

Implementation of Evidence-Based Drug Treatment in Criminal Justice Settings: Opportunities and Challenges

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Overview of Presentation

- Need for implementing and expanding evidence-based drug treatment in criminal justice settings
- Defining and understanding implementation
- Stages and components of implementation
- Improving treatment implementation



BACKGROUND



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Substance Abuse and Treatment Needs among Offenders

- Majority of 14 million arrests test positive for drugs (NIJ, 2004)
 - 1.7 million arrests for drug law violations (82.5% for possession)
- > 4.3 million adults on probation (Glaze & Bonczar, 2009)
 - 37% have a substance abuse disorder (NSDUH, 2008)
- 826,000 on parole (Glaze & Bonczar, 2009)
 - 53% estimated to meet criteria for drug dependence or abuse (Mumola & Karberg, 2006)
- 37% of state prison commitments for violations of parole or other release conditions, mainly related to drug use (BJS, 2000)
- ◆ 2/3 of annual \$168 billion social costs of illegal drug use due to drug-related crime (Belenko et al., 2005; ONDCP, 2001)



Substance Abuse and Treatment Needs among Inmates

- 1.4 million state inmates, 785,000 jail inmates (Sabol & Couture, 2008)
- 83% of state, 72% of jail inmates have used illegal drugs, 69% regular use (Belenko & Peugh, 2005)
- Half of state, 61% of jail inmates under influence of drugs or alcohol during crime
- 53% meet criteria for drug abuse or dependence (Mumola & Karberg, 2006)
 - Compared with 1-2% in general population
- Absent treatment, most released inmates with drug use histories return to drug use and crime (Martin et al., 1999)



Behavioral Health Disorders by Offense Type

	NO PROBLEMS	DRUG ABUSE/DEPEND ONLY	MENTAL HEALTH DISORDER ONLY	DRUG ABUSE/DEPENDENCE & MENTAL HEALTH DISORDER
TOTAL INMATE POPULATION	29.6%	22.0%	17.8%	30.6%
OFFENSE TYPE*				
VIOLENT	32.9%	18.8%	21.0%	27.3%
DRUG	26.1%	28.5%	11.7%	33.7%
NON-VIOLENT , NON-DRUG	26.3%	22.9%	16.7%	34.1%



Offenders Have Limited Access to Effective Addiction Treatment

- Only 24% of state, 8% of jail inmates receive any drug “treatment;” only 10% receive clinical treatment (Belenko & Peugh, 2005)
- 25% of probationers with histories of drug use receive treatment (Mumola, 1998)
- Drug courts serve <10% of eligible population (Belenko, 2002)
- Prison TC beds are limited; most released inmates don’t enter aftercare (Wexler et al., 1999; Prendergast et al., 2005; Inciardi et al., 2004)
- Supervision, security, and control are overriding functions of institutional and community supervision (Taxman et al., 2003)
- Medications treatment is not generally accepted in CJS (Friedmann et al., 2010)



Treatment Received Since Admission by Disorder

	NO PROBLEM	DRUG ABUSE/DEPENDENCE ONLY	MENTAL HEALTH DISORDER ONLY	DRUG ABUSE/DEPENDENCE & MENTAL HEALTH DISORDER
SUBSTANCE TX ONLY	19.6%	37.4%	17.2%	30.2%
MENTAL HEALTH TX ONLY	6.0%	5.9%	19.6%	16.4%
SUBSTANCE AND MENTAL HEALTH TX	2.3%	5.6%	6.9%	14.1%
NO TX	72.2%	51.2%	56.2%	39.4%



Key Components of the Criminal Justice System

Police

Prosecutors

Defense Attorneys

Courts (judges)

Pretrial Services Agencies

Probation

Jail

Prison

Parole



Expanding Treatment Participation Benefits Public Safety and Public Health

- Strong link between drug use and crime
- Reduced recidivism and relapse, increased social productivity
- Positive effects on health risk behaviors
- Economic benefits
- Fewer technical violations
- Evidence-based, well-implemented treatment needed



Public Health Impact Perspective

$$\text{Population Impact} = [\text{Effect Size}] * [\text{Rate of Treatment Utilization}]$$

Tucker & Roth (2006), Coeira (2003)



Effective Substance Abuse Treatment for Offenders

- Chronic vs. acute care model
- Assessment and services should address multiple needs and dynamic risk factors
- Continuing, adaptive care from institution to community
- Target criminogenic risk factors
- Monitoring and accountability, with clinical integrity
- Efficient and appropriate information exchange
- Use EB treatment practices (CBT, MET, family-focused, relapse prevention skills)



Factors Affecting Access to Effective Treatment

- Lack of incentives for offender to participate
- Poor match between offender needs and treatment services
- Supervision, security, and control are overriding functions of institutional and community supervision (Taxman et al., 2003)
- Funding restrictions
- Inadequate treatment infrastructure
- Disincentives for treatment providers to accept offender clients
 - Paperwork
 - Supervision requirements



IMPLEMENTATION ISSUES



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Research → Practice Challenges in the CJS

- Dissemination of model program information is insufficient
- Training ≠ implementation fidelity or sustainability (Bero et al., 1998; Taxman et al., 2004)
- Implementation science and organizational change principles not always incorporated
- Overcoming tx and CJ staff resistance to change (Miller et al., 2006, Simpson, 2002)
- Innovation diffusion and technology transfer can be slow, multistage processes (IOM, 2001; Liddle et al., 2002; Roman & Johnson, 2002; Simpson, 2002)
- Weak treatment infrastructure (McLellan et al., 2003)



Research → Practice Challenges in CJS

- Lack of EBP “fit” to organization/staff values, experience, and daily activities (Liddle et al., 2002; Simpson, 2002)
- Public health/public safety disconnect
 - Emphasis heavily weighted toward “control” and public safety
 - Treatment providers are not “at the table”
- Offender needs are not considered
- Legal, economic, structural, organizational impediments (e.g. supervision & reporting requirements, security issues, lack of CJ staff “buy-in”)
- Resource constraints and competing priorities can limit uptake of EBP (Backer, 1996; Simpson, 2002)



Challenges for the Addiction Professional

- Concerns about sharing clinical decision making
- Patient placement and matching
- Deference to CJ officials
- Difficult-to-treat population
- Information sharing and progress reporting
- Adjusting tx intensity/services
- Reimbursement issues



Dissemination vs. Implementation

- Dissemination: distribution of information about an evidence-based practice or program to a specific target audience
 - manuals
 - web-based program summaries
 - trainings
 - conferences
 - Examples: NREPP, CDC, OJJDP Blueprints, Campbell
 - Not effective for changing practice
- Implementation: Strategies to introduce and sustain evidence-based interventions into practice in specific settings



Dissemination Models

- Replicating Effective Programs (REP) [CDC]
- Diffusion of Effective Behavioral Interventions (DEBI) [CDC]
- National Registry of Effective Programs and Practices (NREPP) [SAMHSA]
- Campbell Collaboration
- Cochrane Reviews



Moving to Effective Implementation

- Successful transfer of evidence-based treatment into practice settings requires effective implementation
- Slow process with a number of stages
- Most EBPs are not well-implemented
- Replication beyond the research setting poses many challenges
- Training by itself is largely ineffective for achieving full EBP implementation and sustained change



Phases of Program Implementation

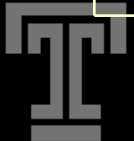
- Exploration/adoption
- Installation
- Initial Implementation
- Full Implementation
- Innovation
- Sustainability

SOURCE: Fixsen et al. (2005), National Implementation Research Network



Implementation Phases, Activities, and Outcomes

Exploration	Perceived need for change, choose EBP	Meet and exchange info, needs assessment, garner support
Installation	Prepare to implement, obtain funding, train staff	Staff meetings held, manuals prepared
Initial Implementation	Modify org culture, monitor fidelity, overcome barriers	Additional training, stakeholder meetings, progress reports
Full Implementation	EBP integrated into daily practice, policies in place, monitor fidelity	Staff meet clinical criteria, referrals made routinely
Innovation	Adapt to changes in environment, monitoring	Fidelity maintained, program modified
Sustainability	Maintain external support, replace staff, funding	EBP maintained over time, fidelity



Improving Treatment Implementation and Outcomes for Offenders

- Multilevel factors may affect implementation and client change in CJ settings:
 - Client level factors
 - Staff level
 - Program level
 - Organizational/System
 - External/Environmental



Improving Treatment Outcomes for Offenders

- CJ staff need training on addictions and treatment
- Improving balance between social control and clinical needs
 - Positioning addiction professional as more equal partner
- Educating the CJS about medications treatment and other EBPs



IMPLEMENTATION COMPONENTS



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Factors Influencing Implementation

- External Influences
 - Funding availability
 - Legal structure
 - Political support
 - Availability of skilled workforce and effective treatment
 - Public safety concerns
 - Community readiness
 - Interagency communication and support structure

SOURCES: Aarons (2006), Fixsen et al. (2005), Glasgow & Emmons (2007)



Factors Influencing Implementation

■ Organizational Influences

- Organization culture for innovation
- Organizational structure
- Organizational readiness to change
- Administrative/management support
- Competing priorities
- Organizational resources
- Mission alignment (public safety vs. public health)
- Information technology (monitoring services and outcomes, data management)

SOURCES: Aarons (2006), Fixsen et al. (2005), Glasgow & Emmons (2007)



Factors Influencing Implementation

■ Staff Influences

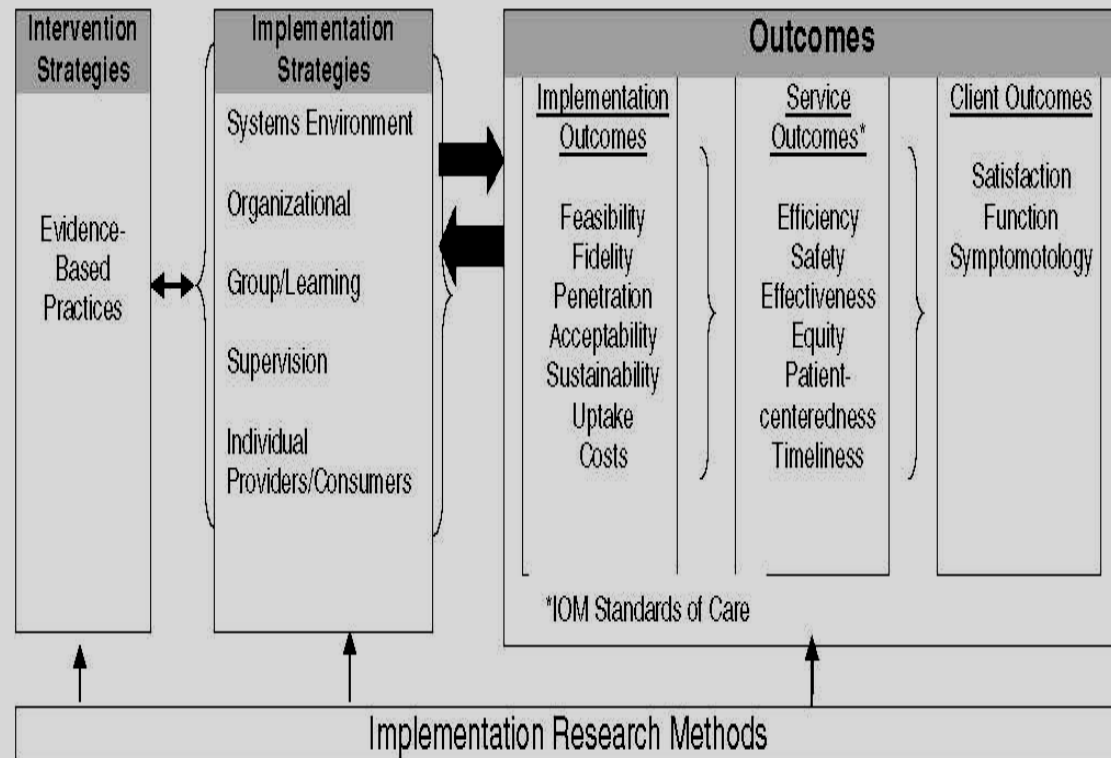
- Skills level, acceptability of EBP
- Incentive structure for change
- Competing priorities, caseloads
- Perceived support of supervisors and leadership
- Attitudes toward EBP
- Rehabilitative vs. punitive focus
- Goal alignment

SOURCES: Aarons (2006), Fixsen et al. (2005), Glasgow & Emmons (2007), Taxman (2003)



A Multi-Level Model of Implementation Research

Fig. 1 Conceptual model of implementation research



SOURCE: Proctor et al., (2009), Adm Policy Ment Health, 36:24–34.



Implementation Model

- Implementation needs to occur at multiple levels:
 - System
 - Organization
 - Staff
 - Client
- Interactions among these levels
- Outcomes need to be measured at multiple levels
 - Implementation domains
 - Service outcomes
 - Client outcomes



Implementation Outcome Examples

- Implementation phase
- Penetration – selection bias, targeting
- Fidelity to the EBP
- Organizational climate and culture change
- Staff uptake of EBP (knowledge, skills, perceived utility, satisfaction)



IMPLEMENTATION STRATEGIES



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Implementation Frameworks and Strategies

- RE-AIM
- Availability-Responsiveness-Continuity (ARC)
- Plan-Do-Study-Act
- QUERI model (Veterans Administration)
- Network for Improvement of Addiction Treatment (NIATx)



RE-AIM

- Process model for guiding improvements in health care
- Reach into target population
- Efficacy of the intervention
- Adoption into target agencies or settings
- Implementation with fidelity and consistency
- Maintenance of the intervention effects over time



ARC Organization Improvement Model (Glisson & Schoenwald, 2005)

- Staged approach to improve org functioning (culture & climate)
 - Preparation for implementation
 - Participatory decision making
 - Focus on continuous improvement and conflict resolution
 - Problem Identification
 - team building and network development
 - information gathering and assessment
 - Direction setting
 - Add conflict resolution, continuous QI mechanisms
 - Implementation
 - Stabilization (self-regulation stage)



Quality Enhancement Research Initiative (QUERI) Model (Stetler et al., 2008)

- Improve Veterans Administration health care systems
- Re-orient org cultural norms/values, build capacity
- Staged process for implementing QI with EBP
 - Identify the problem to be addressed
 - Identify an EBP
 - Identify and measure gaps in performance or quality
 - Implement process improvement strategies to improve practice
 - Monitor and evaluate the improvements
 - Document that EBP improves client outcomes
- Success based on leadership, targeted resource allocation, infrastructure changes, direct involvement of stakeholders



Local Change Team Strategy – the NIATx Model

- Process improvement by creating local change teams
- Focus on discrete, achievable performance measures
 - treatment retention
 - reduce waiting time for admission
 - reduce no-shows to treatment
- Executive sponsor: org head authorizes staff and resources
- Change leader: senior staff invested in improvements, facilitates plans
- Change team: staff critical to local implementation



NIATx Model (cont'd)

- Identify short term performance goals and strategies
- Rapid Cycle Testing to monitor performance goals
- Develop consensus plan to resolve problem, achieve change
- Test new procedures and modify if needed
- Develop sustainability plan



Performance Monitoring and Outcomes

- Need standardized performance measures that can inform decision making
- Program operations need to be rigorously described so they can be replicated with fidelity
- Provide quicker and more regular performance feedback
- Simplify outcome measures for policy makers and practitioners



*RESEARCH AND PRACTICE
OPPORTUNITIES AND
CHALLENGES*



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General Challenges

- Funders may be less interested in replications, and seek new and innovative treatments
- Need a balanced view of research and clinical evidence
- Public Health versus Public Safety
 - Improve communication, establish common values
 - Public safety issues are paramount
- Alignment: can't have successful implementation without org and systems change. Need to invest in org change to sustain EBP



General Challenges

- Legislators want to know benefits of the program, value added, effect on costs
- Need standardized measures that are useful to inform rational decision making and allow comparisons across programs
- Programs need immediate feedback and can't wait for long-term outcomes
 - interim, proximal measures
- Resources needed to support organizational change and infrastructure improvement to facilitate effective implementation



Practice Challenges

- Infrastructure and service system problems make it difficult to implement EBP
 - Affect fidelity
- Fidelity vs. adaptation: Need to adapt interventions to the real world and local conditions
- Performance outcome monitoring
- Workforce issues, line staff resistance, training and attitudes, staff development
- Incentives may be needed to encourage staff to implement EBP



Research Challenges and Opportunities

- Implementation research is a new field
- Complexity of different levels and systems and perspectives
- Improve communication of research findings to policymakers; need to educate politicians, translate language
- Conceptual models to incorporate multi-level factors influencing implementation and outcomes
- Focus on Qs relevant to the policy and practitioner community
- Need better implementation and process measures; social context, systems, org & staff capabilities, workload



Research Challenges and Opportunities

- Tx outcome evaluations take time and money
- RCTs relatively rare in CJ settings
 - equal protection and due process concerns
 - Should include organizational and implementation measures
- How to design implementation research studies: RCT vs. case studies, multiple baseline studies, etc. Is the field mature enough to support RCTs (i.e. medical/FDA model)?
- Naturalistic and qualitative descriptions of organizational structures and cultures, and implementation processes



Summary

- Implementation Science can help conceptualize the challenges of moving EB drug treatment from research to practice
- The implementation process must be planned and organized
- Successful and sustained implementation can be difficult to achieve
- Several frameworks and strategies offer promise



Summary (cont'd)

- Need to consider multi-level influences on implementation
- Full implementation is best achieved with local stakeholder involvement and change leaders
 - Inter-agency and inter-organizational collaboration and communication
- Staged process improvement strategies with achievable and measurable objectives can stimulate organizational and staff change and support for EBP
 - Engagement of line staff and line supervisors



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