Evidence-Based Practices and the Evaluation of Data

Prepared for:
The 2013 SEARCH Annual Membership Group Meeting
July 25, 2013

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Topics to be discussed

- Evidence-Based Practices (EBP) 101
- Use of administrative records and EBP
- Barriers to data sharing
- Balancing EBP with innovation
- Moving Forward with EBPs
Evidence-based practice (EBP) is an interdisciplinary approach...started in medicine as evidence-based medicine (EBM) and spread to other fields such as dentistry, nursing, psychology, education, library and information science, and other fields.

Its basic principles are that all practical decisions made should 1) be based on research studies and 2) that these research studies are selected and interpreted according to some specific norms characteristic for EBP.
How are Evidence-Based Practices identified?

- Rigorous Research and Evaluation
  - High quality research design
    - Experimental design is the “gold standard”
      - But not always possible
  - Controlled for other potential explanations for the change
    - Able to isolate the effect of the practice from other factors
- Replicated
  - Multiple studies yielding evidence of effectiveness
- Long term impacts
  - The desired change lasted
    - Not just short term change
Evidence-Based Practices are:

- **Programs**
  - Multi-systemic Therapy (MST)
  - Communities that Care
- **Program Elements**
  - Individual Counseling for non-institutionalized juveniles
  - Interpersonal skill training for non-institutionalized juveniles
- **Policies**
  - Methamphetamine Precursor Legislation
- **Practices**
  - Actuarial Risk and Needs Assessments
  - Targeting medium and high risk probationers
A framework for the implementation of a Science/Evidence-Based approach

- Data and theory driven planning
  - Using data to inform practice
  - Using theory to guide program development
- Promising practices
  - Identifying practice and programs that are promising
- Critical elements of programs
  - When program models are missing, elements of effective practice
- Evidence-based programs, policies, and practices
An example of data driven programming

- Arizona Prescription Drug Reduction Initiative
  - Piloting the Rx Initiative in counties with significant Rx problems and the infrastructure to implement the model
  - Data used to illustrate the problem
    - Criminal history data (i.e., arrests)
    - Emergency Department (i.e., patient diagnosis data)
    - Hospital Admissions (i.e., patient diagnosis data)
    - Vital Records (i.e., Cause of death data)
    - Prescription Drug Monitoring Program data

- Infrastructure
  - Multi-disciplinary Community Substance Abuse Coalitions
An example of data driven programming

- Arizona National Instant Criminal Background Check System (NICS) Task Force
  - Using criminal history data to understand the scope of the problem
  - Using criminal history data to target jurisdictions with the largest number and/or percentage of missing dispositions
    - NICS Report Cards
Arizona NICS Report Cards

NATIONAL INSTANT CRIMINAL BACKGROUND CHECK SYSTEM (NICS)
COMPLETENESS OF ARIZONA COMPUTERIZED CRIMINAL HISTORY RECORDS
(For Arrest Dates January 1, 2001 – December 31, 2010)
SAMPLE COUNTY

Description of NICS

Established in 1998, the National Instant Criminal Background Check System (NICS) provides firearms licensees across the country access to background check information on individuals who would like to purchase a firearm or explosive. The NICS system is available to many states, a number of U.S. territories, and the District of Columbia for verification or disqualification of firearms and explosives purchasers.

To support the development and administration of a robust national background check system, the Bureau of Justice Statistics administers the NICS Act Record Improvement Program (NARIP) to improve the quality of information accessible to the NICS system. The Arizona Criminal Justice Commission (ACJC) has received approximately $740,000 in grant funds available through NARIP to improve the quality of Arizona records that feed NICS.

Goal of Improving Criminal History Records in NICS Categories

The sole intent of NARIP funds awarded by the ACJC to local criminal justice agencies is to improve the quality and completeness of criminal history record information specifically identified through The Gun Control Act as disqualifying categories for the purchase of firearms or explosives. The NICS Task Force in Arizona has identified the following criminal history record data as disqualifiers available through Arizona Computerized Criminal History (ACCH) records system:

- Felony offense convictions;
- Domestic violence-related convictions;
- Arrests and/or convictions relating to drug use;
- Convictions resulting from "guilty but insane" verdicts.

Criminal history record data has shown that a significant percentage of arrests involving a felony, domestic violence, and/or drug use charge are missing associated case disposition information in the ACCH. In addition, a number of arrest records fail to be entered into the ACCH because of errors in the disposition reporting form. NARIP funds have been specifically allocated by ACJC to improve the completeness of disqualifying criminal history data accessed by NICS.

ACCH Data Description

The following data has been compiled using ACCH record information, provided to ACJC from the Arizona Department of Public Safety. As of January 2012, all arrest records from Arizona must be entered into the ACCH. All law enforcement agencies in Arizona are mandated by A.R.S. §41-1750 to submit fingerprints and arrest information for all felony, misdemeanor domestic violence, misdemeanor driving under the influence, and misdemeanor sexual offenses to the ACCH. Despite the fact that misdemeanor drug offenses are not included in the statute requirement, many agencies across the state report these arrest charges to the ACCH. Nonetheless, it remains unclear what percentage of arrests involving a misdemeanor drug offense are reported to the ACCH.

These data are intended to inform conversations at the local, county, and state level about the quality of Arizona’s criminal history records. Because law enforcement, prosecutors, and the courts have a shared responsibility for submitting criminal history record information, these data do not focus on any single criminal justice agency. Instead, these data are intended to highlight the magnitude of the problem of missing criminal history record information in a county and can be used as a baseline against which to measure the impact of efforts to improve the quality of criminal history record information.
Arizona NICS Report Cards

NATIONAL INSTANT CRIMINAL BACKGROUND CHECK SYSTEM (NICS)
COMPLETENESS OF ARIZONA COMPUTERIZED CRIMINAL HISTORY RECORDS
(For Arrest Dates January 1, 2001 – December 31, 2010)
SAMPLE COUNTY

Category 1: Felony Convictions

Category 2: Misdemeanor Drug Arrests

Category 3: Misdemeanor Domestic Violence

(i.e., misdemeanor arrest charges with a DV flag attached)
### Category 1: Felony Convictions

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of felony arrest charges</td>
<td>3,685</td>
<td>4,215</td>
<td>4,298</td>
<td>4,783</td>
<td>4,819</td>
<td>5,022</td>
<td>4,652</td>
<td>3,746</td>
<td>3,655</td>
<td>3,028</td>
<td>42,041</td>
</tr>
<tr>
<td>Number of felony arrest charges winning dispositions</td>
<td>1,655</td>
<td>1,814</td>
<td>1,144</td>
<td>882</td>
<td>963</td>
<td>1,378</td>
<td>1,243</td>
<td>1,058</td>
<td>1,254</td>
<td>1,042</td>
<td>12,455</td>
</tr>
</tbody>
</table>

### Percentage of Felony Arrest Charges with Missing Dispositions

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample County</td>
<td>44.9%</td>
<td>43.2%</td>
<td>36.5%</td>
<td>45.9%</td>
<td>28.1%</td>
<td>27.0%</td>
<td>25.3%</td>
<td>28.1%</td>
<td>25.5%</td>
<td>25.7%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Arizona</td>
<td>29.6%</td>
<td>31.3%</td>
<td>30.2%</td>
<td>31.3%</td>
<td>30.7%</td>
<td>31.6%</td>
<td>32.5%</td>
<td>32.2%</td>
<td>32.9%</td>
<td>32.7%</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

### Category 2: Misdemeanor Drug Arrests


<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of misdemeanor drug arrest charges</td>
<td>92</td>
<td>107</td>
<td>255</td>
<td>332</td>
<td>332</td>
<td>325</td>
<td>382</td>
<td>376</td>
<td>436</td>
<td>517</td>
<td>3,154</td>
</tr>
<tr>
<td>Number of misdemeanor drug arrest charges winning dispositions</td>
<td>30</td>
<td>46</td>
<td>69</td>
<td>84</td>
<td>75</td>
<td>101</td>
<td>98</td>
<td>95</td>
<td>117</td>
<td>150</td>
<td>888</td>
</tr>
</tbody>
</table>

### Percentage of Misdemeanor Drug Arrest Charges with Missing Dispositions

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample County</td>
<td>32.6%</td>
<td>43.0%</td>
<td>27.1%</td>
<td>25.3%</td>
<td>22.6%</td>
<td>31.1%</td>
<td>25.7%</td>
<td>29.1%</td>
<td>21.4%</td>
<td>20.0%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Arizona</td>
<td>25.6%</td>
<td>28.9%</td>
<td>28.2%</td>
<td>31.1%</td>
<td>29.1%</td>
<td>27.5%</td>
<td>26.2%</td>
<td>28.1%</td>
<td>29.9%</td>
<td>26.0%</td>
<td>29.8%</td>
</tr>
</tbody>
</table>

### Category 3: Misdemeanor Domestic Violence

#### (Laws, misdemeanor arrest charges with a DV flag attached)

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of misdemeanor DV arrest charges</td>
<td>769</td>
<td>928</td>
<td>966</td>
<td>1,085</td>
<td>1,122</td>
<td>1,072</td>
<td>1,431</td>
<td>1,129</td>
<td>625</td>
<td>1,023</td>
<td>10,100</td>
</tr>
<tr>
<td>Number of misdemeanor DV arrest charges winning dispositions</td>
<td>179</td>
<td>314</td>
<td>278</td>
<td>283</td>
<td>255</td>
<td>246</td>
<td>277</td>
<td>276</td>
<td>145</td>
<td>254</td>
<td>2,514</td>
</tr>
</tbody>
</table>

### Percentage of Misdemeanor Domestic Violence Arrest Charges with Missing Dispositions

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample County</td>
<td>23.3%</td>
<td>33.5%</td>
<td>28.7%</td>
<td>26.5%</td>
<td>22.7%</td>
<td>22.9%</td>
<td>22.3%</td>
<td>22.4%</td>
<td>24.7%</td>
<td>25.0%</td>
<td>24.7%</td>
</tr>
<tr>
<td>Arizona</td>
<td>16.2%</td>
<td>19.3%</td>
<td>20.2%</td>
<td>22.7%</td>
<td>23.0%</td>
<td>20.5%</td>
<td>23.5%</td>
<td>22.9%</td>
<td>24.6%</td>
<td>28.3%</td>
<td>22.2%</td>
</tr>
</tbody>
</table>
An example of promising practices

- Arizona Prescription Drug Reduction Initiative
  - Parents360 and Youth360
    - Research-based approach to drug prevention programming
  - Adaptation of an existing adult and youth substance abuse prevention program
    - Rx360
    - Fully integrating the research enterprise in the program work by evaluating the program…not just using EBP but contributing to the advance of EBPs for the CJ and JJ communities.
An example of critical program elements

- The Standardized Program Evaluation Protocol
  - Developed by Dr. Mark Lipsey of Vanderbilt University

  - Prevention Programs
    - Parent training/counseling
    - Interpersonal skills training
    - Tutoring

  - Court Supervised Delinquency Programs
    - Family Counseling
    - Tutoring
    - Mentoring
An example of implementing EBPs

- Illinois Criminal Justice Information Authority
  - JABG funds to support local implementation of EBP
    - JABG set aside to fund EBPs
    - Training of the curriculum is critical
    - Monitoring implementation of the program is critical
The foundation of an evidence-based justice system

- Administrative records
  - Criminal history record data
    - Needed to measure the ultimate justice system performance indicator (i.e., recidivism)
  - Agency-specific data
    - Enables data-driven decision making
    - Enables analyses that control for a variety of factors

- Agency-based research staff
  - Experienced justice professionals to assist with context and interpretation

- Academic researchers
  - Skilled researchers
What role do administrative records play in EBP?

- Criminal history record data
  - A primary outcome variable for the CJS
  - A measure of the outcomes of EBP

- Agency-specific data (e.g., law enforcement, courts, probation, etc.)
  - Supports the use of data driven policy
  - Makes the case for the use of EBPs

- Program data
  - Supports the monitoring of programs to measure consistency with EBPs
Perceived barriers to EBP implementation: Budget cuts

- We can’t afford to implement EBPs
- We can’t afford not to!
- Data and research can be used to maximize the utility of limited resources
Perceived barriers to EBP implementation: Lack of training and TA on EBPs

- Lack of accessible training and technical assistance for administrators and program staff
  - Cultivate / tap into local TA resources
    - SEOWs
    - SACs
    - Universities and Colleges
Perceived Barrier to EBP implementation: Lack of resources for evaluation

- Lack of resources to ensure implementation fidelity
  - Implementation evaluations are less expensive than outcome evaluations
  - Incorporate program implementation data into ongoing performance measurement activities
    - Monitor critical elements of EBPs
    - Monitor critical elements of effective programming
Perceived Barrier to EBP implementation: Lack of resources for evaluation

- Ask programs to report on critical elements of EBPs (i.e., published standards and required procedures of the program model)
  - Example: Big Brothers Big Sisters of America, an EBP mentoring program
    - Orientation is required for all volunteers
    - Volunteer Screening
    - Youth Assessment
    - Quality Matches
    - Supervision
Perceived Barrier to EBP implementation:
Lack of resources for evaluation of new programs

- Tap into local resources
  - Operational agency staff
  - SEOW’s
  - SACs
  - Universities and Colleges
    - Indirects can be high, but often are negotiable
What EBP is not?

- An approach that will stifle innovation
- We still have much to learn
- Jurisdictions are implementing innovative and effective programming but evaluations showing effectiveness have not been done
- Illustrates the need for agencies to embrace the research enterprise and incorporate it into their work
What EBP is not?

- Discounts the experience of our public safety professionals
  - To the contrary, implementation of evidence-based practices require local knowledge and experience
    - To identify the right target population
    - To target the needs of individuals and communities
What EBP is not?

- Irrelevant to your work
  - To the contrary, the information you manage is critical to an evidence-based justice system
In Sum…

- Whether you know it yet or not, you and your data are integral to the effective implementation of EBPs
  - The quality of your data and your ability to share your data is crucial to the successful implementation of EBPs
  - Facilitates adding to the evidence base...
- See/Seize the opportunities, not just the challenges
  - E.G., When resources are limited, EBPs maximize the impact of those resources
- We can become a more efficient and effective CJS, but only if we fully embrace EBPs and the EBP movement

FOR MORE INFO...
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