WHITE PAPER

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Practice Profiles: A Process for Capturing Evidence and Operationalizing Innovations

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Abstract: The purpose of this piece is to provide the research and rationales behind Practice Profiles. To achieve outcomes and develop effective implementation supports, innovations need to be "teachable, learnable, doable, and assessable." Practice Profile methodology facilitates the development of innovations and their necessary infrastructure. Specific training on NIRN's Practice Profile methodology can be found on the Active Implementation Hub.

Keywords: implementation science, usability testing

Background

The field of Implementation Science seeks to determine the supporting conditions for the effective implementation of an innovation. This might be either a new model of service, an evidence-based program, or any of a number of defined efforts to create a particular set of outcomes. Implementation science can be summarized by the formula:



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The three factors of the equation refer to what is implemented, how it is implemented and where it is implemented. In order to achieve significant impact, the innovation (the what) needs to be well specified and matched to the needs of the population, implemented in a deliberate and adaptive manner, as well as supported by a hospitable environment and learning processes.

In terms of the "what," communities are often unable to use existing manualized programs to address complex and emerging challenges. In these cases, communities deliberately choose innovations using available knowledge that meet the unique needs of the target population, are based on research evidence, and are feasible to implement within a specific context. In doing so, communities regularly begin with conceptually defined strategies. When innovations lack specification, it is challenging for "interventionists" who are left to figure out "what" they should be implementing, which results in impediments to implementation with good outcomes for communities (e.g. Hall & Hord, 2006).

Practice profiles are a tool for operationalizing a conceptually defined strategy through community engagement and research methods so that it is clear what practitioners will do as they carry out the innovation. Once an innovation is described in sufficient detail, effective implementation methods can be applied to develop the competency of staff to do the new way of work, to use data to continuously improve the innovation, and to ensure that leadership and administrative practices are in service to new expectations. Enabling contexts also must be built that leverage and build hospitable funding, regulatory and policy environments, engage key stakeholders, and promote ongoing learning.

For the innovation to be useful in practice, the following criteria are necessary (Metz, Bartley, Blase, Fixsen, 2011; Fixsen, Blase, Metz and Van Dyke, 2013):

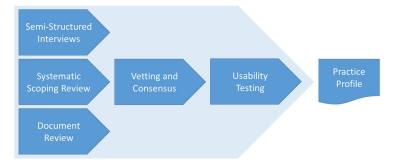
- The philosophy, values, and principles that underlie the innovation.
 - These guide the practitioner's decisions and ensure consistency, integrity, and sustainable effort across all practitioners.
- Clear description of the essential functions.

 These define the role of practitioners and inform activities within each phase of work. Essential functions provide a clear description of the features that must be present to say that the innovation is being used and to achieve outcomes ("essential functions" are sometimes called core components, active ingredients, or practice elements).
- Operational definitions of the essential functions.

 These describe the core activities associated with each essential function and allow the innovation to be "teachable, learnable, doable, and assessable" across a range of contexts. Operational definitions promote functional consistency across practitioners at the service delivery level.
- Practical assessments of performance.
 This assesses whether the innovation is implemented as intended. Fidelity assessments are used to improve practitioner competency and implementation supports such as training and coaching.

Practice Profile Methodology

The development of practice profiles requires a specific methodology. The methodology ensures the inclusion of research or best practices, the alignment of competencies with the innovation's theory of change, and the recognition of "what works" through the experience of communities, practitioners and key stakeholders. Implementation teams conduct the following interrelated (sometimes overlapping) steps in an iterative process to identify the principles, essential functions, and activities of practitioners: 1) semi-structured interviews; 2) systematic scoping review; 3) document review; 4) vetting and consensus process; 5) usability testing. These steps are described in greater in the following section.



Semi-Structured Interviews

Individual interviews are conducted with a sample of practitioners and community members engaged in services. The goal is to identify the innovation's principles that guide successful work with children, youth, adults, and families, as well as the specific activities practitioners are engaged with to bring these principles to life. *Practitioners* and *community* members are asked to provide examples from the field to illustrate the use of guiding principles and core activities related to the innovation. Practitioners also are asked to consider successes and challenges in implementing the innovation. Community members are asked to consider the benefits and challenges of innovations in supporting their desired outcomes. Other kev stakeholders are interviewed as needed. Findings from the interviews are coded for themes to inform the development of a draft description of the practice profile.

Document Review

Existing documentation of the innovation is also reviewed. This can include program theory, logic model, program description, communication plans, and other tools and resources (e.g., CQI and monitoring tools, quarterly reports, and site visit reports). The document review has two purposes: 1) to select documents based on whether they contain information needed to develop the interview protocol and scoping review questions and search terms; and 2) to describe in greater detail information related to principles and essential functions to inform the practice profile development.

Systematic Scoping Review

Scoping reviews (Levac, Colquhoun, & O'Brien, 2010) allow for a rapid and systematic review of published work in a broad thematic area. The goal of the scoping review is to access and review published research that focuses on identifying competencies related to the innovation. The scoping review includes six stages (Arksey & O'Malley, 2005): 1) identifying the research question for the scoping review to address; 2) identifying relevant studies and reports; 3) selecting studies and reports using post hoc inclusion and exclusion criteria based on familiarity the literature; 4) increasing with extracting data to capture process oriented information; 5) summarizing and reporting results; and 6) consulting with community members and key stakeholders to request additional insights beyond the published frameworks. Studies and articles are identified through literature searches and a snowballing technique involving key sources such as

developers or implementers of the innovation. Themes are summarized and integrated with findings from the qualitative interviews to inform the practice profile development.

Vetting and Consensus Building

Community members, practitioners, leadership, and other key stakeholders (researchers, program consultants) vet the initial draft of the practice profile. Facilitation and guiding questions are provided for the vetting and consensus building process. This process happens in two phases and typically takes place over the course of several meetings. The first phase of vetting and consensus building provides an opportunity for stakeholder reflection. Each stakeholder is asked to respond to the following questions: 1) What are your thoughts after reading through the profile? 2) What do you see as the strengths in the profile? 3) What do you notice as areas to be improved or more fully realized? 4) Did you notice anything missing? In the second phase of vetting and consensus building, stakeholders are asked to provide feedback on each essential function. Questions include: 1) Is this an essential function for practitioners? 2) If no, should it be included within another essential function or removed? 3) If yes, are the core activities measurable and observable? 4) What changes or additions are recommended? 5) What additional literature should be reviewed? 6) Are more perspectives needed? Once consensus is developed, the practice profile is tested with real world cases.

Testing and Evolving the Profile

Usability testing uses rapid cycle (Plan, Do, Study, Act) detection of strengths and gaps related to the evolving innovation with a small samples of cases. By "testing" the innovation as it is expected to be implemented with only a few examples (e.g., three to five practitioners initiating new services) across agencies/counties/regions, improvements can be made quickly from one cycle to the next. Data are synthesized across practitioners to provide feedback on the overall usability of the practice profile. When used purposefully, 4 or 5 usability testing cycles with 4 or 5 practitioners involved in each cycle can produce information needed to refine the practice and get started on purposeful continuous quality improvement strategies as the innovation is scaled within the practice setting. When consistent challenges occur, implementation supports or the profile itself may be adjusted or contextualized to represent "real world" implementation. Reflection, problem solving, and small cyclical tests of change are the hallmark of this phase of practice profile development.

Plan

Plan

Practice profile methodology is aligned with continuous quality improvement — optimizing the use of evidence in a range of contexts and enabling ongoing learning among practitioners, researchers, policy makers and funders, and community members to improve the sustainability of evidence in practice settings. Operational learning (Chambers, Glasgow, & Stange, 2013) is a core value of the practice profile methodology. As described by Damschroder and colleagues the successful implementation innovations includes "dedicated time for reflecting or debriefing before, during, and after implementation as one way to promote shared learning and improvements along the way" (Damschroder et al., Emphasizing continuous quality 2009, pg. 11). improvement has implications for researchers, practitioners and policy makers. For researchers, development and refinement of interventions are not completed during clinical trials, but rather optimized through ongoing use in practice settings. Policy makers will need to assess opportunities to incentivize ongoing, data-driven improvement strategies. Practitioners will need to employ feedback loops among community members, researchers and policy makers to continually assess and improve practice (Chambers, et. al., 2013).

Practice profile methodology demonstrates a commitment to adapting models and practices to achieve more desirable outcomes (see Kainz and Metz, 2016). While there is increasing emphasis on the importance of translating, adapting, and optimizing evidence-based practices and programs in local contexts, there is less information on how to assess "fit" and determine optimal adaptations to models without compromising evidence-based outcomes. Conceptual models for guiding adaptation (Aarons, 2012) shed some light on how to tailor systems, organizations, and programs to meet the needs of local communities and target populations. The practice profile methodology provides a concrete strategy for factoring in the dynamic interplay between characteristics of the service system, service delivery organization, and communities. This is done by including key stakeholders in the co-creation of the innovation, as well as during its ongoing implementation and improvement.

Benefits of Practice Profiles

Practice profiles have many, including:

- Support co-creation of the innovation

 Practice profiles include key stakeholders (community members, practitioners, researchers and policy makers) in the operationalization, execution, and improvement of the innovation and provide consensus-building opportunities.
- Provide a fully operationalized practice model for consistent implementation of the innovation
 Practice profiles provide greater specificity of the innovation and improve the likelihood that practitioners can engage in the essential functions.
- Facilitate the development of effective training protocols, coaching strategies, and fidelity assessments

 A well-operationalized innovation allows for the development of competency-based recruiting, hiring, training, coaching, and fidelity assessments that are "in service to" the essential functions outlined in the practice profile. Without this level of operationalization, organizations will be unable to develop the right supports and infrastructure for ensuring the innovation is used effectively and improved over time.
- Refine the organizational and systems supports the
 organization or agency will need to install to facilitate
 consistent and effective practice across practitioners
 A well-operationalized innovation will allow organizations
 to develop decision-support data systems, administrative
 practices, and systems partnerships aligned with the
 expectations for the new way of work.
- Promote the use of continuous improvement as an essential functions of the practice model

 Organizations can only improve innovations that are well-defined. Without knowing what "it" is, "it" cannot be tested (e.g., in interactions with children and families) and improved over time. Usability testing allows for data-driven enhancements and revisions to the profile, leading to improved practice by practitioners.
- Ensure that outputs and outcomes of the innovation can be accurately interpreted

 Outcomes are challenging to interpret when there is a lack of clarity in "what" was implemented. If expected outcomes are not achieved, fidelity assessment data related to the practice profile components can provide an explanation and facilitate action planning.
- Demonstrate a commitment to adapting models and practices to achieve more desirable outcomes
 Practice profiles emphasize the importance of translating, adapting, and optimizing evidence-based practices and programs in local contexts.

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