Juvenile Drug Treatment Court Guidelines
Research Evidence and Practice Synthesis and Translation Protocol

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Introduction

This *Research Synthesis and Evidence Translation Protocol* describes the research-based, practitioner-informed systematic process used to develop the Juvenile Drug Treatment Court Guidelines (JDTC Guidelines).

In 2014, the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP) identified a need to create research-informed guidelines for juvenile drug courts[2] to promote effective practice and high-quality service delivery for the substance-involved juveniles served by these courts.[3] In October 2014, OJJDP awarded a cooperative agreement for this project to American Institutes for Research (AIR), which has subcontracted with several other organizations and individuals as partners in the guidelines development process (see Project Staffing, below, for more information).

There are two phases of this project:

- The development of the JDTC Guidelines will take place during Phase 1.

- During Phase 2, the guidelines will be tested in the field, and the findings will inform potential updates and revisions to the JDTC Guidelines.

This phased approach reflects the need both to present the best available research-based information and then to build on that research base through testing.

The JDTC Guidelines have been informed by systematic reviews of both research and practice (including expert input). Where and how these different types of information were integrated into the guidelines involved differing strategies. This protocol outlines the steps used to establish the underlying research and practice foundation, synthesize this information, and translate the research evidence and practice into the several components of the JDTC Guidelines. This document is organized into four core sections, which include the following:

1. Identifying Guiding Principles and the Structure of the JDTC Guidelines

    a. Defining the core elements of the JDTC Guidelines

2. Establishing the Research Evidence Base for the Guideline Statements

    a. Conducting systematic research reviews

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[1] There are three primary authors of this protocol. Other individuals were involved in the background research and drafting of the JDTC Guidelines and are noted accordingly in the appendices to this document. The views expressed in this protocol are those of the authors and do not necessarily represent the official policies of the U.S. Department of Justice or the Office of Juvenile Justice and Delinquency Prevention.

[2] The term *juvenile drug treatment court* (JDTC) is used in this document to refer to courts that are aligned with the JDTC Guidelines. The term *juvenile drug court* (JDC) is used in this document to refer to courts that historically may or may not be similar to JDTCs but were established prior to these JDTC Guidelines.

[3] See U.S. Department of Justice solicitation OJJDP-2014-3927 at
http://www.ojjdp.gov/grants/solicitations/FY2014/DrugCtGuidelines.pdf.

Identifying Guiding Principles and the Structure of the JDTC Guidelines

The research-based guiding principles described below served as the organizational and theoretical framework for the JDTC Guidelines and, ultimately, for this protocol. Identifying these principles and the guidelines structure was essential to ensure that decisions about how the JDTC Guidelines should translate research and practice into practical guidance were themselves guided by research.

As a first step, the Core Research Team conducted a literature review to identify reliable, research-based sources that focused on two aspects: (1) processes for integrating research evidence that could be applied to the JDTC Guidelines, and (2) the format of the JDTC Guidelines. This effort involved the following activities:

- Scans of peer-reviewed literature in implementation science and organizational change-oriented journals

- Reviews of government-funded evidence synthesis and guidelines or standards development efforts

- Multidisciplinary expert recommendations for example practice guidelines, standards, or evidence synthesis

The core research team reviewed these sources and qualitatively coded them to identify common themes. The team then presented its findings in *Development of Guidelines from Research: A Briefing Document.*[4] A summary of this document was presented to the Expert Panel in October 2015 for review and comment. The core research team then compiled and summarized the panel's comments. Several key guiding principles for the structure of the JDTC Guidelines, as discussed below, were derived on the basis of this process.

1. The process of integrating research evidence into the JDTC Guidelines should:

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[4] Chow, C., & Petrosino, A. (2015). *Development of guidelines from research: A briefing document*. Woburn, MA: WestEd.

- **Be transparent**—Use an explicit, transparent process for developing guidelines from research and other evidence to ensure that the guidelines do not represent conflicts of interest and are not biased toward particular conclusions.

  - Application: This guiding principle is reflected in the establishment of this synthesis and translation protocol.

- **Have clear standards of evidence**—Implement a systematic method of assessing and presenting the quality and strength of the research evidence associated with statements made. Considerations for this system should:

  a. Address how research evidence (e.g., from quantitative or qualitative empirical studies) is prioritized over other types of evidence. Research and other types of evidence vary in terms of quality, ranging from studies using the most rigorous methods (e.g., randomized-controlled trials) to other studies using important but less rigorous approaches (e.g., quasi-experimental). As such, it will be critical to rate the quality of the evidence-supporting statements, and the quality of evidence supporting the JDTC Guidelines should be made explicit. Systematic reviews of existing evidence are prioritized as the "best evidence" to consider because they assemble all of the known relevant studies and assess their quality.

  b. Provide a rating of the overall strength of evidence supporting each guideline that is focused on the level of evidence on which each standard or principle is based.

     - Application: This guiding principle is reflected in the following steps of this project: Synthesizing and Assessing the Evidence in the Research Reviews and establishment of the Guideline Evidence Translation Standards for the Core Guideline Elements.

- **Uphold research integrity and independence**—Minimize the influence of potential conflicts of interest or biases of any input process. This may include having contributors declare any potential conflicts of interest before the process, ensuring that contributors represent diverse views (and are not weighted in one direction), and charging the contributors with prioritizing conclusions from research rather than personal opinion.

  - Application: This guiding principle is reflected in the [Translating the Research Evidence Base into the Guideline Statements and the Convergence of Practice Themes into the Objectives and Research Evidence and Practice Considerations of the JDTC Guidelines](#), Staffing, and the Research Independence and Integrity Policy established for this project.

2. The organization of the JDTC Guidelines should be:

- **Comprehensive**—The JDTC Guidelines should provide direction for action and should comprehensively address key practice components. The Guidelines should also be based on research from any and all related fields. For example, there must be a key focus on treatment for substance use issues *and* for co-occurring disorders that are prevalent in juvenile justice populations. A comprehensive organization of the guidelines requires moving beyond a sole focus on recidivism to include broader

outcomes and issues relevant to juvenile justice populations, particularly based on the developmental perspective.

- Application: This guiding principle is reflected in the Map of Objectives and Guideline Statements.

- **Reasonable and Actionable**—The JDTC Guidelines that emerge from this process should be research-informed, represent the voice and needs of practitioners and consumers, and consider the context of juvenile and family drug courts.

  This criterion should involve sharing drafts for expert and stakeholder feedback on the clarity and utility of the guidelines. It should also involve gathering input from young people and the families of youth who have previously participated in JDTCs.

  - Application: This guiding principle is reflected in the use of the Convergence of Practice Themes and Conducting Expert Reviews for Implementation and Practice Considerations, in addition to the Evidence Credibility Rating of Guideline Statements (see Appendix A).

- **Understandable**—Generally speaking, the JDTC Guidelines are recommendations that are intended to assist practitioners and others to make informed decisions about practice in a particular area. The exact content of a guideline may vary but will include an organizing statement and more specific information on how to put the guideline into practice. The JDTC Guidelines should include understandable, practitioner-friendly terminology about supporting research, including definitions of technical language.

  - Application: This guiding principle is reflected in the Research Evidence and Practice Considerations and Conducting Expert Reviews.

- **Measureable**—The JDTC Guidelines also will provide direction on ways that JDTC personnel can measure progress toward each guideline.

  - Application: This guiding principle is reflected in the Indicators of the JDTC Guidelines.

Defining the Core Elements of the Guidelines

Based on the findings from the research reviews and expert feedback identified above, the Research Team established the following four core elements or types of information—informed by both research and practice—that will be included in the JDTC Guidelines:

- *Map of Objectives and Guideline Statements*—An organizing framework that captures the key components of a juvenile drug treatment court and substance use treatment in juvenile courts.

- *Guideline Statement*—A concise, action-oriented statement.

- *Research Evidence and Practice Considerations*—Definitional or descriptive statements that clarify and promote understanding of each *Guideline Statement*. These statements may include discussions regarding how implementation may vary in practice.

- *Guideline Indicators*—Performance measurement benchmarks relevant to each *Guideline Statement*. Given the close relationship between performance measurement and testing,

these will be developed as part of the project's Phase 2 and, like other core elements of the Guidelines, will be informed by the reviews of research and practice conducted during Phase 1.

Establishing the Research Evidence Base for the Guideline Statements

Conducting Systematic Research Reviews

To establish a research evidence base for the *Guideline Statements*, the core research team first conducted four systematic reviews based on a uniform process. Because of the different foci of each review, the methods used to synthesize results were different (e.g., quantitative versus qualitative outcomes) but generally followed the methodological expectations for the conduct of systematic reviews as outlined by the Campbell Collaboration.[5] The four reviews are summarized below. The full reports for each review, which provide detailed descriptions of findings and the associated methodologies, are available at https://www.ncjrs.gov.

1. **Meta-Analysis of Research on the Effectiveness of Juvenile Drug Courts.**[6] This systematic review and meta-analysis quantitatively synthesized findings from the most current evidence base of juvenile drug court effectiveness research. The objectives of the meta-analysis were to examine the effects of juvenile drug courts on general recidivism, return to substance use, and drug use outcomes, and to explore variability in these effects across characteristics of the juvenile participants and drug courts. To address these objectives, the project team synthesized results from randomized and controlled quasi-experimental design studies that reported on the effects of juvenile drug courts located in the United States.

2. **Meta-Analysis of Adolescent Substance Use Treatment Effectiveness.**[7] This systematic review and meta-analysis quantitatively synthesized findings from the most current evidence base of adolescent substance use treatment effectiveness research. The objectives of the meta-analysis were to examine the effects of substance use treatment programs on adolescents' subsequent substance use and to explore variability in these effects across key features of the adolescent populations and treatment programs. To address these objectives, the project team synthesized results from randomized and controlled quasi-experimental design studies that reported on the effects of substance use treatment programs located in the United States or Canada.

3. **Systematic Review of Juvenile Drug Court Process.**[8] This study reviewed the evidence on implementation barriers, facilitators, and process issues related to juvenile drug courts,

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[5] See the Methodological Expectations of Campbell Collaboration (C2) Intervention Reviews at https://www.campbellcollaboration.org/images/pdf/plain-language/MEC2IR_conduct_standards_v1_0_Updated_September_2014_1.pdf.

[6] Tanner-Smith, E. E., Lipsey, M. W., & Wilson, D. B. (2015). *Meta-analysis of research on the effectiveness of juvenile drug courts*. Nashville, TN: Peabody Research Institute, Vanderbilt University. Available at https://www.ncjrs.gov.

[7] Tanner-Smith, E. E., Steinka-Fry, K. T., Kettrey, H. H., & Lipsey, M. W. (2015). *Adolescent substance use treatment effectiveness: A systematic review and meta-analysis*. Nashville, TN: Peabody Research Institute, Vanderbilt University. Available at https://www.ncjrs.gov.

[8] Wilson, D., Olaghere, A., & Kimbrell, C. S. (2016). *Developing juvenile court practices on process standards: A systematic review and qualitative synthesis*. Fairfax, VA: George Mason University. Available at https://www.ncjrs.gov.

including system-wide contextual factors. This review focused on program factors directly relevant to JDC success, such as fidelity, subject demographics, program elements, and structure, as well as on other potential moderators of effectiveness.

4. **Systematic Review of Factors that Impact Implementation Quality of Child Welfare, Public Health, and Education Programs for Adolescents.**[9] This study reviewed the evidence on factors that impact implementation quality and fidelity in child welfare, public health, and education programs delivered to adolescents, including organization and community contextual factors. This review focused on factors directly relevant to the quality and fidelity of program implementation, such as staff training or access to technical assistance, as well as other potential moderators of quality and fidelity.

5. **Targeted, Supplemental Research Reviews:** If the Convergence of Practice Themes (below) revealed practice gaps not addressed by one of the four reviews conducted under this project, the core research team conducted a targeted scan of other systematic reviews that had the same methodological standards as the systematic reviews initially conducted for the project. These were targeted to address specific gaps or questions.

Credibility of Findings Rating Categories

The results of these reviews were synthesized according to the processes described below and are reflected in the *Guideline Statements*. Each *Guideline Statement* was assigned a credibility of finding rating. The credibility of findings rating categories, as developed by the research team working on the systematic reviews, were defined as:

High credibility: We are very confident that the qualitative and quantitative evidence supports the finding within the context of the study.

Medium credibility: We are moderately confident that the qualitative and quantitative evidence supports the finding within the context of the study, but there is a possibility that it is substantially different.

Low credibility: Our confidence in the findings is limited: The true finding may be substantially different from what the available evidence is able to support.

Questionable credibility: We have very little confidence in the findings: The true finding is likely to be substantially different from what the available evidence is able to support.

Synthesizing and Assessing the Evidence in the Meta-Analysis Research Reviews

For the two meta-analyses, two independent researchers working under the supervision of the core research team screened and coded all studies. Coding involved reading the full text of the study to identify information relevant to the coding protocol. The primary focus of coding was the identification and extraction of study characteristics and quantitative results from each study (i.e., effect sizes). Both meta-analyses used validation or double coding, whereby each researcher coded the other researcher's set of eligible studies without knowledge of the other researcher's

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[9] Campie, P. E., & Sokolsky, J. (2016). *Systematic review of factors that impact implementation quality of child welfare, public health, and education programs for adolescents: Implications for juvenile drug treatment courts.* Washington, DC: American Institutes for Research. Available at https://www.ncjrs.gov.

coding. Any differences between the coders, including credibility ratings, was resolved through a consensus discussion. The meta-analyses then synthesized effect sizes across studies.

1. For the *Meta-Analysis of Research on the Effectiveness of Juvenile Drug Courts*, the quality of evidence for each of the main meta-analysis findings (i.e., mean effect sizes) was assessed using the Cochrane Collaboration's Grading of Recommendations Assessment, Development, and Evaluation Working Group (GRADE) criteria.[10] This approach specifies four levels to rate the quality of a body of research evidence that reflect the credibility of research evidence. These ratings consider within-study risk of bias, directness of evidence, effect size heterogeneity, precision of estimates, and risk of publication bias.

2. For *Adolescent Substance Use Treatment: A Systematic Review and Meta-Analysis*, the included studies were required to meet a minimum quality and design threshold (i.e., randomized or well-controlled quasi-experimental designs). Many studies compared several different types of treatments resulting in a very large number of estimated mean effect sizes—specifically, substance use outcomes were reported for 95 treatment-comparison combinations and resulted in 506 standardized mean difference effect sizes representing posttreatment differences in substance use between treatment conditions. As such, quality of evidence was assessed for the totality of the body of evidence, rather than each mean effect size.

Synthesizing and Assessing the Evidence in the Systematic Research Reviews

Under each of the two systematic research reviews—*Developing Juvenile Drug Court Practices on Process Standards: A Systematic Review and Qualitative Synthesis* and the *Systematic Review of Factors that Impact Implementation Quality of Child Welfare, Public Health, and Education Programs for Adolescents: Implications for Juvenile Drug Treatment Courts*—two independent researchers from the core research team screened, coded, and double-coded all studies. Coding involved reading the full text of the study to identify relevant information. This process is described in the coding manual appended to each review. The primary focus of coding was the identification of a study finding, either quantitative or qualitative. Any number of findings could be coded per study. These reviews used qualitative synthesis methods that combined meta-analysis and qualitative content analysis techniques. Both qualitative and quantitative evidence were included, and the syntheses used the meta-aggregation method as outlined by the Cochrane Collaboration.

Researcher confidence relative to each finding was then judged on the four-point scale described above. The four-point scale produced a credibility rating that reflected the amount of evidence, the analysis of the evidence, and the finding's connection to evidence. Exhibit 1 shows the three-step process used by the two teams, each with two independent coders, to determine the credibility of findings within the context of the qualitative and quantitative evidence presented in each study included in the systematic reviews.

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[10] See http://handbook.cochrane.org/chapter_12/12_2_1_the_grade_approach.htm

Exhibit 1. Systematic Reviews: Findings Credibility Determination Process

Qualitative Data	Quantitative Data
Step 1: Are the findings clearly connected with direct quotes or detailed descriptions of observations, rather than simply the opinion of the researcher with little connection to the evidence?	**Step 1:** Are the findings directly connected to a statistical finding and consistent with that statistical finding in terms of statistical significance, direction of effect, and magnitude of effect? (Note that not all of these will be relevant for all types of quantitative findings.)
Step 2: Is there an adequate amount of qualitative data to have confidence in the findings, or would additional time in the field have produced different findings? If different methods are triangulated to produce the finding, credibility is higher. If there is no indication of the number of interviews or time spent observing, credibility is weakened.	**Step 2:** Are findings based on at least 85 percent of original sample (or 85 percent of subsample if finding is based on a subsample)?
Step 3: Is there evidence of careful qualitative analysis, such as using multiple coders, validation methods, qualitative software, or discussions of data validity?	**Step 3:** Are clear risks of bias for findings minimized? Things to consider are: (1) post hoc nature of finding (i.e., possible "data fishing"), (2) appropriateness of statistical method, (3) selection bias or other internal validity concerns if finding is of a causal nature, (4) poor question wording or measurement construct fit, (5) adequate statistical power if finding is one of no effect, and (6) any other concern that would raise doubt about the finding.

At each step in the process, individual articles were scored in binary fashion (yes/no) to arrive at an overall credibility score for each article. If a study produced no answers to all questions it would receive the lowest rating of "questionable credibility." Once themes were identified in common across individual studies, the ratings for each study were combined to determine an overall rating that best represented the group of studies within each theme (Exhibit 2).

Exhibit 2. Credibility of the Evidence for Themes

> **THEME 1**
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> **Study A: Low Credibility** + **Study B: Moderate Credibility** + **Study C: Moderate Credibility**
> **= THEME 1: Moderate Credibility**

Synthesizing and Assessing the Evidence in the Additional, Supplemental Systematic Reviews

The core research team conducted additional reviews targeted to answer specific practice gaps or questions not covered by the meta-analyses or systematic reviews conducted. These additional reviews involved the identification of published systematic reviews that provided evidence to support the *Guideline Statements* to address the identified gaps.

Establishing Convergence of Practice Themes for Key Components, Implementation and Practice Considerations, and Guideline Statement Practice Gaps

The purpose of identifying the convergence of practice for this project was to identify descriptive evidence for "what is going on" in JDTCs, which is not necessarily about "what works" in JDTCs. Identifying convergence of practice themes served two purposes in developing the JDTC Guidelines: (1) to provide information related to the *Map of Objectives and Guideline Statements*

and *Research Evidence and Practice Considerations*, and (2) to identify gaps in the research needed for *usable, actionable*, and *comprehensive* guidelines. The process of identifying convergence of practice themes consisted of establishing an initial key variable crosswalk, a systematic policy and practice review, site visits, and expert review to identify convergence of practice themes and then conducting a gap analysis between those themes and the *Guideline Statements*.

Initial Key Variable Crosswalk

The core research team developed an initial key variable crosswalk to identify the theoretical elements (or the common program elements, system features, and practices) of juvenile drug courts that would guide the scope and breadth of the research reviews conducted under this initiative. This work started by building from the systematic reviews previously published by members of the Team. In addition, there were other initial scans of the literature and consideration of the document titled *Juvenile Drug Courts: Strategies in Practice.*[11] From this series of reviews, the core research team worked closely with expert opinion feedback from OJJDP staff. . In addition to guiding the scope of the research reviews, these variables guided the examination of the potential moderators of effectiveness and implementation variables explored within the research reviews.

Systematic Policy and Practice Review

The core research team established two approaches to the systematic review of JDTC policies and practices. First, the project team used a combination of document review and interviews to conduct an environmental scan of 25 JDTCs. The scan captured and reported data on nine different domain areas including court context, history, and funding. Second, more intensive listening sessions were conducted with five JDTCs. Details on each process are provided below. The full reports for each review are available at https://www.ncjrs.gov.

1. **Juvenile Drug Courts: Policy and Practice Scan.**[12] The Policy and Practice Scan (also known as an "environmental scan") was conducted to provide data on a small sample of JDTCs in the U.S. The objectives of the scan were to collect data from 25 JDTCs on current operations and structures, challenges to implementation, and successes they recognize. State-level juvenile drug court coordinators for each state and territory were asked for a list of local JDTCs, contact information, and any data that could help assess eligibility. The administrative office of the courts was contacted in any state whose coordinator did not respond to these requests. The sample was supplemented with JDTCs listed in the most recent directory from the National Association of Drug Court Professionals (NADCP). Eligible JDTCs were also identified through Google searches. A total of 405 JDTCs from 43 states and Puerto Rico were identified. To be included in the scan, a local JDTC had to have been created in 2004 or later (excluding JDTCs that predated the 16 Strategies in Practice) and have been operational for at least two years. Of those identified, 108 were eligible for inclusion. Key contacts at each eligible site were asked to participate by e-mail or phone. A total of 25 JDTCs agreed to participate

[11] Bureau of Justice Assistance. (2003). *Juvenile Drug Courts: Strategies in Practice*. Rockville, MD: National Drug Court Institute.

[12] Choo, K., Petrosino, A., Persson, H., Fronius, T., Guckenburg, S., and Earl, K. 2016. *Juvenile Drug Courts: Policy and Practice Scan.* San Francisco, CA: WestEd Justice and Prevention Research Center. Available at https://www.ncjrs.gov.

and are included in the final sample. These 25 sites may not be representative of all JDTCs in the United States, but every attempt was made to ensure that the 25 JDTCs were geographically diverse.

2. **OJJDP Juvenile Drug Court Guidelines Project: Juvenile Drug Court Listening Sessions**.[13] A team of consultants conducted site visits with JDTCs to identify issues related to screening, assessment, treatment, and outcome monitoring. The site visits and listening sessions were conducted with an array of JDTCs differing in structure, size, and length of time in implementation. Prior to each visit, court personnel and key stakeholders were asked to report on selected preliminary information. All available JDTC background materials and preliminary reports from court personnel were reviewed prior to conducting the listening session. Any issues identified in the review of background materials and online survey responses requiring clarification were addressed on-site (i.e., questions added to individual stakeholder interviews and the listening session). A full-day listening session was conducted in each participating site. To ensure reliability of coding procedures, site visits included three members of the listening session team. The listening session team observed JDTC team staffing meetings and court hearings. The number of staffing meetings to be observed depended on the amount of time available on-site to conduct hearing observation, a listening session with the stakeholders, individual professional stakeholder interviews, and a project debriefing or exit meeting. Semi-structured individual interviews were conducted with the JDTC judge and the JDTC coordinator. In addition, a multi-stakeholder listening session with as many members of the JDTC team as possible (e.g., drug court coordinator, attorneys, agency staff, treatment provider) was conducted at each site.

Securing Expert Reviews

In addition to the systematic policy and practice review, expert opinion was systematically collected through the following:

1. **Expert Panel Discussion.** On October 22, 2015, the members of the project's Expert Panel (see a list of members at the end of this document) assembled for a one-day meeting to consider core research team learnings from the research reviews and to discuss the process of developing guidelines for JDTCs. The research team led the meeting and the Expert Panelists were joined in the conversation by a number of federal staff from OJJDP, the National Institute for Justice, and the Substance Abuse and Mental Health Services Administration. The meeting included meaningful discussion on each of the following: what should be included in the Guidelines, the target audience for the Guidelines, the standards of evidence for the *Guideline Statements*, the role of expert opinion in the preparation of the guidelines; and the potential roles for the expert panelists in the development of the guidelines.

2. **Listening Sessions/Focus Groups.** A series of four listening sessions using a webinar format were facilitated to elicit feedback on the second draft of the JDTC Guidelines. Invited participants included judges, drug court coordinators, probation officers, treatment professionals, defense and prosecuting attorneys, and national program,

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[13] Gatowski, S., Miller, N.B., Rubin, S., Thorne, W., and Barnes, E.W. 2016. *OJJDP Juvenile Drug Court Guidelines Project: Juvenile Drug Court Listening Sessions.* Reno, NV: Court Centered Change Consultants. Available at https://www.ncjrs.gov.

practice, policy, research, and training experts. Webinar organizers reached out to the National Council of Juvenile and Family Court Judges, the National Center for State Courts, the National Association of Drug Court Professionals, and Reclaiming Futures to help engage their stakeholders in providing feedback on the draft Guidelines. As a result of these recruitment efforts, the webinars included representatives from all JDTC professional stakeholder groups as well as national JDTC research, training, and technical assistance experts. Webinar participants were briefed on the Guidelines Project and were provided copies of the draft Guidelines for review. The research team then moderated discussion focused on whether the guidelines were perceived to be clear, important, and suitable for implementation in the field. This was also an opportunity to assess whether there were gaps in the draft guidelines.

3. **Targeted Review by Expert Panel Members.** Once the process of drafting the JDTC Guidelines began, individual members of the expert panel were given opportunities to review the drafts and their input was applied to inform many of the revisions to the JDTC Guidelines as they evolved. In addition, staff from federal agencies were also approached to provide reviews of the early drafts of the JDTC Guidelines. As the JDTC Guidelines reached the final stages of development, a select group of expert panel members were asked to provide a final review.

Synthesizing and Assessing the Information into Convergence of Practice Themes

The policy and practice information was then qualitatively coded into practice themes informed by expert opinion. Those practice themes with documented implementation in at least 75 percent of the sample field of the policy and practice scan or site visits/listening sessions, or identified by an expert reviewer in one of the methods above, were identified as Convergence of Practice Themes.

Identifying Guideline Statement Practice Gaps

The Convergence of Practice Themes were then reviewed by the core research team and were systematically compared to drafts of the *Guideline Statements* and *Research Evidence and Practice Considerations*. A practice gap was defined as a Convergence of Practice Theme that could not be addressed under a current *Guideline Statement*, either directly or through implementation and practice considerations. These practice gaps were then used to identify questions for the Targeted Supplemental Research Reviews.

Translating the Research Evidence Base into the Guideline Statements and the Convergence of Practice Themes into the Objectives and Research Evidence and Practice Considerations of the JDTC Guidelines

Evidence Translation Standards for the Core Elements

The following evidence translation standards were created based on the guiding principles presented at the beginning of this protocol. Based on these guiding principles, research evidence is valued above other types of evidence. In addition, it is important that the JDTC Guidelines are comprehensive, understandable, and actionable.

Map of Objectives and Guidelines Statements:

The *Map of Objectives and Guidelines Statements* is the overall organizational framework of the JDTC Guidelines and broadest representation of information contained within them. Research meeting the evidence credibility standards becomes the basis for the various *Guideline Statements*, organized under seven overarching Objectives.

Guideline Statement:

All *Guideline Statements* must be directly relatable to a finding from one of the research reviews with an Evidence Quality Credibility Rating of at least High Quality *or* Moderate Quality from the Assessing and Synthesizing the Evidence in the Research Reviews. Practice gaps identified by Convergence of Practice Themes may be noted as a gap, but *not* as a *Guideline Statement*.

All *Guideline Statements* will have Research Evidence described with citations noting the origin of the Statement.

Research Evidence and Practice Considerations:

The *Research Evidence and Practice Considerations* will provide a summary of the research evidence that supports each *Guideline Statement*, along with qualitative contextual information or definitions identified as a Convergence of Practice Theme or in the Research Evidence Base and will also provide clarifying descriptions regarding practice considerations of *Guideline Statements*.

Writing, Editing, and Expert Review

The JDTC Guidelines will be written by the Core Research Team. To achieve the project's goal of creating Guidelines that are comprehensive, reasonable, actionable, understandable, and measureable, the Core Research Team, OJJDP Staff, the Expert Panel, and Federal Partners will be involved in drafting and reviewing the JDTC Guidelines. All reviewers will focus on clarity of language, suitability and importance of statements for practice, and identification of gaps in the objectives, guidelines statements, or research evidence or practice considerations. The reviewers will not have responsibility for the addition or deletion of information outside the Evidence Translation Standards for the Core Elements outlined above.

Project Staffing

This initiative is being led by an AIR research team. AIR has engaged several highly qualified partners for a Core Research Team. During Phase 1 of this initiative, the Core Research Team will be responsible for conducting a number of systematic reviews of research, policies, and practices. These efforts will create a base of research-informed knowledge from which the JDTC Guidelines will be developed. Throughout the process, the Core Research Team will work closely with a group of core OJJDP staff that will offer expert review and guidance on all activities and materials that are developed.

Core Research Team

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Expert Panelists and Federal Partners

A panel comprising experts and federal partners was assembled to advise the development of the guidelines. Panel membership is designed to reflect the typical composition of a JDTC team (i.e., judge, prosecutor, defender, treatment provider, parent, and young adult) plus a researcher. The panel participated in a working group meeting in October 2015 and helped provide input for this translation protocol.

The expert panelists will participate in the development of the practice guidelines in the following ways:

- The Core Research Team prepared a synthesis of key findings from the research reviews that will form the basis for development of the guidelines. As that synthesis is finalized, a small subgroup from the Expert Panel will be assembled (via webinar or conference call) to inform the process for development of a first draft of the Guidelines.

- The first draft of the guidelines will then be shared with the entire Expert Panel for review and comment.

- AIR's communications team plans to engage a subgroup from the Expert Panel for participation in a working session (also to be held via webinar or conference call) on messaging strategies for the Guidelines.

- AIR will follow up with many of the Expert Panelists to continue exploring ways that their individual and professional networks may be engaged to provide input on and reaction to the Guidelines.

- AIR will also follow up with individual members of the Expert Panel, as appropriate, for more focused requests relating to the evidence compiled in preparation for the development of Guidelines.

- AIR will engage the panelists to serve as ambassadors for obtaining feedback on the Guidelines and endorsing and disseminating them.

Expert Panelists

Steven Belenko, Temple University

Phil Breitenbucher, Children and Family Futures, Inc.

Susan Broderick, National Juvenile Justice Prosecution Center, Georgetown University

Jeffrey Butts, Research & Evaluation Center, John Jay College of Criminal Justice

Anthony Capizzi, Montgomery County (Ohio) Juvenile Court

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APPENDIX A
Credibility Ratings for Guideline Statements

Objective	Guideline Statement	Credibility of Findings
1. Focus the JDTC philosophy and practice on effectively addressing substance use and criminogenic needs to decrease future offending and substance use and to increase positive outcomes.	1.1. The JDTC team should be composed of stakeholders committed to the court's philosophy and practice, and to ongoing program and system improvement. The team should include collaborative relationships with community partners.	High
	1.2. The roles for each member of the JDTC team should be clearly articulated.	Medium
	1.3. The JDTC team should include participants from local school systems, with the goal of overcoming the educational barriers JDTC participants face.	High
	1.4. The JDTC should ensure that all team members have equal access to high-quality regular training and technical assistance to improve staff capacity to operate the JDTC and deliver related programming effectively. Such training and technical assistance should focus on: • The nature of substance use disorders and the dynamics of recovery. • Staff skill development and effective case management. • Screening and assessment for substance use and criminogenic needs, particularly relating to the development of treatment plans. • Adolescent development and the developmental perspective for juvenile justice programming. • Cultural competence in working with youth and families. • Family engagement and working with caregivers through a trauma-informed lens. • The use of effective contingency management strategies (e.g., incentives and sanctions). • The purpose of each intervention implemented for JDTC participants, the evidence of its value, and how it aligns with the JDTC's mission. • The effective use of evidence-based practices (that address co-occurring mental health issues and other co-occurring issues such as family dysfunction) in substance use treatment.	High
	1.5. JDTCs should be deliberate about engaging parents or guardians throughout the court process, which includes addressing the specific barriers to their full engagement.	Medium
	1.6. JDTCs should provide court-certified or licensed onsite interpreters for parents or guardians with limited English proficiency and for those with a hearing deficiency. In addition, all documents should be translated into the native language of non-English-speaking youth and parents or guardians.	Medium

Objective	Guideline Statement	Credibility of Findings
2. Ensure equitable treatment for all youth by adhering to eligibility criteria and conducting initial screening.	2.1. Eligibility criteria should include the following: • Youth with a substance use disorder • Youth who are 14 years old or older • Youth who have a moderate to high risk of re-offending	High
	2.2. Assess all program participants for the risk of reoffending using a validated instrument.	High
	2.3. Screen all program participants for substance use using validated, culturally responsive screening assessments.	High
	2.4. If potential program participants do not have a substance use disorder and are not assessed as moderate to high risk for reoffending, they should be diverted from the JDTC process.	Medium
	2.5. JDTCs should ensure that eligibility criteria result in equity of access for all genders; racial and ethnic groups; and youth who are lesbian, gay, bisexual, transgender, queer or questioning, intersex, and gender nonconforming (LGBTQI–GNC) and Two-Spirit.	High
3. Provide a JDTC process that engages the full team and follows procedures fairly.	3.1. JDTCs should work collaboratively with parents and guardians throughout the court process to encourage active participation in (a) regular court hearings, (b) supervision and discipline of their children in the home and community, and (c) treatment programs.	High
	3.2. The judge should interact with the participants in a nonjudgmental and procedurally fair manner.	High
	3.3. The judge should be consistent when applying program requirements (including incentives and sanctions).	High
	3.4. The JDTC team should meet weekly to review progress for participants and consider incentives and sanctions, based on reports of each participant's progress across all aspects of the treatment plan.	High
4. Conduct comprehensive needs assessments that inform individualized case management.	4.1. Needs assessments should include information for each participant on: • Use of alcohol or other drugs. • Criminogenic needs. • Mental health needs. • History of abuse or other traumatic experiences. • Well-being needs and strengths. • Parental drug use, parental mental health needs, and parenting skills.	Medium
	4.2. Case management and treatment plans should be individualized and culturally appropriate, based on an assessment of the youth's and family's needs.	Medium

Objective	Guideline Statement	Credibility of Findings
5. Implement contingency management, case management, and community supervision strategies effectively.	5.1. For each participant, the application of incentives should equal or exceed the sanctions that the JDTC applies. Incentives should be favored over sanctions.	High
	5.2. Participants should feel that the assignment of incentives and sanctions is fair: • Application should be consistent; i.e., participants receive similar incentives and sanctions as others who are in the court for the same reasons. • Without violating the principle of consistency described above, it is also valuable to individualize incentives and sanctions.	High
	5.3. Financial fees and detention should be considered only after other graduated sanctions have been attempted. Detention should be used as a sanction infrequently and only for short periods of time when the youth is a danger to himself/herself or the community, or may abscond.	High
	5.4. Ongoing monitoring and case management of youth participants should focus less on the detection of violations of program requirements than on addressing youth's needs in a holistic manner, including a strong focus on behavioral health treatment and family intervention.	High
	5.5. A participant's failure to appear for a drug test and otherwise tampering with drug test results should be addressed with immediate, graduated sanctions.	High
	5.6. The JDTC team should be prepared to respond to any return to substance use in ways that consider the youth's risk, needs, and responsivity.	Medium

Objective	Guideline Statement	Credibility of Findings
6. Refer participants to evidence-based substance use treatment, to other services, and for prosocial connections.	6.1. The JDTC should have access to and use a continuum of evidence-based substance use treatment resources—from in-patient residential treatment to outpatient services.	Medium
	6.2. Providers should administer treatment modalities that have been shown to improve outcomes for youth with substance use issues. These modalities include, but are not limited to, the following: • Assertive continuing care. Programs that provide integrated and coordinated case management services for youth after they are discharged from outpatient or inpatient treatment, including home visits, client advocacy for support services, and integrated social support services. • Behavioral therapy. Programs based on operant behavioral principles that use incentives (e.g., gift certificates) to reward abstinence and/or compliance with treatment. • Cognitive behavioral therapy. Programs based on theories of classical conditioning that focus on teaching adolescents coping skills, problem-solving skills, and cognitive restructuring techniques for dealing with stimuli that trigger substance use or cravings. • Family therapy. Programs based on ecological approaches that actively involve family members in treatment and address issues of family functioning, parenting skills, and family communication skills. • Motivational enhancement therapy. Programs that use supportive and nonconfrontational therapeutic techniques to encourage motivation to change based on clients' readiness to change and self-efficacy for behavior change. • Motivational enhancement therapy/cognitive behavioral therapy. Programs that use a combination of motivational enhancement and cognitive behavioral therapy techniques. • Multiservice packages. Programs that combine two or more of these approaches. These programs use a combination of behavioral, cognitive behavioral therapy, family therapy, motivational enhancement therapy, pharmacotherapies, and/or group and mixed counseling in a comprehensive package.	Medium
	6.3. Service providers should deliver intervention programs with fidelity to the programmatic models.	Medium
	6.4. The JDTC should have access to and make appropriate use of evidence-based treatment services that address the risks and needs identified as priorities in the youth's case plan, including factors such as trauma, mental health, quality of family life, educational challenges, and criminal thinking.	High
	6.5. Participants should be encouraged to practice and should receive help in practicing prosocial skills in domains such as work, education, relationships, community, health, and creative activities.	High

Objective	Guideline Statement	Credibility of Findings
7. Monitor and track program completion and termination.	7.1. Court and treatment practices should facilitate equivalent outcomes (e.g., retention, duration of involvement, treatment progress, positive court outcomes) for all program participants regardless of gender, race, ethnicity, or sexual orientation.	High
	7.2. A youth should be terminated from the program only after the JDTC team carefully deliberates and only as a last resort after full implementation of the JDTC's protocol on behavioral contingencies.	High
	7.3. Each JDTC should routinely collect the following detailed data: • Family-related factors, such as family cohesion, home functioning, and communication. • General recidivism during the program and after completion, drug use during the program, and use of alcohol or other drugs after the program ends. • Program completion and termination, educational enrollment, and sustained employment. • Involvement in prosocial activities and youth-peer associations.	High

APPENDIX B
Targeted Supplemental Research Reviews

Targeted Supplemental Research Reviews

1. Carney, T., and Myers, B. 2012. Effectiveness of early interventions for substance-using adolescents: Findings from a systematic review and meta-analysis. *Substance Abuse Treatment, Prevention, and Policy* 7(1):25.

    A meta-analysis of nine studies that compared substance use and behavioral outcomes for youth participating in early intervention programs with outcomes for youth participating in treatment or care as usual.

2. Catalano, R.F., Berglund, L.M., Ryan, J.A.M., Lonczak, H.S., and Hawkins, J.D. 2004. Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Annals of the American Academy of Political and Social Science* 591(1):98–124.

    A systematic review of 77 positive youth development programs, the study sought to describe approaches that contribute to positive youth behavior outcomes and also reduced or prevented youth's involvement in problem behaviors, including substance use and delinquent activities.

3. Dowden, C., and Andrews, D.A. 1999. What works in young offender treatment: A meta-analysis. *Forum on Corrections Research* 11:21–24.

    This study involved a meta-analysis of 229 studies of juvenile offenders. It sought to explore the importance of the principles of risk, need, and responsivity, as they pertain to correctional treatment of juvenile offenders.

4. Fisher, E.A. 2014. Recovery supports for young people: What do existing supports reveal about the recovery environment? *Peabody Journal of Education* 89(2):258–270. Available online: https://recoveryschools.org/wp-content/uploads/2016/02/Recovery-Supports-for-Young-People.pdf.

    A systematic review of the literature on recovery for adolescent substance users. The study examined formalized aftercare recovery programs and recovery communities. The key questions addressed had to do with understanding the challenges related to recovery for adolescents.

5. Howell, J.C., and Lipsey, M.W. 2012. Research-based guidelines for juvenile justice programs. *Justice Research and Policy* 14(1):17–34.

    This article summarizes the key findings of a meta-analysis of interventions for juvenile offenders including 548 independent study samples drawn from 365 research reports.

6. Lipsey, M.W., Howell, J.C., Kelly, M.R., Chapman, G., and Carver, D. 2010. *Improving the Effectiveness of Juvenile Justice Programs: A New Perspective on Evidence-Based Practice*. Washington, DC: Georgetown University Center for Juvenile Justice Reform.

   A meta-analysis of 548 evaluations of delinquency interventions, finding that "juvenile justice systems will generally get more delinquency reduction benefits from the intervention by focusing their most effective and costly interventions on higher risk juveniles and providing less intensive and costly interventions to the lower risk cases."

7. Lowenkamp, C.T., Latessa, E.J., and Holsinger, A.M. 2006. The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs? *Crime & Delinquency* 52(1):77–93.

   A meta-analysis using data from 2 independent studies of 97 correctional programs that investigates how adherence to the risk principles increases effectiveness in reducing recidivism.

8. Mazerolle, L., Bennett, S., Manning, M., Ferguson, P., and Sargeant, E. 2013. *Legitimacy in Policing: A Systematic Review.* Oslo, Norway: Campbell Systematic Reviews. Available online: www.campbellcollaboration.org/lib/download/2453.

   A meta-analysis of 30 studies containing 41 independent evaluations. The systematic review sought to synthesize empirical evidence on police-led interventions to increase perceptions of police legitimacy.

9. Petrosino, A., Turpin-Petrosino, C., and Guckenburg, S. 2010. *Formal System Processing of Juveniles: Effects on Delinquency*. Oslo, Norway: Campbell Systematic Reviews.

   A systematic review involving 7,304 juveniles across 29 experiments examining the formal processing of system-involved youth. Formal processing does not reduce subsequent delinquent activity; based on official data, it appears to increase the prevalence, incidence, and severity of these acts.

10. Prendergast, M.L., Pearson, F.S., Podus, D., Hamilton, Z.K., and Greenwell, L. 2013. The Andrews' principles of risk, need, and responsivity as applied in drug abuse treatment programs: Meta-analysis of crime and drug use outcomes. *Journal of Experimental Criminology* 9(3):275–300.

   A meta-analysis of drug treatment programs that included 243 independent comparisons. The study sought to determine whether the principles of risk, needs, and responsivity can be extended to programs that treat drug abusers.