

Exploring Core Components Research in Social Services Settings

Summary of 2020 OPRE Methods Meeting



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A growing body of research aims to identify and study the core components of effective interventions, defined as the “essential functions and principles that define the program and are judged as being necessary to produce outcomes in a typical service setting.”¹ Core components approaches can complement traditional social policy evidence building; for example, by making research insights more generalizable and programs more adaptable, scalable, and better equipped to pursue continuous improvement.² Core components approaches can also help address some of the common challenges associated with traditional impact evaluations. For example, smaller programs with fewer resources to adopt manualized interventions, conduct evaluations, or make use of fidelity supports could benefit from an alternative approach. Interventions deemed effective through formal evaluation may not

have the desired effect when implemented in new environments and under different

The Administration for Children and Families’ Evaluation Policy

The Administration for Children and Families’ Evaluation Policy guides the planning, conduct, and use of evaluation to inform policy and practice across the agency’s programs. The policy establishes five principles that core components approaches may help support:

- **Rigor.** Evaluations use the best methods available that are also appropriate to the evaluation questions and feasible within budget and other constraints.
- **Relevance.** Evaluation priorities account for legislative requirements, Congressional interests, and the interests and needs of ACF’s stakeholders. Findings are disseminated in ways that are accessible and useful to policymakers and practitioners.
- **Transparency.** Information about planned and ongoing evaluations is easily accessible, and comprehensive results are released, whether favorable, unfavorable, null, or mixed.
- **Independence.** ACF-sponsored studies are insulated from undue influence, and from both the appearance and the reality of bias.
- **Ethics.** ACF studies safeguard the dignity, rights, safety, and privacy of participants.

See <https://www.acf.hhs.gov/opre/resource/acf-evaluation-policy> for additional information about this policy.



¹ Blase, K., & Fixsen, D. (2013). Core intervention components: Identifying and operationalizing what makes programs work. <https://aspe.hhs.gov/report/core-intervention-components-identifying-and-operationalizing-what-makes-programs-work>

² Ferber, T., Wiggins, M., & Sileo, A. (2019). *Advancing the use of core components of effective programs.* <https://forumfyi.org/knowledge-center/advancing-core-components/>

conditions or may not be feasible to implement with existing resources. A core components approach can provide evidence critical for successfully adapting programs across a variety of conditions and determining which intervention elements are critical to achieving desired results and delivering benefit to participants.

Despite the potential benefits, most program evaluations are not designed to explore core components, and few researchers have extensive experience implementing these approaches. Few systematic reviews provide sufficient details about interventions' core components, including the procedural information required to reliably implement them in the field.

On October 28–29, 2020, the Administration for Children and Families' (ACF) Office of Planning, Research, and Evaluation (OPRE) convened a virtual meeting for participants from Federal agencies, research firms, academia, and other organizations to discuss core components approaches. The speakers addressed the following questions:

- ▶ What is the motivation for using core components approaches?
- ▶ What are the steps to implementing core components approaches?
- ▶ How can researchers identify, organize, and test components?
- ▶ How have researchers built bridges to practice and why are they needed?
- ▶ How have practitioners applied core components in social services settings?
- ▶ What are the current debates and future areas of exploration surrounding core components approaches?

- ▶ How have core components approaches been applied in the Federal context, and how might they be applied?

This summary describes the meeting presentations and highlights themes that emerged.

WHAT IS THE MOTIVATION FOR USING CORE COMPONENTS APPROACHES?

In the opening session of the Methods Meeting, speakers identified potential reasons for using core components approaches. They first identified motivations at a broad level, noting that new and drastically different approaches (as compared with traditional evidence-building practices) are needed to solve large societal problems. Although human service interventions aim to improve lives and reduce suffering, barriers to achieving these goals can surface, such as having an inadequate evidence base to inform program implementation and an insufficient workforce to serve all needs.

A wealth of anything creates a scarcity in something else. In this instance, a wealth of information creates a scarcity of attention.

—Summarized from Dr. Bruce F. Chorpita's presentation, [*Designing Human Services for an Information-Rich World: Core Components in Context*](#)

Research has generated a wealth of information to help strengthen interventions and address societal problems, yet stakeholders sometimes struggle to use it effectively. This "information paradox" means funders, researchers, and program staff process and act on only a small fraction of

the available information. Speakers suggested that core components approaches offer a solution to this problem by providing new and different ways to use the available information.

After identifying the broader reasons for considering core components approaches, speakers discussed motivations for applying them in the Federal research space. Several recent developments have paved the way for exploring core components approaches at the Federal level, including increasing efforts to build evidence on effective programs and making data more accessible, culminating in the Evidence-Based Policymaking Act of 2018; growing interest in using more adaptable approaches (i.e., finding ways to examine evidence besides registry-based approaches); and a growing awareness of the challenges related to adopting model-based programs.

Federal offices are exploring ways core components approaches can help agencies target resources more effectively, provide greater flexibility in program implementation at the local level, and build the evidence base. Within the U.S. Department of Health and Human Services, for example, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) formed a subgroup within the Interagency Working Group on Youth Programs for Federal agencies to share information about core components approaches to program evaluation. ASPE also funded several evaluations to identify and test youth program components. Presenters noted there are challenges and barriers to implementing core components in the Federal context, and they cautioned the components should be used to complement

or supplement more traditional evaluation structures rather than replace them. Presenters from the session indicated successfully implementing core components approaches would require stakeholder commitment and an investment of resources to be successful.

WHAT ARE THE STEPS TO IMPLEMENTING CORE COMPONENTS APPROACHES?

Presenters introduced the major steps involved in implementing core components research and described specific approaches that can be applied. They shared that building evidence-based programs (EBPs) typically requires three primary elements: evidence, a bridge to practice, and a policy push. This framework is described below:

- ▶ **Evidence.** Methodologically credible research on the effects of programs or treatments on desired outcomes (e.g., randomized controlled trials [RCT], strong quasi-experiments).
- ▶ **Bridge to practice.** Translation and dissemination of research findings in a form available to practitioners (e.g., research reports, treatment manuals, professional training registries of effective programs, marketing by purveyors).
- ▶ **Policy push.** Policy context that promotes use of evidence-based practices (e.g., professional practice standards, State EBP legislation, Government Performance and Results Act, Foundations for Evidence-Based Policymaking Act).

Implementing this framework using traditional research methodologies can be challenging. For example, study results are typically shared in registries, but many programs being implemented have not been formally studied in this manner. Program variability and complexity also influence program effectiveness, with interpersonal and interactive programs (e.g., home visiting) being the most complex because of their focus on social and behavioral change.

Presenters described several ways core components approaches can help address these issues and build EBPs in novel and practical ways. Several approaches and their benefits follow:

- ▶ **Unpacking program packages.** Focuses on deconstructing effective programs to find commonalities across interventions. Identifies components that make each intervention effective, explains how each component operates, and helps build bridges from research to practice.
- ▶ **Applying structured components ontology.** Helps wield more information in more ways; can lead to deeper analysis beyond the intervention level (e.g., causal mechanism research, single component studies).
- ▶ **Distillation trees.** Provide aggregate data on frequency that core components occur in interventions and help identify how certain groups will respond to an intervention.
- ▶ **Knowledge appliances.** Stress that components are one part of a dynamic architecture needed to achieve positive outcomes.

They also described typical steps for implementing core components approaches (see text box).

Five Common Steps to Implementing Core Components Approaches

- **Identifying.** Developing theories about which identified components of programs might be instrumental in helping targeted populations achieve desired outcomes.
- **Testing.** Winnowing the identified components based on which ones empirically predict the targeted population's improvement in desired outcomes across multiple contexts and subpopulations.
- **Empowering.** Creating guides, tools, assessments, protocols, techniques, and processes that facilitate translation and dissemination of core components for use by practitioners.
- **Validating.** Testing the tools and methods to determine whether they increased the use of the core components and whether this led to better participant outcomes.
- **Scaling.** Implementing a strategy to scale up the use of the tools and methods proven to increase practitioners' use of the core components.

—Summarized from Dr. Cheri Hoffman's and Dr. Allison Dymnicki's presentations, [*The Path to Core Components Approaches*](#) and [*What Do We Mean By Core Components?*](#)

HOW CAN RESEARCHERS IDENTIFY, ORGANIZE, AND TEST COMPONENTS?

Presenters noted that studying core components, like any research enterprise, begins by addressing a series of questions. Ultimately, core components researchers should strive to identify specific details about what interventions work, for whom, and under

what circumstances. To select an appropriate analytical approach, researchers must first ask—

- ▶ What is the project’s purpose?
- ▶ Who is the intended audience?
- ▶ How will study results be used?
- ▶ What are the appropriate research questions?

Based on responses to these initial questions, researchers can decide between two main approaches to analyzing core components: descriptive and inferential. Both are useful, depending on a study’s goals and purpose. Descriptive analyses are commonly drawn from systematic review results (e.g., meta-analyses) and focus on organizing and describing information about key intervention components. Presenters explained how tools such as evidence gap maps can help researchers describe and visualize where evidence is most robust and where it is lacking by mapping intervention characteristics onto a diagram (e.g., intervention type, outcome type). Inferential analyses offer more in-depth testing where enough data exist by enabling researchers to group similar studies together based on core components and to test effectiveness across components. Inferential analyses relevant for

core components research include confirmatory moderator analysis, which tests for differences across groups and works well for testing policy-relevant components at scale. Such an approach also offers a more complicated multiple predictor meta-regression analysis useful when the research team has access to large amounts of data but lacks an a priori understanding of effect size causes.

Presenters next discussed how researchers can use taxonomies and ontologies to better organize and test components. These are classification systems researchers can develop and use to organize data, identify information, and clarify differences and similarities between components. Relevant components to include in a taxonomy structure may be an intervention’s delivery mechanism, the amount of exposure to an intervention, and the context of an intervention’s implementation. Researchers can link components identified in a taxonomy or ontology to relevant tools (e.g., [Behaviour-Change Wheel](#)) to select appropriate behavioral interventions.

Taxonomies and ontologies are beneficial because they enable researchers to assemble and organize large amounts of relevant data to better address research questions. They are machine readable and can automatically synthesize information to generate new levels of insight. After describing the numerous benefits associated with developing taxonomies and ontologies, presenters cautioned attendees that all knowledge systems require ongoing user commitment and input. They must be evaluated for utility and for adequacy (e.g., accuracy, extensivity, usability, timeliness)



compared with traditional evidence synthesis methods. Such systems are “living things” that must be extended, adapted, and linked over time.

HOW HAVE RESEARCHERS BUILT BRIDGES TO PRACTICE AND WHY ARE THEY NEEDED?

Presenters next shared their experiences with projects that both analyzed core intervention components approaches and helped apply them in the field. This transition from research to practice helped study teams ensure practitioners could use their findings in practical, tangible ways.

- ▶ **Strengthening youth-serving interventions.** Researchers at Abt Associates are conducting an ASPE-supported study to inform practice guidelines for providers and practitioners in youth-serving organizations. The study uses meta-regression to empirically identify the components of programs most associated with outcomes, then translates those analyses into actionable guidelines to help practitioners better align their programs with evidence-based practices.
- ▶ **Addressing low engagement in mental health services.** Researchers at the University of South Carolina are leading a team that is using components to address low engagement among youth and families in treatment for mental health services. The study team coded engagement procedures, or components, included in 50 RCTs of effective interventions to identify

practices that led to the identification of 11 common components likely to improve engagement in diverse settings. Providers and supervisors could then use the framework researchers developed to adapt and adjust their practices.

- ▶ **Improving social-emotional learning in educational settings.** Researchers at Harvard’s Ecological Approaches to Social and Emotional Learning lab completed an iterative research process to develop and test social-emotional (SEL) learning “kernels” or effective practices that are targeted, specific, and easy for educators to adapt and integrate into regular practice. Specifically, the team developed and tested an intervention called Brain Games that links desired SEL skills to specific, brief, adaptable activities to help build those skills as time permits in the classroom.

Principally, we’re concerned with connecting what we know to what we do.

—Dr. Stephanie Jones, *SEL Kernels: Turning Social-Emotional Learning into Components*

- ▶ **Empowering youth-serving practitioners to use evidence-based practices.** Researchers from the Forum for Youth Investment explained how they support practitioners in adapting their programs and incorporating evidence-based practices in the field. The organization’s model is built on a Pyramid of Program Quality, based in part on Maslow’s Hierarchy of Needs, which can help practitioners implement effective practices leading to high youth engagement. The Forum’s staff have

developed supports and technical assistance tools, such as a self-administered SEL Program Quality Assessment tool, to help practitioners assess areas for potential improvement and identify next action steps.

HOW HAVE PRACTITIONERS APPLIED CORE COMPONENTS IN SOCIAL SERVICES SETTINGS?

Presenters next explored how core components research can help produce positive and equitable program outcomes in social services settings. Representatives from two social service agencies and a social science researcher shared their experiences implementing core components approaches. Presenters discussed how they used core components, as follows:

- ▶ **Address complex mental health problems.** Uplift Family Services, an organization that provides mental health services to families and children in California, used “core elements” to establish service principles that apply to its diverse group of more than 100 programs. Uplift engaged a research partner (PracticeWise) that identified a set of core elements relevant to most of its clients. The organizations developed a comprehensive training program to teach practitioners about these components and provide them with tools to implement evidence-based practices in the field. Since implementing this approach, Uplift Family Services has continued to revisit and refine it to ensure its compatibility with evolving
- ▶ **Optimize family-based interventions in Title I schools.** A team of researchers at Arizona State University used core components to develop a school-based program called Bridges. The program is available to Spanish- and English-speaking families. It engages parents and their middle school-aged children to increase student engagement and prevent common teen problems (e.g., issues with drugs, alcohol). Researchers conducted an RCT to test the effectiveness of the program, study its core components, and refine it accordingly. Identifying the core components central to producing positive outcomes enabled researchers to streamline the program and make it easier for schools to implement effectively. This process helped ensure the program’s benefits were retained when adapted for delivery settings and different populations.
- ▶ **Increase equity and reduce disparities.** The United Way of the National Capital Area strives to promote social change by increasing equity and reducing disparities in the communities it serves. To improve outcomes, the United Way team used a core components approach to identify the program elements most likely to promote resilience and protect participants against negative outcomes. The organization partnered with researchers from the Annie E. Casey Foundation to administer a Youth Experience Survey that assessed risk factors, protective

factors, and outcomes. The team then identified relevant EBPs whose components aligned with such findings and worked with developers to implement the programs appropriately. The United Way team worked carefully to ensure its core components work addressed racism and systemic oppression, with programs selected and program elements adapted as needed to address cultural considerations. The United Way has found that addressing cultural considerations through program interventions in this manner is not simply a moral imperative, it is also imperative to achieving positive outcomes.

WHAT ARE THE CURRENT DEBATES AND FUTURE AREAS OF EXPLORATION SURROUNDING CORE COMPONENTS APPROACHES?

In a roundtable discussion, panelists convened to review the state of the core components field. Speakers shared their experiences implementing core components approaches, responded to questions about current debates, and contemplated how such approaches could be implemented more effectively in the future. They discussed ways core components approaches differ from traditional methods of developing EBPs, noting they enable researchers to connect effective practices and outcomes more directly and give practitioners flexibility to adapt interventions. They cautioned core components approaches require the same level of effort as traditional approaches to



implement effectively and may require adjustments to how fidelity is monitored and assessed. Core components approaches may also require research teams to provide additional technical assistance and hands-on support to practitioners to ensure components-based programs are tailored and implemented appropriately (e.g., creating a “practice profile” tool with practical steps to help communities operationalize and study the programs). Panelists were optimistic that technology could help practitioners implement components-based programs effectively, particularly in the era of COVID-19 with many services being delivered remotely. They also indicated components approaches could be used to promote equity by centering communities and their needs.

Panelists also explored potential changes that could strengthen the field moving forward. For example, they discussed ways core components methods might affect research syntheses in the future. Speakers highlighted current clearinghouses that identify practices for implementation, such as the Blueprints for Healthy Youth Development clearinghouse, and discussed ways to expand on this approach by

providing further details about which program elements practitioners can manipulate. Throughout the discussion, panelists emphasized the importance of documentation, noting primary researchers and their funders should encourage more explicit identification of core components to promote their application in various settings. Documenting core components adequately can, for example, help systematic reviewers link components and outcomes more effectively, support collaboration among a diverse set of stakeholders, and create more opportunities to assess components through rapid cycle testing. Panelists also discussed the need for a methodological infrastructure that centers communities in core components work.

HOW HAVE CORE COMPONENTS APPROACHES BEEN APPLIED IN THE FEDERAL CONTEXT AND HOW MIGHT THEY BE APPLIED?

A second roundtable discussion explored considerations for implementing core components approaches in Federal agencies. The panel opened with introductions from the panelists, who outlined how core components approaches had been implemented to date within their respective agencies and offices. Approaches included conducting meta-analyses to assess components that drive impacts in various programs (e.g., career pathway programs, youth-serving programs), developing guidance on essential elements to support practitioners in understanding evidence-based approaches to preventing

violence, and identifying core components of comprehensive home-visiting models through a “precision paradigm” to target interventions more effectively.

Panelists next moved to a question-and-answer session. They began by discussing what core components approaches can offer Federally led evaluation and evidence-based policymaking, noting these approaches can empower practitioners to tailor interventions to the unique communities they serve. Echoing comments from earlier sessions, the panelists also acknowledged these approaches can help promote equity by testing which components of an intervention have the greatest impact for specific subpopulations. Speakers next explored how core components can help build the evidence base for Federal programs, reiterating that core components approaches are complementary to other, more traditional forms of evidence building and adding that these newer approaches may be more appealing to stakeholders who are resistant to traditional evidence-based approaches.

A large portion of the discussion centered on ways the Government might support core components research, where appropriate. One direct way, panelists noted, is to fund high-quality program evaluation and research studies that include core components approaches or generate reports with enough evidence to support meta-analyses and additional core components research. They discussed the Government’s ability to promote coordination and collaboration among agencies and create a common language and infrastructure that could further support components research. They

discussed the need for practitioner-friendly resources and technical assistance to implement core components approaches effectively, which the Government could help support. Panelists also explored barriers to implementing core components approaches in Federal settings, including the challenges associated with implementing new approaches, ensuring appropriate fidelity, and finding ways to coordinate with other initiatives and approaches (e.g., quality improvement). They observed the theory of change associated with core components approaches needs to be better defined to be implemented effectively.

Panelists closed the discussion by acknowledging the complexity of Federal systems, programs, and standard evaluation activities. Implementing new research approaches effectively in this context will require careful thought and planning.

WANT TO LEARN MORE?

To access the online meeting archive, including a detailed agenda, meeting materials, and presentation slides, please visit the OPRE Methods Meeting website at www.opremethodsmeeting.org. The site also includes materials from other innovative methods meetings OPRE has organized and will be updated to include future meetings.



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EXPLORING CORE COMPONENTS RESEARCH IN SOCIAL SERVICES SETTINGS

Virtual Meeting Agenda

Day 1: October 28, 2020

Welcome and Greetings from OPRE (Session 1)

Naomi Goldstein (Office of Planning, Research, and Evaluation)

Motivation, Use, and Current Debates (Session 2)

Designing Human Services for an Information-Rich World: Core Components in Context

Bruce F. Chorpita (University of California, Los Angeles)

The Path to Core Components Approaches

Cheri Hoffman (Office of the Assistant Secretary for Planning and Evaluation)

Describing the Diversity of Core Components Approaches (Session 3)

Constructing and Deconstructing Evidence-Based Programs

Mark W. Lipsey (Vanderbilt University)

Where Do Components Come from and Where Do They Fit In?

Bruce F. Chorpita (University of California, Los Angeles)

What Do We Mean by Core Components?

Allison Dymnicki (American Institutes for Research)

Questions and Answers for Sessions 2 and 3

Synthesis: Defining, Identifying, and Testing Components (Session 4)

Analyzing Core Components

Joshua R. Polanin (American Institutes for Research)

Taxonomies and Ontologies: Organising Knowledge About Core Components

Susan Michie (University College London)

Synthesis: Two Methodological Examples (Session 5)

Core Components of Effective Prevention Programs for Youth

Sandra Jo Wilson (Abt Associates)

Building a Knowledge Appliance: Components and Much More

Kimberly D. Becker (University of South Carolina)

Questions and Answers for Sessions 4 and 5

Day 2: October 29, 2020

Synthesis to Use: Building a Bridge from Research to Practice (Session 6)

SEL Kernels: Turning Social-Emotional Learning into Components

Stephanie M. Jones (Harvard University)

Synthesis to Use: Building a Bridge from Research to Practice

Poonam Borah (The Forum for Youth Investment)

Moderator and Q&A Discussion:

Amanda Coleman (Office of Planning, Research, and Evaluation)

Use: Application of Core Components (Session 7)

Components Research in Social Services Settings: An Agency's Perspective

Eleanor Castillo-Sumi (Uplift Family Services)

Using Core Components to Optimize Family-Based Prevention in Title I Schools

Nancy Gonzales (Arizona State University)

The Importance of Equity in Evidence-Based Program Implementation

Dirk Butler (United Way of National Capital Area)

Q&A Discussion

Current Debates and Future Areas of Exploration (Session 8)

Panelists:

Jeffrey C. Valentine (University of Louisville)

Allison Metz (University of North Carolina at Chapel Hill)

Moderator:

Sean Grant (Indiana University)

Implications for the Federal Context (Session 9)

Panelists:

Megan E. Lizik (Department of Labor)

Sandra F. Naoom (Centers for Disease Control and Prevention)

Sarah Oberlander (Office of the Assistant Secretary for Planning and Evaluation)

Kyle Peplinski (Maternal and Child Health Bureau)

Kay O'Neill (Johns Hopkins University)

Moderator:

Kriti Jain (Office of Planning, Research, and Evaluation)

Wrap Up the Day

Scott Cody (Insight Policy Research)

Jenessa Malin (Office of Planning, Research, and Evaluation)