data.	<b>Color is used to highlight key patterns</b> Action colors should guide the viewer to key parts of the display. Less important or supporting data should be a muted color.	<b>Color scheme is intentional</b> Colors should represent brand or other intentional choice, not default color schemes. A safe bet for consultants is to use your client's colors. Use online tools to identify brand colors and others that are compatible.	<b>Display is free from decoration</b> Graph is free from clipart or other illustrations used solely for decoration. Some graphics, like icons, can support interpretation.	<b>Graph is two-dimensional</b> Avoid three-dimensional displays, bevels, and other distortions.	Axis intervals are equidistant The spaces between axis intervals should be the same unit, even if every axis interval isn't labeled.	<b>Data are intentionally ordered</b> Data should be displayed in an order that makes logical sense to the viewer. Data may be ordered by frequency counts (e.g., from greatest to least for nominal categories), by groupings or bins (e.g., histograms), by time period (e.g., line charts), alphabetically, etc.	<b>Proportions are accurate</b> A viewer should be able to take a ruler to measure the length or area of the graph and find that it matches the relationship in the underlying data.
2	Ν	2	2	2	2	Ν	2	Ν	2
-	-	4	4	4	4	4	4	4	<u>ц</u>
0	0	0 r	0	0	0 r	0	0	0	0 r
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

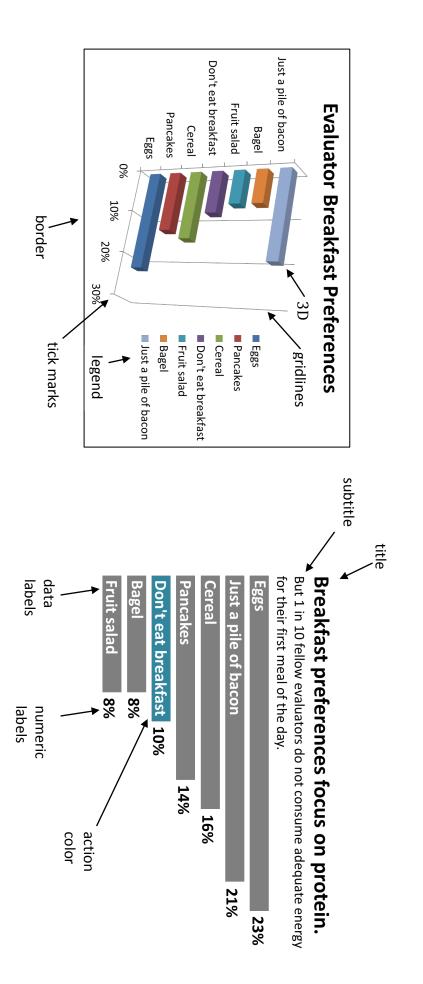
AnnKEmery.com/blog StephanieFvergreen.com/blog	For more support, check out:			unimportant information dilute the power of visualization.	viewer's attention so only visualize the data that needs attention. Too many graphics of	Overall Graphs will catch a	interpreting the data.	add clutter or noise to a graph, so eliminate them whenever they aren't useful for	Excessive lines— gridlines, borders, tick marks, and axes—can	Lines
m/blog Well-formatted data visualizations score between 90-100% of available points	<pre>cout:</pre> Score://	Individual chart elements work together to reinforce the overarching takeaway message Choices about graph type, text, arrangement, color, and lines should reinforce the same takeaway message.	<b>Contextualized or comparison data are present</b> Comparisons—over time, across programs or subgroups of participants, etc.—help the viewer understand the significance of the data.	<b>Graph has appropriate level of precision</b> Few numeric labels need decimal places. When precision is important, choose a type of graph type that displays differences through length or points along a line (e.g., bar charts, dot plots). When precision is less important, you can use a graph that displays differences through angles or area (e.g., pie charts, circle charts).	<b>The type of graph is appropriate for data</b> Data are displayed using a graph type appropriate for the relationship within the data. For example, change over time is displayed as a line graph, area chart, slope graph, or dot plot.	<b>Graph highlights significant finding or conclusion</b> Graphs should have a "so what?" – either a practical or statistical significance (or both) to warrant their presence.	<b>Graph has one horizontal and one vertical axis</b> Viewers can best interpret one x- and one γ-axis, even if one is hidden. Don't add a second γ-axis.	Axes do not have unnecessary tick marks Tick marks are useful in line graphs (to demarcate each point in time along the y-axis) but unnecessary in bar charts.	<b>Graph does not have border line</b> Graph should bleed into the surrounding page or slide rather than being contained by a border.	<b>Gridlines, if present, are muted</b> Color should be faint gray, not black. Full points if no gridlines are used.
vailal	י וו ו	2	2	2	2	2	2	2	2	2
ole r		4	4	4	4	4	4	4	4	4
Join		0	0	0	0	0	0	0	0	0
	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

<u>StephanieEvergreen.com/blog</u> Stephanie Evergreen's book, *Presenting Data Effectively* 

Well-formatted data visualizations score between 90-100% of available points. At this level, viewers are better able to read, interpret, and retain content.

# **Data Visualization Anatomy Chart**

Confused by the terminology? Review the anatomy charts below for illustration of what's what.



# CHIEF PROBATION OFFICERS

## **FACT SHEET**

### WHAT IS ADULT PROBATION?

Probation is a law enforcement tool that holds people convicted of crimes accountable and helps to oversee their rehabilitation.

Trained officers supervise offenders to enforce court-ordered restrictions and ensure rehabilitation, working closely with other law enforcement and local entities (health or social services, community organizations, employers, etc.).

### **HOW PROBATION IS REDUCING CRIME — AND COSTS**

Probation has always helped to reduce recidivism and the cost of crime. In 2009, California's probation chiefs took this commitment to a new level by sponsoring SB 678, a law that provides incentives to counties that reduce the number of adult felony probationers that go to state prison for violating probation conditions.

Probation departments are implementing innovative practices for augmented supervision and rehabilitation, such as day reporting centers, partnering with service providers and treatment programs, and partnering with local law enforcement. How's it working?

- **90%** of California probation departments use a formal risk-assessment tool to ensure the best supervision of each individual
- **47 of 58** California counties (through 2010) were successful in making reductions in the number of probationers sent to state prison
- **37.5%** decrease from 2008 to 2012 in the number of people sent to state prison by ensuring that probation conditions were met
- \$179 million was saved by the state from these reductions
- \$87.5 million went to counties that sent fewer people to state prison

# ENSURING EFFECTIVE PROBATION — AND CRIME PREVENTION

Despite SB 678's success, the current budget proposed for 2013-14 **decreases its funding by \$104.2 million.** To protect public safety and taxpayer resources, the state should continue to fully fund SB 678, as well as other investments in community corrections.

### ABOUT THE CHIEF PROBATION OFFICERS OF CALIFORNIA

The Chief Probation Officers of California (CPOC.org) provides leadership in the mobilization, coordination and implementation of Probation programs in the state's 58 counties. This includes protecting the public (through detention and treatment, victim services and preventing crime) and insuring quality investigations and supervision of offenders for the courts.

### PROBATION BY THE NUMBERS

72%

Percentage of people in the adult justice system sentenced to felony probation or probation and jail (probation is the most common sanction in our justice system)

# 400,000

Number of Californians currently on probation (80% for felonies)

**118%** Increase in the adult probation population from 1980 to 2010 (when California's overall population only increased by 57%)

\$1,500

Average amount spent for supervising one probationer for one year (compared to expensive incarceration options that can be as high as \$47,000 per year)

12%

Probation departments under Public Safety Realignment (as of December 31, 2012)

# POLICY BRIEF TEMPLATE

### No more than 2-6 pages, 1500 words

### Preparation

- Audience research who am I writing for and why
- Decide on key message and approach
- Do a SWOT analysis what are the strengths, weaknesses, opportunities and threats surrounding the research issue.

### **Executive Summary**

• A one or two sentence overview of the brief that entices readers to go further

### Introduction

- Answer the question **why** is the topic important, **why** should people care
- Answer the question **what** were the goals of the research and overall findings
- Create curiosity about the rest of the brief

### **Approaches and Results**

- Summarize facts, issues and context
- Reduce detail to only what reader needs to know
- Provide concrete facts or examples to support assertions

### Conclusion

- Base conclusions on results
- Aim for concrete conclusions and strong assertions.

### **Implications and Recommendations**

• State clearly what could or should happen next.

### An Introduction to Evidence-Based Practices

April 2014







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The movement toward the use of evidence-based practices (EBPs) has been sweeping the criminal justice community in recent years. The purpose of this briefing paper is to provide policymakers with an introduction and overview of the key concepts and issues associated with the identification and use of EBPs in criminal justice. The briefing provides a brief history of the evidence-based movement, discusses what is meant by evidence and where evidence comes from, identifies sources for information on EBPs, discusses issues associated with implementing EBPs, and addresses the question of what to do when there is no evidence for a particular program or practice.

### A Brief History of the Evidence-Based "Movement"

### **Evidence-Based Medicine**

Today's evidence-based movement has its origins in the field of medicine, where an initial interest in the *safety* of treatment was eventually joined by an equal interest in the *efficacy* of treatment. Beginning in the mid-1800s, parallel trends involving the increased use of scientific methods, statistical analysis, and discoveries from the natural sciences increased interest in distinguishing between effective and ineffective medical treatments based on patient outcomes (Office of Technology Assessment, 1976). Still, it took the better part of a century for the medical community to accept the importance of using empirical evidence to determine which treatments were safe and effective.

In 1938, the Federal Food, Drug, and Cosmetic Act was passed, requiring that the safety of new drugs be demonstrated by scientific investigation before marketing was allowed. The Act was amended in 1962 to add the requirement that efficacy as well as safety be demonstrated for drugs (Office of Technology Assessment, 1976). Despite steady advances over the decades, as recently as 40 years ago it was still possible for a British medical researcher and epidemiologist to create a stir in the medical community by asserting that most medical treatments being used by practitioners were not based on any valid evidence of effectiveness. In his 1972 book, *Effectiveness and Efficiency: Random Reflections on Health Services*, Archibald Cochrane argued that health services should be evaluated on the basis of scientific evidence, rather than on anecdotes, opinion or tradition (Przybylski, 2008). Four years later, the U.S. Office of Technology Assessment (OTA) issued the first of several reports supporting Cochrane's thesis. In a 1976 report to Congress, for example, the OTA stated that "only 10 to 20% of all procedures used in present medical practice have been proven by clinical trial; many of these procedures

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may not be efficacious" (Office of Technology Assessment, 1976, p. 7). Shortly thereafter, the medical community began assembling evidence on effective interventions drawn from rigorous studies and disseminating it in a way that practitioners could easily access and apply (Przybylski, 2008). This was facilitated by the development, between 1992 and 1996, of a series of 19 clinical practice guidelines sponsored by the Agency for Health Care Policy and Research (now the Agency for Healthcare Research and Quality) (Eddy, 2011).<sup>1</sup> In 1993, the Cochrane Collaboration (*www.cochrane.org*) began in the United Kingdom, with the goal of identifying and synthesizing evidence about effective clinical practices in medicine (Eddy, 2011). The Evidence Based Practices Movement in Criminal Justice

Just a few years after Cochrane published his critique, Robert Martinson issued his now infamous synthesis of research in corrections (Martinson, 1974), followed by a book by Lipton, Martinson, and Wilks (1975), both of which seemed to lead to the conclusion that "nothing works" in rehabilitating offenders.<sup>2</sup> In the 1980s, numerous reviews were conducted to rebut Martinson, along with research into the effectiveness of alternative ways of preventing crime (Welsh, 2007). This included a series of publications by Canadian psychologist Paul Gendreau and his colleagues with titles such as "Effective Correctional Treatment: Bibliotherapy for Cynics" (1979) and "Treatment in Corrections: Martinson was Wrong" (1981).

In 1980, the University of Chicago Press began publishing an annual volume entitled *Crime and Justice: A Review of Research*, which included reviews of existing literature on specific topics (although without considering the strength of the research designs or characterizing the effectiveness of individual programs and initiatives).<sup>3</sup>

Throughout the 1980s and early 1990s, the criminal justice researchers who undertook the task of summarizing what was known about effective programs were concerned with describing what the evidence showed about what types of interventions were effective. There was no systematic effort to identify specific programs that were shown to be effective, nor to rate the quality of the studies that led to their conclusions regarding effectiveness. This changed in

<sup>&</sup>lt;sup>1</sup> The term "evidence-based" dates to this time period, when it appeared in the title of a 1992 article by David Sackett and his colleagues published in the *Journal of the American Medical Association* ("Evidence-Based Medicine: A New Approach to Teaching the Practice of Medicine").

<sup>&</sup>lt;sup>2</sup> Although many have argued that Martinson's point was that the poor quality of the available evidence led to the conclusion that researchers could not say definitively "what works" in corrections.

<sup>&</sup>lt;sup>3</sup> Annual Reviews, a nonprofit organization, began publishing annual summaries of the literature in biochemistry in 1932, and quickly branched out to over 40 areas, including psychology (since 1950), sociology (since 1975), and law and social science (since 2005).

the mid-1990s with two different efforts to identify specific programs that were effective and to objectively assess the methodological quality of each of the studies supporting conclusions about "what works."

In 1996, the Center for the Study and Prevention of Violence (CSPV), at the Institute of Behavioral Science, University of Colorado Boulder, designed and launched a national initiative to identify and replicate youth-focused violence, delinquency and drug prevention programs that have been demonstrated as effective. The project, initially called Blueprints for Violence Prevention, identifies prevention and intervention programs that meet a strict scientific standard of program effectiveness. The project initially identified 10 model programs and published detailed descriptions of the programs and the evaluation results. The results of this effort were to identify programs that the scientific evidence showed are effective, and to provide detailed information about these programs so that they could be replicated by others.

In 1996 Congress required the Attorney General to provide a "comprehensive evaluation of the effectiveness" of Department of Justice grants to assist state and local law enforcement and communities in preventing crime. This was the culmination of a long-standing interest on the part of Congress in the evaluation of crime prevention initiatives (Sherman, 1997). In 1972, for example, the Omnibus Crime Control and Safe Streets Act of 1968 was amended to require evaluations of local assistance grants, and the 1988 Anti-Drug Abuse Act Byrne Grants program limited funding to projects of "proven effectiveness" as demonstrated by program evaluation (Sherman, 1997).

In the 104<sup>th</sup> U.S. Congress, the Senate approved a bill that would have required up to three percent of funds for some local assistance programs to be targeted for evaluation of those programs. The House version of the bill did not include the evaluation set-aside, and the Conference Committee agreed to fund a comprehensive evaluation instead (Sherman, 1997). Congress required that the research for the evaluation be "independent in nature," and "employ rigorous and scientifically recognized standards and methodologies" (Sherman, 1997). The result was a report completed by Dr. Lawrence Sherman and his colleagues at the University of Maryland, an early and highly visible effort to identify EBPs in criminal justice by reviewing research and evaluation studies (Sherman, Gottfredson, MacKenzie, Eck, Reuter, & Bushway,

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1997). The Maryland study was one of the first criminal justice efforts to "score" the evaluation studies it reviewed based on the strength of the scientific methods used.<sup>4</sup>

With the establishment of the Internet and the widespread availability of high-speed access to the Web, agencies and organizations began to develop online resources for identifying evidence-based practices in criminal and juvenile justice. These resources included the Office of Juvenile Justice and Delinquency Prevention (OJJDP)'s Model Programs Guide, established in 2000; the Office of Justice Programs' CrimeSolutions.gov website, established by OJP in 2011; and the BJA-funded What Works in Reentry Clearinghouse, established in 2012. Each of these resources is discussed in greater detail in the section on "Resources for Identifying EBPs."

### Where Does Evidence Come From?

What do we mean when we use the term "evidence?" When we talk about evidence, we mean information about the effectiveness of a program, set of practices, or policy initiative that is generated using established scientific methods. The Office of Justice Programs (OJP) "considers programs and practices to be evidence-based when their effectiveness has been demonstrated by causal evidence, generally obtained through high quality outcome evaluations," and notes that "causal evidence depends on the use of scientific methods to rule out, to the extent possible, alternative explanations for the documented change."<sup>5</sup> Below we will examine two of the key

### What is Effectiveness?

What do we mean by the "effectiveness" of a program? In criminal justice, we tend to conceptualize effectiveness in one of several ways: reducing crime (in the case of policing interventions), reducing recidivism (correctional interventions), or reducing victimization/revictimization (prevention/victim-based interventions). For example, a program or intervention targeting probationers or parolees is considered effective if it reduces the likelihood of the individual committing another crime.<sup>6</sup> There may be other indicators of effectiveness for such a program, but reducing recidivism is usually considered the "bottom line."

<sup>&</sup>lt;sup>4</sup> The "methodological rigor" rating used in the study was based on a scale adapted from one used by the Center for Substance Abuse Prevention in their 1995 study of the effectiveness of substance abuse prevention efforts, which was the precursor to the National Registry of Prevention Programs (NREPP).

<sup>&</sup>lt;sup>5</sup> Crimesolutions.gov glossary (<u>www.crimesolutions.gov/glossary</u>).

<sup>&</sup>lt;sup>6</sup> Once program effectiveness is conceptualized, it must also be operationalized; that is, we must specify the specific operations/measures that will be used to define the concept. For example, there are many ways to define recidivism:

### What are Scientific Methods?

The other key term used in OJP's EBP definition is "scientific methods." There are several key components of evidence that is produced using such methods. In particular, scientific evidence is:

- **objective**: it is observable by others, it is based on facts (rather than thoughts or opinions), and it is free of bias or prejudice that might be caused by personal feelings;
- **replicable**: it can be observed by others using the same methods that were used to produce the original evidence;
- **generalizable**: it can be applied to individuals and groups other than those who were involved in producing the original evidence.

In general terms, scientists (criminal justice researchers or program evaluators) assure that their evidence is *objective* by using precise, unambiguous measures to assess concepts such as recidivism. They assure that evidence is *replicable* by maintaining transparency of the methods they use to collect the information: explaining in detail what they collected and how they collected it, and subjecting their findings to assessment and review by their peers by presenting them at professional conferences and publishing them in refereed journals. *Generalizability* is more difficult to ensure, and usually results from gathering evidence from a representative sample of the kinds of people (offenders) about whom we are interested in forming conclusions.

### Randomized Controlled Trials

The hallmark of the scientific method is experimentation. This means comparing two groups: those who receive the intervention (treatment group) and those who do not (control group). The outcomes or measures of effectiveness of interest (for example, recidivism) are compared for the two groups to determine if they are in the hypothesized (expected) direction. For example, if drug courts are effective, then we would expect that probationers seen in drug courts would be expected to have lower recidivism rates than a control group of probationers who appear in regular courts.

The key to ensuring, as the OJP definition states, that we can rule out alternative explanations for observed differences between the groups is that the groups must be the same on

rearrest, reconviction, and reincarceration. There are also different ways that we might measure, or obtain information on, these: police reports, court records, or even self-reports by perpetrators.

all factors other than the intervention. For example, if the drug court probationers are all first time offenders while the regular court offenders all have lengthy criminal histories, then we would expect to see differences in recidivism that are unrelated to the type of court in which they are seen. The best way to ensure the equivalency of the two groups is through random assignment; that is, individuals are assigned to the groups by the researcher/evaluator in a random manner such that each person has an equal chance of ending up in the experimental or control group. This is the best way to ensure that the two groups are equivalent on all factors except the one of interest (in our example, amount of supervision). These designs, known as randomized controlled trials (RCTs), provide confidence that observed differences are due to the intervention, and reduce the likelihood that evaluators will falsely conclude that the intervention being studied is effective. This is what is meant by "causal evidence."

### Quasi-Experiments and Non-Experiments

Randomized controlled trials (RCTs), are often referred to as the "gold standard" for producing evidence. However, there are a number of questions in criminal justice that cannot be easily addressed using RCTs. For example, to determine the effect of sentence length on recidivism, we cannot randomly assign offenders to receive different sentences. Interventions at the community level are also difficult to evaluate using RCTs (for example, determining the effectiveness of a county-based comprehensive domestic violence intervention program). In fact, it can be difficult to persuade any decision-maker (like a judge or program manager) to suspend their usual placement criteria in favor of random assignment to a particular program or intervention.<sup>7</sup>

In cases where RCTs are not feasible, other methods of designing evaluations may be employed that provide some assurance that observed differences are due to the intervention under study and not other factors. These designs, known as quasi-experimental designs, vary in terms of their level of sophistication and their ability to control for possible differences between the groups, other than the intervention, that might produce outcomes. For example, when assessing a program with limited capacity, an evaluator might employ a "waiting list" as a comparison group. The waiting list would consist of individuals who are eligible for the program but have not been admitted due to space considerations. Since those on the waiting list are

<sup>&</sup>lt;sup>7</sup> Ethical issues, legal considerations, and cost are additional factors that make implementing RCTs difficult or impractical.

eligible for the program, they should be similar in most respects to those actually in the program. It would thus be reasonable for the evaluator to expect that any observed differences in outcomes are due to the program itself, and not to other differences between the two groups. However, the evaluator cannot be certain of this, since the individuals were not assigned randomly to the two groups. It is for this reason that evidence produced by quasi-experimental designs is not considered as strong or as compelling as evidence from RCTs.<sup>8</sup>

Some evaluations may not manage to use quasi-experimental designs, but may rely on simple measurement of outcomes. For example, an evaluation of a rape awareness campaign may question women in the community about their knowledge of rape and prevention methods at the end of the campaign. This can be considered a "non-experimental" design, since it is not comparing outcomes of different groups or even of the same group at different times. Using this type of non-experimental design, any observations of knowledge cannot be unambiguously attributed to the campaign itself. This is because the women in the community who are questioned may have received other information, been exposed to a variety of situations, or had any number of experiences during the campaign, all of which would be unknown to the evaluator, that might have affected their knowledge of rape and prevention methods. Thus little weight would be given to any evidence of effectiveness produced by this type of assessment.

### What is not Scientific Evidence?

Given the characteristics of the scientific method discussed earlier, it should be obvious that there are many types of information that might be collected in an evaluation that would not rise to the level of "scientific evidence." In particular, opinions, testimonials, and anecdotes are not evidence of effectiveness in and of themselves. For example, a survey of probation and parole officers that shows positive attitudes about an offender reentry program is not evidence, by itself, of program effectiveness.<sup>9</sup>

### How Much Evidence is Enough?

The discussion above suggests that there are levels of evidence, and evidence from some evaluations should be given greater weight than evidence from others because it of higher quality. The question arises, then, of how to consider the quantity of evidence. How much

<sup>&</sup>lt;sup>8</sup> This may be particularly true in those areas where evidence from RCTs is already available. For example, a quasiexperimental design that shows that a drug court is not effective in reducing recidivism will not count for much when weighed against the positive evidence of effectiveness produced by a number of RCTs of drug courts.

<sup>&</sup>lt;sup>9</sup> Although this might be important information that could be put to good use by the program in question.

evidence is needed to consider a specific program to be "evidence-based?" For example, what if a program has been assessed by only one RCT that showed positive outcomes? Should it be considered evidence-based? What if another program has been assessed by two or three quasiexperiments that have shown positive outcomes? Should that program be considered evidencebased? What about a third program where some evidence shows positive outcomes and other evidence shows no outcomes (or even negative outcomes)?

Unfortunately, there is no single satisfactory answer to the questions posed above. As we will see in the discussion of resources, different sources of information on EBPs handle the question of how the quality and quantity of evidence should be balanced differently. However, in recent years researchers and evaluators have focused less on single evaluations and more on examining the magnitude and consistency of the evidence produced by multiple studies of specific programs and initiatives.

### Systematic Review and Meta-Analysis

One method that is used to examine multiple studies is conducting a systematic review. Systematic reviews are usually conducted by subject matter experts, as is the case with resources such as CrimeSolutions.gov. In these cases, formal criteria are used to assess the quality of available evaluations of a particular area (the "evidence base"), and conclusions are reached about the effectiveness of that intervention based on application of these criteria by the reviewers.

A second approach to identifying EBPs involves using a statistical technique known as "meta-analysis." Meta-analyses use statistical methods to combine the results of multiple evaluations of a specific intervention to assess whether, when combined, they show positive program outcomes. Meta-analysis produces an average "effect size" for a particular outcome. For example, a meta-analysis of drug courts would review all available experimental and quasi-experimental evaluations of these programs, looking at outcome measures such as recidivism. Some studies may have shown large decreases in recidivism, others small decreases, and still others no decreases or even increases in recidivism. The meta-analysis would statistically combine these outcomes to produce an average recidivism reduction that could be tested to drug courts. The statistical significance of this average recidivism reduction could be tested to determine if drug courts in general seem to be effective in reducing recidivism. The average recidivism reduction could also be used to compare outcomes produced by drug courts to those

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of other types of criminal justice interventions, perhaps as part of a comparative cost analysis (see, for example, Drake, Aos, & Miller, 2009).

In 2009, Mark Lipsey published a meta-analysis of 548 studies of delinquency interventions published between 1958 and 2002 (Lipsey, 2009). Based on the results of this meta-analysis, Lipsey and his colleagues have developed the Standardized Program Evaluation Protocol (SPEP), a tool that assesses programs by rating how closely their characteristics correspond to those programs shown to be effective at reducing recidivism in the meta-analysis (Lipsey, Howell, Kelly, Chapman & Carver, 2010). The SPEP assesses juvenile justice programs the type of service the program provides, the treatment amount (duration and contact hours), treatment quality, and youth risk level.

### <u>Summary</u>

To summarize, the identification of a program, practice or policy as evidence-based requires scientific evidence regarding its effectiveness. Stronger evidence is derived from randomized controlled trials and quasi-experiments, which help to ensure that observed positive outcomes are due to the intervention itself and not other factors. Evidence derived from multiple studies, combined either by expert assessment or by means of meta-analysis, should be weighted more heavily than evidence derived from a single evaluation.

### **Resources for Identifying EBPs**

As noted previously, there are a number of Web-based resources available for identifying EBPs in criminal justice and related fields. A few selected resources are worth mentioning here; a more comprehensive list of Web-based resources can be found in the Appendix.

In criminal justice, the premier resource is CrimeSolutions.gov (www.crimesolutions.gov). Established by OJP in 2011, CrimeSolutions.gov provides information on 270 programs in a number of areas of criminal justice including corrections, courts, crime and crime prevention, drugs and substance abuse, juveniles, law enforcement, technology and forensics, and victims and victimization. Programs are rated as "effective," "promising," or "no evidence."<sup>10</sup> Each program's rating can be based on one study or more than one study, and this is indicated in the rating. Ratings are assigned by program experts using a standardized protocol known as the Program Evidence Rating Instrument.

<sup>&</sup>lt;sup>10</sup> As of this writing, 27% of programs on the site are identified as effective, 61% as promising, and 12% as showing no effects.

According to the website, one of the reasons OJP created CrimeSolutions.gov is to "encourage justice practitioners to replicate programs with a track record of success, when it is reasonable and feasible to do so. Replicating programs that have been shown to work and that fit a community's needs has the potential to save valuable time and resources compared to implementing untested programs that may or may not address the same problems as effectively."

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) established the Model Programs Guide (MPG) in 2000. The MPG was originally developed as a tool to support the Title V Community Prevention Grants Program, and was expanded in 2005 to include substance abuse, mental health and education programs. The MPG contains over 200 juvenile justice programs in the areas of prevention, immediate sanctions, intermediate sanctions, residential, and reentry. Programs are rated as either "exemplary," "effective," or "promising" based on the conceptual framework of the program; the program fidelity; the evaluation design; and the empirical evidence demonstrating the prevention or reduction of problem behavior, the reduction of risk factors related to problem behavior, or the enhancement of protective factors related to problem behavior. Ratings were established by a peer review panel, and are now based on the same rating instrument used by CrimeSolutions.gov.

The What Works in Reentry Clearinghouse (<u>http://whatworks.csgjusticecenter.org</u>) is a BJA-funded initiative established by the Council of State Governments in 2012 and designed to provide information on evidence-based reentry interventions. The site contains information about 56 initiatives in six focus areas (brand name programs, employment, family-based programs, housing, mental health, and substance abuse). Interventions are rated on a five-point scale: strong or modest evidence of a beneficial effect; no statistically significant findings; and strong or modest evidence of a harmful effect. The ratings were made by experts using standardized coding instruments.

Outside of the criminal justice arena, an important resource for EBPs is the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidencebased Programs and Practices (NREPP). NREPP (<u>http://nrepp.samhsa.gov</u>) includes almost 300 interventions in the areas of mental health and substance abuse treatment, substance abuse prevention, and mental health promotion. Independent reviewers assess studies in each area on the quality of research and on readiness for dissemination (which includes the availability of

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implementation materials, availability of training and support resources, and availability of quality assurance procedures).

Even from this brief summary of available resources, we can see that different organizations and agencies take different approaches to identifying EBPs. Users should review the information provided on the websites carefully to determine what criteria and procedures are used to identify EBPs. In particular, users should be aware of the number of studies that support a particular program or practice, and whether these studies used RCTs or quasi-experimental designs. The Blueprints for Healthy Youth Development website provides a list of 500 youth programs rated on at least one of six federal or private organization EBP websites<sup>11</sup>, including CrimeSolutions.gov and the OJJDP MPG (see <u>www.blueprintsprograms.com/resources.php</u>).

### **Implementing EBPs**

One of the keys to being able to take advantages of resources that provide lists of EBPs is being able to successfully implement the programs or practices. This is known as "implementing with fidelity." As the CrimeSolutions.gov website notes:

If you want to replicate a successful program, you have to plan carefully and pay attention to details to accurately reproduce critical program elements that often include specific procedures, personnel qualifications, and client characteristics. The best way to get similar positive results from these programs is to replicate them with fidelity—using the same procedures, with the same kinds of people, and in the same kinds of settings (*www.crimesolutions.gov/about\_tips.aspx*).

Unfortunately, it is often difficult to obtain details about the programs assessed on these various websites. Much of the research and evaluation reviewed on these sites is published in journals, where detailed program descriptions are not available. In fact, detailed program information or implementation manuals may not be available from any source, unless the program is what is sometimes called a "name brand" program (in which case implementation materials will be available for a fee). As noted earlier, SAMHSA's NREPP includes a readiness for dissemination component that includes an assessment of the availability of implementation materials. This is obviously useful information for those deciding whether to adopt a particular program for their own use.

<sup>&</sup>lt;sup>11</sup> This includes the 44 youth programs on the Blueprints' own website that it finds to be "model" or "promising." The list provides information on which website(s) rate which programs, so users can easily identify programs rated by multiple sites.

### Adapting EBPs for Local Use

It is often the case that a program cannot be adopted for use directly, but must be *adapted* to fit a particular set of circumstances before it can be used. There may be a variety of reasons that one may choose to adapt a program, including differences in target population (age, rural vs. urban) and potential barriers to implementation such as time, money or resources. Most websites offer caution in adapting EBP programs, advising that key program components should be implemented with fidelity. However, as noted previously, it can be difficult or impossible to identify which program elements must be implemented exactly and which can be changed (and how) without affecting positive outcomes.<sup>12</sup>

In recent years, knowledge about how best to implement programs and practices has been increasing rapidly. One of the leading organizations in this "implementation science" movement has been the National Implementation Research Network (NIRN). The NIRN website (<u>http://nirn.fpg.unc.edu/</u>) provides a wealth of information on implementation. Those interested can begin with a comprehensive report produced by NIRN that summarizes what is known about implementation research (Fixsen, Naoom, Blase, Friedman & Wallace, 2005).

### What if there is No Evidence?

While many readers of this briefing may be able to identify a program that suits their needs from one of the EBP resources listed above, others may find themselves in a different situation. Some may be interested in implementing a program which has not yet been subjected to rigorous evaluation. Others may be already funding or implementing "homegrown" programs that have not been evaluated. Still others worry about whether there will be room for innovation when an evidence-based approach is adopted. What should be done when there is no evidence of program effectiveness?

The basic answer to this question is that programs and policies should be based, to the extent possible, on theories and concepts that are supported by research. If programs are consistent with established theories of behavioral change, for example, and are implemented

<sup>&</sup>lt;sup>12</sup> For more information, view JRSA's Webinar Making "What Works" Work for You: Evidence-Based Components and Adaptation at <u>www.jrsa.org/njjec/trainings-presentations.htm</u>.

using (to the extent possible) core components of evidence-based programs (e.g., that high risk offenders receive more services than low risk offenders), we would expect them to be successful. On the other hand, programs or interventions that are based on questionable assumptions about behavior change that do not employ best practices would not be expected to show positive effects.

One example of a recent program that was considered innovative at the time it was implemented (and has received considerable national attention since) is Hawaii's Opportunity Probation with Enforcement (HOPE) program. Begun by Judge Steven Alm in 2004, the program responds to probation violations (such as testing positive for drug use) with immediate sanctions, usually a few days in jail. Evaluations have shown positive outcomes as a result of this approach.

While the HOPE intervention appeared to have been created by Judge Alm rather spontaneously (and thus could be considered an innovative program), the program in fact has a strong theoretical basis. Swiftness and certainty of punishment have been long established as effective principles in criminal justice. As one evaluation of HOPE explains, "the basic tenets of the HOPE program (the use of clearly articulated sanctions applied in a manner that is certain, swift, consistent, and parsimonious) are well supported by prior research (Hawken & Kleiman, 2009, p. 9)." Unfortunately, the history of criminal justice programming offers many examples of innovative programs and initiatives that were not well supported by prior research, and therefore doomed to failure.<sup>13</sup>

For many years, evaluators have been preaching the importance of specifying program goals and objectives, tying these explicitly to program activities, and measuring both the implementation of the activities and the corresponding outcomes. These are known as program "logic models" because they spell out the logic that connects what the program is doing to the outcomes it expects to produce. A solid program, even one that is not directly supported by scientific evidence, should be able to make a compelling case for how what it is doing is expected to result in positive changes (lower recidivism, fewer probation violations, etc.).

<sup>&</sup>lt;sup>13</sup> Boot camps and the "Scared Straight" program for juveniles are examples of initiatives where there was no compelling theory or research supporting the principles of behavioral change that presumably underlay the program activities.

### Summary

For the last 40 years or so, the criminal justice field has been moving slowly but inexorably toward the use of scientific evidence to develop programs and interventions designed to prevent and reduce crime and victimization. There are now many resources that can provide funders and program managers with detailed information on evidence-based practices in almost all areas of criminal justice. Many questions and challenges remain regarding the implementation of these EBPs, and researchers and scholars are now turning their attention to these issues. It is clear, however, that we have reached a point in time where policymakers are demanding that programs and initiatives be supported by solid empirical evidence. With diminishing resources available for funding criminal justice issues, understanding how to identify and implement EBPs will be critical for decisionmakers in all areas of the justice system.

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### **Appendix: Evidence-Based Practices Resources**\*

Systematic Reviews and Program Ratings

### Crime and Delinquency

### CrimeSolutions.gov (www.crimesolutions.gov)

Established by the Office of Justice Programs in 2011, CrimeSolutions.gov provides information on 270 programs rated as "effective," "promising," or "no evidence."

### Model Programs Guide (MPG) (<u>www.ojjdp.gov/mpg</u>)

Established by the Office of Juvenile Justice and Delinquency Prevention in 2000, the MPG rates over 200 juvenile justice programs rated as either "exemplary," "effective," or "promising."

What Works in Reentry Clearinghouse (http://whatworks.csgjusticecenter.org)

Established by the Bureau of Justice Assistance, rates 56 initiatives in six focus areas on a five-point scale: strong or modest evidence of a beneficial effect; no statistically significant findings; and strong or modest evidence of a harmful effect.

### **Education**

### Best Evidence Encyclopedia (http://www.bestevidence.org)

Created by the Johns Hopkins University School of Education's Center for Data-Driven Reform in Education with funding from the Institute of Education Sciences, this site classifies programs in math, reading, science, comprehensive school reform, and early childhood education as having strong, moderate or limited evidence of effectiveness.

### What Works Clearinghouse (http://ies.ed.gov/ncee/wwc)

Developed by the Department of Education's Institute of Education Sciences, the Clearinghouse provides information in over 200 specific areas related to topics/outcome domains such as dropout prevention, early childhood education, and student behavior. For each intervention, the site provides an improvement index, an effectiveness rating, and an indication of the extent of the available evidence.

### Health and Medicine

### Cochrane Collaboration (www.cochrane.org)

The Cochrane Collaboration is a nonprofit organization that publishes systematic reviews related to healthcare. Over 5,000 reviews in over 30 areas of health and medicine are published online in the Cochrane Database of Systematic Reviews, including child health, mental health, and tobacco, drugs and alcohol dependence.

<sup>&</sup>lt;sup>\*</sup> Key articles and reports cited in the References section also serve as useful resources, including: Drake et al., 2009; Fixsen et al., 2005; Lipsey, 2009; Lipsey et al., 2010; Przybylski, 2008; and Sherman et al., 1997.

### The Community Guide (http://www.thecommunityguide.org)

Established by the Department of Health and Human Services' Community Preventive Services Task Force, the Guide produces systematic reviews of effective programs in over 22 areas of health services, including violence, mental health, and alcohol abuse.

### Mental Health and Substance Abuse

### *National Registry of Evidence-based Programs and Practices (NREPP)* (http://nrepp.samhsa.gov)

Established by the Substance Abuse and Mental Health Services Administration, NREPP includes almost 300 interventions in the areas of mental health and substance abuse treatment, substance abuse prevention, and mental health promotion.

### Multiple Types of Social Interventions

### Campbell Collaboration (www.campbellcollaboration.org)

An offshoot of the Cochrane Collaboration, the Campbell Collaboration publishes systematic reviews in the areas of crime and justice, education, social welfare, and international development. Almost 100 different reviews are available online.

### Coalition for Evidence-Based Policy (http://evidencebasedprograms.org)

This nonprofit organization provides ratings of 45 programs in 12 areas, including crime/violence prevention, K-12 education, and substance abuse prevention/treatment. Programs are designated as "top tier" (those with evidence of sizeable, sustained effects on important outcomes based on randomized controlled trials) or "near top tier" (missing evidence of sustained effects).

### Youth Development

### Blueprints for Healthy Youth Development (<u>www.blueprintsprograms.com</u>) Developed by the University of Colorado's Institute for Behavioral Science, the

Blueprints website identifies 46 model and promising programs.

### Promising Practices Network (PPN) (www.promisingpractices.net)

Developed and maintained by the Rand Corporation, PPN identifies programs that have been shown to improve outcomes for children. Programs are designated as "proven" or "promising." The site includes 28 proven programs and 58 promising programs.

### Other EBP Resources

### Center for Evidence-Based Crime Policy (http://cebcp.org)

Developed by the Department of Criminology, Law and Society at George Mason University, the Center provides a variety of resources related to evidence-based policing and other areas of criminal justice, including the translation of research to practice.

### EPISCenter (http://www.episcenter.psu.edu)

Penn State's EPISCenter, supported by the Pennsylvania Commission on Crime and Delinquency, promotes the use of evidence-based delinquency prevention and intervention programs through research, advocacy, and technical assistance.

Evidence-Based Medicine Resource Center (http://www.nyam.org/fellows-members/ebhc)

This site, established by the Section on Evidence-Based Health Care of the New York Academy of Medicine contains references, bibliographies, tutorials, glossaries, and online databases to guide those embarking on teaching and practicing evidence-based medicine. It offers practice tools to support critical analysis of the literature and MEDLINE searching, as well as links to other sites that help enable evidence-based medical care.

### National Implementation Research Network (NIRN) (http://nirn.fpg.unc.edu)

The University of North Carolina's NIRN provides information on implementation science and organizational change. NIRN conducts research and publishes information on how to effectively implement evidence-based programs on a national scale.

### National Juvenile Justice Evaluation Center (NJJEC) (www.jrsa.org/njjec)

Developed by the Justice Research and Statistics Association in 2010 with funding from OJJDP, NJJEC's goal is to improve the evaluation capacity of states, tribes, and local communities and facilitate the use of evidence-based programs and practices in juvenile justice.

Washington State Institute for Public Policy (<u>www.wsipp.wa.gov</u>)

Created by the Washington legislature, WSIPP conducts research on evidence-based practices in education, criminal justice, welfare, and health. WSIPP is particularly known for its work in cost-benefit analysis, and the development of a methodology to calculate the costs and benefits of a variety of criminal justice initiatives.



#### **JUVENILE JUSTICE IN CALIFORNIA**

Sonya Tafoya and Joseph Hayes

#### **California's juvenile justice system is a network of county and state agencies and programs.**

In recognition of developmental differences between adults and juveniles, the juvenile justice system is intended to emphasize guidance, education, treatment, and rehabilitation over punishment. The system deals with juveniles who were under age 18 at the time of their offense. In addition to local law enforcement, county probation departments and juvenile courts work with local school districts and child welfare and behavioral health departments. County probation departments are also responsible for operating juvenile halls, camps, and ranches. At the state level, the Division of Juvenile Justice (DJJ) maintains three secure facilities and a conservation camp for lower-risk offenders.

#### Minors can be arrested for felony, misdemeanor, or status offenses.

In 2012, 30% of reported arrests were for felonies, 56% for misdemeanors, and 13% for status offenses (truancy, curfew violations, or other charges applicable only to minors). Of the 36,289 juvenile felony arrests reported in 2012, 23% were of African Americans, 20% were of whites, and 52% were of Latinos. Of the 67,817 reported misdemeanor arrests, 15% were of African Americans, 24% were of whites, and 54% were of Latinos.

#### **Local law enforcement, probation departments, and juvenile courts have many options short of incarceration.**

The response to a juvenile offense depends on its seriousness and also on the offender's background. For example, a 15-year-old arrested for the first time for skipping school might be counseled and released. At the other extreme, the most serious cases may be directly filed in or remanded to the adult criminal system. Most of the time, however, law enforcement refers the arrestee to a county juvenile probation department. (Referrals may also come from other agencies or individuals—e.g., schools or parents.) About half the time, the probation department either closes the case or prescribes informal probation or a diversion program (including education, community service, or restorative justice). More serious cases warrant a juvenile court hearing, but judges have a range of options short of committing youth to a county or DJJ facility. Of the approximately 150,000 juvenile arrests made in 2011, only 11% resulted in confinement, and fewer than 1% resulted in commitment to a DJJ facility.

#### A series of reforms has lowered the number and changed the composition of DJJ wards.

In the mid-1990s, the state began to shift responsibility for juvenile offenders to the counties. A 2007 reform permitted counties to commit only the most serious offenders to state facilities. Between 2007 and 2013, the year-end number of juvenile offenders in DJJ institutions and camps fell from 2,115 to 659. The share of youth in DJJ facilities for homicide increased from 5% to 12.4% and for assault from 32.2% to 39.7%. A subsequent reform gave counties responsibility for all offenders released from DJJ, resulting in a drop in state parole numbers from 2,462 to zero between 2007 and 2013.

#### > The reforms have not increased county caseloads—in part due to declining youth felony arrest rates.

At year-end 2007, counties held an average of 10,843 youths in their juvenile halls and camps. By year-end 2012 that figure fell to 6,892—a 36% decline. The number of youth supervised under alternative programs dropped from 2,268 to 1,645 during the same period. One contributing factor is that between 2007 and 2012 the juvenile arrest rate fell by 42%—to its lowest level in decades. This trend mirrored a general decline in felony arrest rates for young adults.

#### Maintaining the remaining state juvenile facilities is costly.

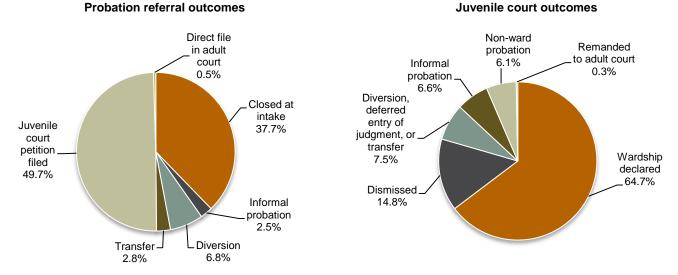
The educational and specialized treatment needs of DJJ wards, their diminishing numbers, and court-imposed remediation of deficiencies in staffing, facilities, and educational, medical, and mental health services have resulted in a high per-ward cost. The annual cost to house a DJJ ward is \$179,400—more than three times the per-inmate cost in the adult system. DJJ has contained some of these costs by closing four institutions and one conservation camp. The remaining facilities were filled to about 60% capacity in 2012.



PPIC



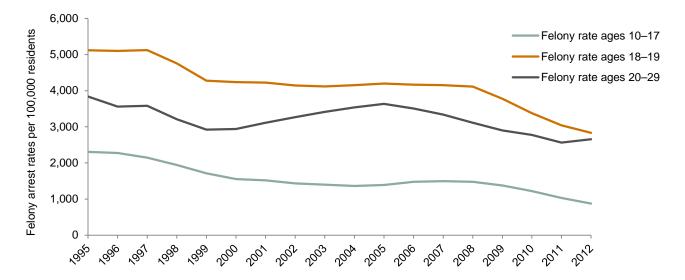
#### County probation departments and juvenile courts have a range of options



**Source:** California Department of Justice, 2011 Juvenile Justice in California.

**Notes:** "Transfer" includes cases referred to traffic court and Immigration and Customs Enforcement deportations. Non-ward probation, informal probation, diversion, and deferred entry of judgment are statutorily defined options that judges can use to give youth the opportunity to avoid deeper involvement in the justice system. For further detail, see Welfare and Institutions Code §652.2, §725(a), §790.

#### Felony arrest rates have dropped for both juveniles and young adults



**Sources:** California Dept. of Justice, Criminal Justice Statistics Center, published tables. (accessed Feb. 19, 2014). California Dept. of Finance, Race/Ethnic Population with Age and Sex Detail, July 2000–2010, and Race/Ethnic Population with Age and Sex Detail, 1990–1999 (May 2009). U.S. Census Bureau, Population Division, Annual Estimates of the Resident Population. April 1, 2010 to July 1, 2012 (June 2013).

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## CHIEF PROBATION OFFICERS OF CALIFORNIA VOLUME 1 / ISSUE 4

## Assessing Risks and Needs of Realigned Populations: Post-Release Community Supervision and Services

A first and essential step of California probation departments is to use risk and needs assessment for people being released back to the community from state prison under Post-Release Community Supervision (PRCS). It is good public safety policy to use validated assessment tools to assign offenders to the right level of probation monitoring and match them with evidence-based programs that address the specific criminal risk factors of the individual.

This brief looks at the work county probation departments do to prioritize resources towards higher risk offenders, and refer people to programs most likely to reduce recidivism. As realignment continues to be implemented in counties, it will be important to understand whether the full range of evidence-based practices from offender assessment to probation supervision to treatment completion are properly resourced. Although risk and needs assessments can help to make better supervision and referral choices, probation collaboration with community

## What is Public Safety Realignment?

Enacted through California Assembly Bills 109 and 117, realignment gave counties responsibility to manage two populations of offenders who have been the responsibility of the California Department of Corrections and Rehabilitation (CDCR). Post-Release Community Supervision (PRCS) and local prison offenders (1170h) share the fact they have been convicted of a felony offense that is non-serious, non-violent, and non-sexual. For information, go to: http://www.cpoc.org/realignment

partners is important to ensure quality, availability, and capacity of programs in their community. Criminal justice research has shown that combining probation monitoring with effective treatment will yield the greatest recidivism reduction<sup>1</sup>

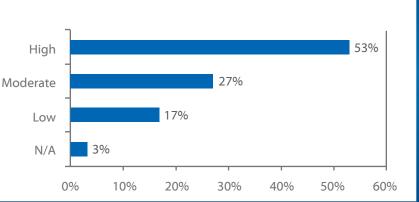
## **STATIC RISK:** Supervision Levels Linked to the Assessed Risk of Offenders

Conducting risk assessments is the cornerstone of the probation business model. Validated risk/needs assessment tools compile elements of an offender's past criminal acts and demography as well as psychometric information to create a set of quantitative scores to assist probation officers in managing and case planning for offenders. Risk assessment allows departments to prioritize intensive supervision on higher risk offenders to keep the public safe. Conversely, it allows probation to shift low risk offenders into less intensive supervision services, which research shows has better outcomes for those less likely to recidivate. Over a 15-month period, 80% of the offenders released from prison as PRCS offenders, were assessed as high or moderate risk to recidivate (Figure 1), with 17% assessed as low risk to recidivate. <sup>2,3</sup>

### **DYNAMIC NEEDS:** Services Linked to the Assessed Needs of Offenders

Assessing offenders for dynamic risk means determining what interventions or services will have the most impact on a particular offender at the time of the assessment, which is partly linked to a





concept called Risk-Need-Responsivity (RNR). RNR means the static risk of re-offense and dynamic service needs of the offender inform the program that will best reduce that offender's risk of recidivating. This approach helps to tailor program offerings as well as offender referrals based on offender temperament, culture, and gender. This is an important development as it gives probation officers information about what interventions will do the most to reduce future crime for an offender. For county planning purposes, use of the aggregate needs of the offender population gives an insight into the amount and type of services needed in a jurisdiction. By using needs on the front end to create a menu of services for a county, offenders are more likely to be placed in the right kind of program. Making evidence-based programming referrals is only the first step. Programs must also deliver high quality, effective programming with fidelity to proven methods. Determining the level and range of services is an important component, along with the correct intensity of service. By adhering to principles of risk-need-responsivity with offenders, research shows counties can create plans and allocate appropriate fund-ing to create quality programming across a number of areas which result in better outcomes.<sup>4,5,6</sup>

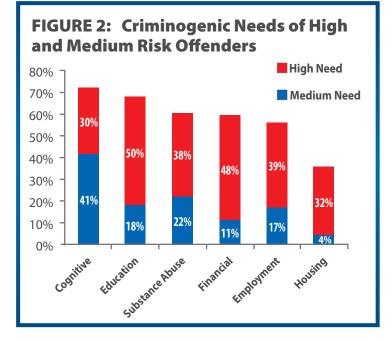
### **APPLYING RISK NEEDS ASSESSMENT TO THE PRCS POPULATION**

The population being released from prison as PRCS offenders, face challenges around education, antisocial attitudes and cognition, employability, mental health, substance abuse, and homelessness. Figure 2 shows the needs assessments of high and moderate risk offenders from CDCR's COMPAS needs assessment scores. <sup>7,8</sup>

Although offenders may need a wide range of services, research shows that services should focus on the "Big 4" criminogenic need areas in case plans: antisocial attitudes, antisocial peers, antisocial personality issues and impulse control. <sup>9</sup>

72% had a high or medium need for cognitive interventions around criminal thinking.

Major risk factors for offenders tend to be associated with continued thought patterns or cycles that lead to recidivism. Antisocial attitudes, rationalizations for criminal activity, and defiance of authority can get in the way of progress in other areas of an offender's life. Additionally, associations with criminal peers and poor use of recreation time put offenders at risk. Classes and sessions in Cognitive Behavioral Therapy (CBT) Programs address this need in an evidence based method that includes cognitive restructuring, as well as social and problem solving skill development.



Nationwide surveys of incarcerated people show 60% completing high school, compared to 85% in the general public. <sup>10</sup> This low level of educational attainment is a major impediment to employment as inmates tended to have lower reading and quantitative skills, which translates into a cycle of unemployment and idle time. By placing offenders in GED, high school, or college programs and developing their skills, offenders are better able to pursue jobs and use these skills in other areas of their life.

61% had a high or medium need for substance abuse programming.

68% had a high or medium need for education.

With incarcerated people having a substance abuse rate substantially higher than the general public, treatment options must target specific types of addiction, as well address it in a dose proven to be effective. Surveys of state prison inmates found only 22% of prisoners received drug treatment during their prison term, despite having treatment needs as they exited prison. <sup>11</sup> Although money put into treatment can have a positive impact on offender outcomes, not all programs are evidence-based, or delivered in a way that is backed by research. The programs can be either inpatient where the offender check into a dedicated facility or outpatient in settings such as day reporting centers or community based treatment centers.

56% had a high or medium need for vocation and employment assistance.

Referrals to employment programs focus on offering offenders transitional opportunities for job placement, as well as building job skills. Programs in this area recruit community businesses to serve as a hiring pool which gives offenders access to job opportunities that they otherwise would not have. By improving their employability with resume writing classes and other workforce development opportunities, offenders can begin to better prepare for life in the working world.

36% had a high or medium need for residential services, and 59% for financial assistance.

When residential and financial needs are stabilized, other services can be effective. Homelessness and poverty are common attributes of former prisoners re-entering society, such that other interventions have been found to be ineffective without basic needs being fulfilled. Residential services include housing vouchers and assistance in finding stable or independent living. Financial assistance can be in accessing government services, medical insurance, or social security benefits.

## 20% of PRCS clients have diagnosed mental health needs.

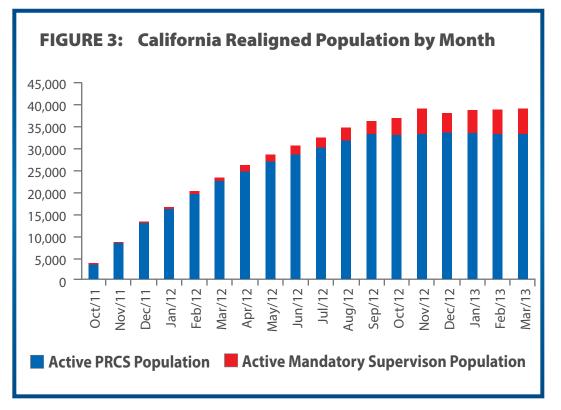
Other interventions are shown to be less effective when the underlying mental health issues are not addressed. Based on CDCR mental health assessments, approximately 4% of PRCS offenders who are released to counties have intensive, acute mental health needs, while an additional 16% have somewhat less intensive mental health issues, but are considered stable. Research studies have shown that around 50% of offenders who had mental health needs received services while in custody. As they return to California counties, this translates into mentally ill PRCS offenders needing long term and ongoing treatment for illnesses including schizophrenia, bipolar disorder, post-traumatic stress disorder, and depression. <sup>12, 13</sup>

## THE BALANCED APPROACH TO REALIGNMENT

California probation departments have made a commitment to the use of evidence-based practices to match offender's assessed needs with appropriate services, and structure supervision around an offender's relative risk to reoffend. Research shows these strategies and techniques will be successful with the realigned populations, but there also needs to be an emphasis on funding and sustaining their expansion to other population in the adult criminal justice system to make the system successful and our communities safer. By using validated

risk assessments at the beginning of working with realigned offenders (Figure 3), probation departments can employ a level of supervision that keeps the public safe, as well as provides service referrals based on the factors most likely to reduce recidivism.

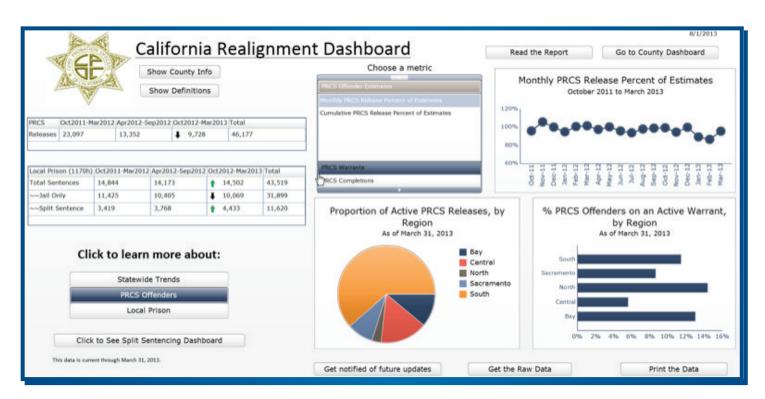
Even with proper funding, probation needs access to programs that follow evidence-based models and deliver services to



offenders with a high level of fidelity to the program model.

The long term effectiveness of this approach hinges on local Community Corrections Partnerships (CCP) funding programs that are responsive to the needs of that community. This means less victimization, greater probation success, and better use of taxpayer dollars. A properly funded probation delivery system that provides high quality assessment, case planning, supervision, and the sufficient capacity and types of evidence-based interventions that matches the offender population is a sound investment of public safety dollars.

To interact with the statewide realignment data, go to www.cpoc.org.





## For questions about this report, please email <u>cpoc@cpoc.org</u>, or visit our website at <u>http://www.cpoc.org/realignment</u>

## CPOC would like to thank The James Irvine Foundation for its support of data collection and the publication of this report.

<sup>1</sup> Aos, S., Miller, M., & Drake, E., (2006) Evidence-Based Adult Corrections Programs: What Works and What Does Not. Olympia: Washington State Institute for Public Policy.

<sup>2</sup>Turner, S., Hess, J., & Jannetta, J. (2009). Development of the California Static Risk Assessment Instrument (CSRA). University of California, Irvine, Center for Evidence-Based Corrections. <sup>3</sup>Data is based on static risk assessment records of 35,318 PRCS from January 2012 to March 2013 from the California State Risk Assessment (CSRA) administered by the California Department of Corrections and Rehabilitation (CDCR) during PRCS inmates stay in state prison. Although counties assess PRCS offenders for risk upon arrival to a county, there is no database of county-level assessment data, such that CDCR assessments were used to illustrate the risk and needs of PRCs offenders returning to counties. 98% of all PRCS offenders were assessed during their term of incarceration, such that it makes a useful proxy for understanding the risk profile at the time of prison release.

<sup>4</sup> Bonta, J., & Andrews, D. A. (2007). Risk-Need-Responsivity Model for Offender Assessment and Rehabilitation. Rehabilitation, 06.

<sup>5</sup>Crites, E. L., & Taxman, F. S. (2013). The Responsivity Principle: Determining the Appropriate Program and Dosage to Match Risk and Needs. In Simulation Strategies to Reduce Recidivism (pp. 143-166). Springer New York.

<sup>6</sup> Andrews, D. A., "Enhancing Adherence to Risk Need-Responsivity: Making Quality a Matter of Policy," Criminology and Public Policy 5 (2006): 595-602;

<sup>7</sup> Although 98% of PRCS offenders in the California prison system were assessed for risk, not all were assessed for dynamic needs. Cognitive and educational scores were given to 3,500 PRCS offenders, implying we can be 95% sure of a confidence interval of +/-1.5 percentage points. In this document, the percentages are used to give a general idea of the profile of PRCS offenders, with actual county assessments offering current and more complete information.

<sup>8</sup>CDCR COMPAS Assessment Fact Sheet, (2009) <u>http://www.cdcr.ca.gov/rehabilitation/docs/FS\_COMPAS\_Final\_4-15-09.pdf</u>

<sup>9</sup> Bonta, J., Rugge, T., Scott, T. L., Bourgon, G., and Yessine, A. K. (2008). Exploring the Black Box of Community Supervision. Journal of Offender Rehabilitation, 47(3), 248-270 <sup>10</sup> California Legislative Analyst Office. (2008) From Cellblocks to Classrooms: Reforming Inmate Education To Improve Public Safety.

<sup>11</sup> Davis LM, et al. (2011). Understanding the Public Health Implications of Prisoner Reentry in California: State-of-the-State Report, Santa Monica, Calif.: RAND Corporation.

<sup>12</sup> PRCS Monthly Dashboards: http://www.cdcr.ca.gov/realignment/PRCS Health Care Information.html

<sup>13</sup> CDCR Mental Health Services Delivery System. http://www.cdcr.ca.gov/dchcs/docs/mental%20health%20program%20guide.pdf



# INFRASTRUCTURE, SAFETY, B R I E AND ENVIRONMENT

## Juvenile Probation Initiatives in California and Their Effects

RAND RESEARCH AREAS THE ARTS CHILD POLICY CIVIL JUSTICE EDUCATION ENERGY AND ENVIRONMENT HEALTH AND HEALTH CARE INTERNATIONAL AFFAIRS NATIONAL SECURITY POPULATION AND AGING PUBLIC SAFETY SCIENCE AND TECHNOLOGY SUBSTANCE ABUSE TERRORISM AND HOMELAND SECURITY TRANSPORTATION AND INFRASTRUCTURE WORKFORCE AND WORKPLACE

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ver the past ten years, county probation departments across the state of California have undertaken a number of major initiatives aimed at juvenile offenders and at-risk youths. These initiatives were part of a system-wide "sea change" from a focus on suppression, enforcement, and monitoring of youthful offenders to an emphasis on families and on rehabilitative and therapeutic approaches. While the importance of these efforts had been acknowledged, there had been no integrated description of these initiatives; nor had a broad review of the potential effect of this "sea change" on youth outcomes been examined. In 2005, the Chief Probation Officers of California asked RAND to help fill these information gaps.

#### **Programs and Initiatives**

Five major initiatives have affected probation departments in California during the past decade.

- Title IV-A-EA. Funding associated with the Emergency Assistance (EA) program of Title IV-A of the Social Security Act allowed probation departments to add services aimed at reducing juvenile crime, such as case management services, gang intervention programs, and parenting skills training. Title IV-A-EA funding for county probation departments was approximately \$150 million in fiscal year (FY) 1994/1995 and \$120 million in FY 1995/1996.
- Juvenile Crime Enforcement and Accountability Challenge Grant Program. In 1996, the Legislature initiated this program as a major effort to determine what approaches were effective in reducing juvenile crime. The Legislature provided \$110 million to help counties identify, implement, and evaluate locally developed community-based projects that targeted at-risk youths and young offenders. Two waves of challenge grants were awarded to 14 and 17 counties, respectively. County projects included a

#### Abstract

Over the past ten years, probation departments across the state of California have undertaken five major initiatives aimed at juvenile offenders and at-risk youths. Although these initiatives were concomitant with reductions in juvenile arrests and other positive outcomes, we cannot definitively attribute such observed statewide trends to these initiatives.

broad spectrum of interventions, serving more than 5,300 at-risk youths and juvenile offenders.

- Repeat Offender Prevention Program (ROPP). ROPP was undertaken by the Legislature in 1994 to respond to rising juvenile crime rates. Funding began in FY 1996/1997 and helped support multiyear demonstration projects in eight counties. The annual allocation has been \$3.8 million. Each county has developed its own programs, with an emphasis on a multidisciplinary, multiagency teamoriented approach. In addition to funding existing ROPP programs, the FY 2000/2001 state budget also provided \$5.7 million to support start-up activities for new projects in eight additional counties.
- Comprehensive Youth Services Act (CYSA). The Welfare-to-Work Act of 1997 created the CYSA to fund juvenile probation services. To support CYSA activities, California's allocation of funds under the federal welfare reform act was increased by \$141 million in the first year and \$168 million in subsequent years, based upon probation departments' claiming for services provided. Counties used funds to provide services and programs across the continuum of options, from prevention and early intervention

through custody. In FY 2003/2004, over 40,000 at-risk youths received services; similar numbers received services while on probation.

• Juvenile Justice Crime Prevention Act (JJCPA). In 2000, the California Legislature passed the act now called the JJCPA, which was designed to provide a stable funding source to counties for programs that have been proven effective in curbing crime among at-risk youths and young offenders. JJCPA currently supports 193 collaborative programs implemented in 56 counties to address locally identified needs in the continuum of responses to juvenile crime. Budget allocation for JJCPA was \$121 million for the first year and \$116.3 million for each of the next two years. In its third year, 106,055 youths were served.

#### **Indicators of Change**

Determining the effectiveness of statewide initiatives on statewide youth recidivism and other measures is not straightforward. Such an endeavor is difficult for a variety of reasons. We do not have the opportunity to "hold everything else constant" to measure the effects of such changes. Many other changes relevant to youths' lives have occurred over the past decade in California, including major economic changes in the state, immigration policies, and perceptions of personal safety. Although we cannot draw firm conclusions regarding the effect of initiatives on outcomes, we note the temporal proximity between initiatives and outcomes that might suggest how the initiatives affected youths and their families.

Juvenile arrests and incarcerations in California have fallen over the past ten years, and teen pregnancies have dropped. The number of youths living below the poverty level has gone down, and high school graduation rates have increased. These positive measures are concomitant with probation initiatives, although California's trend on many measures mirrors nationwide trends, suggesting that something other than these initiatives may be at work. For example, the economy in California and nationwide (as measured by unemployment rates) improved during much of the decade examined. However, on certain measures, such as arrest rates and teen pregnancy rates, the decline over the past decade has been greater for California youths than for U.S. youths as a whole, suggesting that programs and initiatives in California may be having positive effects beyond the national trends. When we compared California with seven other large states with decentralized probation services, we found that each of these states—with the notable exception of Pennsylvania—experienced reductions in juvenile arrest rates over the past decade. All except Pennsylvania have instigated new initiatives during the decade in attempting to curb juvenile crime, but just as in California, we have not been able to directly link the initiatives to the reduction in arrest rates in any state.

#### Implications

The policy implications of this analysis are limited because we cannot confidently assert that the initiatives under consideration caused changes in juvenile crime and other outcomes across the state. Although we cannot tie statewide outcomes to these initiatives, it is important to note that evaluations of these initiatives have shown that criminal justice outcomes for program participants have generally been better than those for youths in routine probation programming. Such findings indicate the importance of this type of programming for at-risk and probation youths in California.

Our ability to understand how the delivery of different services under these initiatives affects youth justice and non-justice outcomes could be enhanced if better data were available on the types of youths who participated in the programs and the services that they received. With these data we could more definitely point to the program components that seem to make the biggest difference for youths with varying needs.

This research brief describes work done for RAND Infrastructure, Safety, and Environment and documented in Accomplishments in Juvenile Probation in California Over the Last Decade by Susan Turner and Terry Fain, TR-297-CPOC, 2005, 60 pp. (available at http://www.rand.org/publications/TR/TR297). The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.



## Risk/Needs Assessment 101: Science Reveals New Tools to Manage Offenders

Every day, criminal justice officials make decisions that have enormous implications for public safety and spending: Should this offender be sentenced to prison or probation? What conditions of supervision are appropriate? Does this violation of supervision warrant a revocation to prison? Historically such critical decisions about offender punishment and treatment were guided by personal experience, professional judgment and a limited understanding about the most effective ways to deter offenders from committing future crimes.

Today our knowledge has vastly improved. After decades of experience managing offenders and analyzing data, practitioners and researchers have identified key factors that can help predict the likelihood of an individual returning to crime, violence or drug use. The instruments that have been developed—and fine-tuned over time—to measure the likelihood of future criminal behavior can help officials to better identify individuals at a high risk of reoffending, while also identifying the types of supervision and services that are most likely to slow the revolving door of America's prisons (see Figure 1). When developed and used correctly, these risk/needs assessment tools can help criminal justice officials appropriately classify offenders and target interventions to reduce recidivism, improve public safety and cut costs.

#### Figure 1

### Data Driven: Assessment Tools Can Accurately Identify Offender Risk

100% A validation study of one of the most commonly used tools, the Level of 80% Service/Case Management Inventory Recidivism Rate 60% (LS/CMI), demonstrated its ability to accurately identify offenders' 40% risk of reoffending.<sup>1</sup> 20% 0% SOURCE: Andrews et al, 2004 Very Low Low Medium High Very High LS/CMI Risk Level

# What Are Risk/Needs Assessment Tools?

A risk/needs assessment tool is essentially a uniform report card that measures offenders' criminal risk factors and specific needs that, if addressed, will reduce the likelihood of future criminal activity. Tools typically consist of a set of questions that guide face-to-face interviews with offenders, probing behaviors and attitudes that research shows are related to criminal reoffending. The questionnaire often is supplemented with an official records check, including prior arrests and incarcerations. Responses are statistically weighted, based on research that shows how strongly each item correlates with recidivism. The tool then calculates an overall score that classifies an individual's risk of reoffending. This risk level and accompanying information about an offender's unique needs can then inform decisions about the best course of action.

# 2 How Are These Tools Used?

Risk/needs assessment tools can be customized for use by different agencies at various decision points in the sentencing and corrections process.

- **Courts** use risk/needs instruments to help make pretrial bail and release decisions, sentencing and revocation decisions and to set conditions of supervision.
- Probation and parole agencies

   often use such tools to decide levels
   of supervision, determine the need
   for specialized treatment programs
   (such as substance abuse, mental
   health and cognitive skill building),
   develop an offender's supervision
   plan and inform decisions about
   sanctions and revocations.
- Prison and jail systems typically use risk tools to help set inmate security classification levels and identify which programs inmates should attend.
- **Parole boards** use the instruments to guide release decisions and to set conditions of supervision.

### 3 What Are Criminal Risk Factors?

Research has identified both changeable (dynamic) and unchangeable (static) risk factors related to criminal behavior. Studies have revealed seven dynamic risk factors closely associated with criminal conduct that can be assessed and altered through effective interventions.<sup>2</sup>

- 1. **Antisocial Personality Pattern** impulsive, adventurous pleasure seeking, restlessly aggressive and irritable behavior
- 2. **Procriminal Attitudes**—offering rationalizations for crime and expressing negative attitudes toward the law
- 3. **Social Supports for Crime**—having criminal friends and being isolated from prosocial peers
- 4. **Substance Abuse**—abuse of alcohol and/or drugs
- Poor Family/Marital Relationships—poor family relationships and inappropriate parental monitoring and disciplining
- 6. **School/Work Failure**—poor performance and low levels of satisfaction with school or work
- 7. Lack of Prosocial Recreational Activities—a lack of involvement in prosocial recreational and leisure activities

Research also has identified a number of static risk factors linked to a high risk of reoffending including age at first arrest, number of prior convictions and current offense.<sup>3</sup>

4 Why Is It Important to Differentiate Individuals by Risk Level?

Matching offenders to programs based on their risk levels is one of the keys to reducing recidivism. Research has revealed that certain intensive programs work very well with high-risk offenders but actually can increase recidivism rates among low-risk offenders (see Figure 2). One program, for example, cut recidivism for high-risk offenders by more than 25 percent but increased reincarceration of low-risk offenders by almost 18 percent.<sup>4</sup> Researchers think this counterintuitive finding may occur because mixing risk groups exposes the lower-risk offenders to the more destructive behaviors of higherrisk offenders and jeopardizes prosocial relationships and productive community engagement they may have.<sup>5</sup>

Further, risk classifications help criminal justice officials maximize use of limited resources. Targeting higher-risk offenders with proven programs ensures that resources are concentrated on offenders with whom they can have the greatest impact.

### 5 How Effective Are Risk/Needs Tools?

Numerous studies have demonstrated that validated risk assessments accurately differentiate between high-, mediumand low-risk offenders. In other words, individuals classified as high risk reoffend at a higher rate than those classified as low risk.<sup>6</sup>

Risk/needs assessments have become a cornerstone of good correctional practice. Research consistently has shown that assessing each individual's risk of reoffending, matching supervision and treatment to an offender's risk level and targeting his or her unique criminal risk factors and needs with proven programs significantly improves offender outcomes, reduces recidivism and enhances public safety.<sup>7</sup> In fact, studies have demonstrated that evidence-based community supervision and treatment strategies consistently reduce recidivism as much or more than incarceration.<sup>8</sup>

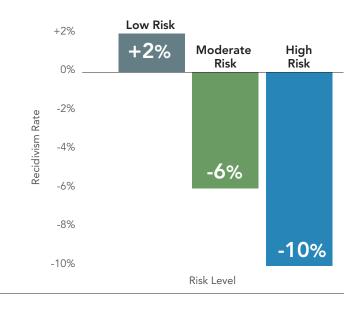
### 6 What Tools Are Available?

A wide range of instruments is available and careful consideration should be given to selecting or developing an appropriate risk/needs assessment. Many tools are available off the shelf, some of which measure only risks or needs while others assess both. There also are specialized instruments that assess the risk of

#### Figure 2

### Targeting High Risk Offenders Maximizes Recidivism Reduction

A 2010 study demonstrated the effectiveness of matching offenders to programs by risk level. The study of 44 halfway house programs in Ohio found that the programs reduced recidivism for high-risk offenders by 10 percent but increased recidivism of low-risk offenders by two percent. One program decreased recidivism rates by more than 25 percent for high-risk offenders but increased new incarcerations by almost 18 percent for low-risk individuals.



SOURCE: Latessa et al, 2010

committing certain offenses (such as sex offenses and violent offenses) or specific areas of need (such as substance abuse and mental health). A number of agencies have opted to modify existing instruments or to develop tools themselves.

### 7 What Considerations Should Be Made When Implementing an Assessment Tool?

Effective implementation of a risk/ needs assessment is critical to successful recidivism reduction. Each instrument must be validated to ensure that risk classifications accurately represent the likelihood of reoffending among the group of offenders for which it will be used. Corrections agencies should ensure that tools are widely available, standardized and routinely used to inform decisions affecting case planning and offender management. Staff should have consistent access to training opportunities, and officials should regularly assess whether supervising officers are successfully reducing the risk level of their charges. In larger agencies, the use of a centralized assessment unit can improve consistency and objectivity. Finally, because offender risk and need factors change over time, offenders must be reassessed periodically to ensure accurate classification and to maximize efficient use of limited resources.

## 8 What Are the Challenges and Limitations of Risk/Needs Assessment?

- Risk/needs assessments cannot predict an individual's behavior with absolute precision. Inevitably there will be lower-risk offenders who reoffend and higher-risk offenders who do not reoffend. However, objective tools more accurately predict behavior than subjective assessments by individuals, making them critically important in helping agencies to classify and manage groups of offenders.
- Risk/needs assessments can help guide decisions, but they should not be dispositive. These tools serve as an anchor for decision-making, but professional discretion remains a critical component.
- Risk/needs instruments must be well designed, well implemented, validated and used routinely to inform decisionmaking. Staff must be adequately trained and supervised to ensure the assessment consistently and effectively informs decisions and drives case management plans.
- There is no one-size-fits-all risk assessment tool. Agencies frequently employ multiple tools to inform decision-making at points throughout the criminal justice process, and significant attention must be dedicated to ensuring that the appropriate instruments are selected or developed.

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### WHAT CAN POLICY MAKERS DO?

State policy makers across the country are putting research into action by passing legislation that requires their courts and corrections agencies to use evidence-based practices. Over the past few years, a number of states have passed comprehensive corrections reform packages that require the use of risk/needs assessment and are projected to save taxpayers millions of dollars. For example:

- Arkansas: The Public Safety Improvement Act of 2011, a comprehensive sentencing and corrections reform law, directs the Department of Community Correction to use risk/needs assessments to set conditions of supervision and to assign programming as part of an overall strategy for improving supervision practices.<sup>9</sup> The full package is projected to save Arkansas \$875 million in averted prison costs through 2020.<sup>10</sup>
- Kentucky: The wide-ranging Public Safety and Offender Accountability Act of 2011 requires the courts and corrections authorities to incorporate risk/needs assessments to inform decisions at multiple points in the criminal justice process.<sup>11</sup> The Act further requires that 75 percent of state expenditures on individuals under community supervision be spent on evidence-based programming within five years. The state estimates the overall legislation will save \$422 million over 10 years.<sup>12</sup>
- New Hampshire: In 2010, the state legislature mandated the use of risk/needs assessments to inform decisions about the length of active supervision for all offenders on probation and parole.<sup>13</sup> Along with the establishment of a new system for handling technical violations of supervision, this provision is expected to save the state nearly \$11 million over five years.<sup>14</sup>
- South Carolina: The legislature in 2010 required probation agents to conduct actuarial assessments of offenders' risks and needs, and make decisions about the type of supervision and services consistent with evidence-based practices. The law was part of the Omnibus Crime Reduction and Sentencing Reform Act,<sup>15</sup> which is projected to save the state \$241 million over five years.<sup>16</sup>

## Endnotes

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<sup>8</sup> Paul Gendreau, Claire Goggin, Francis T. Cullen, and Donald A. Andrews, "The Effects of Community Sanctions and Incarceration on Recidivism," *Forum on Corrections Research* 12 (2001): 10-13, http://www. csc-scc.gc.ca/text/pblct/forum/e122/122c\_e.pdf; Mark W. Lipsey and Francis T. Cullen, "The Effectiveness of Correctional Rehabilitation: A Review of Systematic Reviews," *Annual Review of Law and Social Science* 3 (2007): 297-320.

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<sup>10</sup> Pew Center on the States, *Arkansas's 2011 Public Safety Reform: Legislation to Reduce Recidivism and Curtail Prison Growth* (Washington, DC: The Pew Charitable Trusts, July 2011), http://www.pewcenteronthestates. org/uploadedFiles/Pew\_Arkansas\_brief.pdf.

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Launched in 2006, the Public Safety Performance Project seeks to help states advance fiscally sound, data-driven policies and practices in sentencing and corrections that protect public safety, hold offenders accountable and control corrections costs.

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