TBM

CrossMark

Active involved community partnerships: co-creating implementation infrastructure for getting to and sustaining social impact

Renée I. Boothroyd, PhD, MA, MPH, CHES,[1] Aprille Y. Flint, MSW,[2] A. Mark Lapiz, MSW,[3] Sheryl Lyons, EdS, LMHC,[4] Karen Lofts Jarboe, MSW, LCSW,[2] William A. Aldridge, IIPhD[1]

[1]Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill, Campus Box 8180, Chapel Hill, NC 27599-8180, USA

[2]Child and Family Policy Institute of California, Sacramento, CA, USA

[3]Social Services Agency, County of Santa Clara, San Jose, CA, USA

[4]Department of Health and Human Services, County of Humboldt, Eureka, CA, USA

Correspondence to: R Boothroyd
renee.boothroyd@unc.edu

Abstract

Active involved community partnerships (AICPs) are essential to co-create implementation infrastructure and translate evidence into real-world practice. Across varied forms, AICPs cultivate community and tribal members as agents of change, blending research and organizational knowledge with relationships, context, culture, and local wisdom. Unlike selective engagement, AICPs enable active involvement of partners in the ongoing process of implementation and sustainability. This includes defining the problem, developing solutions, detecting practice changes, aligning organizational supports, and nurturing shared responsibility, accountability, and ownership for implementation. This paper builds on previously established active implementation and scaling functions by outlining key AICP functions to close the research-practice gap. Part of a federal initiative, California Partners for Permanency (CAPP) integrated AICP functions for implementation and system change to reduce disproportionality and disparities in long-term foster care. This paper outlines their experience defining and embedding five AICP functions: (1) relationship-building; (2) addressing system barriers; (3) establishing culturally relevant supports and services; (4) meaningful involvement in implementation; and (5) ongoing communication and feedback for continuous improvement. Planning for social impact requires the integration of AICP with other active implementation and scaling functions. Through concrete examples, authors bring multilevel AICP roles to life and discuss implications for implementation research and practice.

Keywords

Community, Tribes, Partnership, Implementation, Sustainability

"Like the coming together of two rivers, each with its own colors, current and dynamic force, a new path is formed when agency and community partners come together. Neither loses depth or diversity in the joining, rather we gain new perspectives and opportunities as we work together to achieve shared outcomes."

Implications

Research: Implementation researchers should acknowledge a blending of research, practice, and policy worlds by building time and resources for community engagement into study protocols and measurement.

Practice: Service delivery systems should actively join with community and tribal members and co-create capacities that engage them to support, monitor, and improve implementation practice.

Policy: Funders and policymakers should commit resources for the structures and processes that ensure active involved community partnering in implementation research and practice.

– California Partners for Permanency, Child & Family Practice Model Program Manual

INTRODUCTION

The question "what does it take?" to get evidence into practice is critical so that what can help improve safety, health, and well-being reaches those it is intended to help. The fields of dissemination and implementation research have emerged from this understanding that evidence alone is not enough to produce socially significant outcomes [1–4]. Researchers and practitioners involved in translating evidence into practice recognize the need to take into account the ability to bring the full, intended experience of the innovation into the lives of children, families, and communities. This ability to implement includes strategies of diffusion (passive spread of innovation knowledge) and dissemination (distribution and transfer of information and innovation material), but is not defined solely by these strategies. Implementation is an active and outcome-oriented endeavor [5] that is

focused on how to support full and effective use of an evidence-based innovation as intended in typical service settings [6, 7]. Active implementation strategies focus on building both human (i.e., ongoing professional development) and organizational (i.e., using data for quality improvement) resources and abilities to create and nurture systems of change for getting to social impact.

Beyond a focus on cultural fit of the program [8–11], broader attention to community engagement and partnering in the process of implementation can strengthen what we know as core factors essential for getting research into real-world practice [12–17]. Community participation and engagement in implementation research and practice are not a new concept, per se [18–23], and can range along a continuum from more passive forms of consultation and ongoing feedback to collaboration and more active roles in decision making [24]. Disagreement about the type and depth of community-partnering strategies remains, as does the tension to balance urgency with patience to address serious problems effectively [25]. Some projects incorporate community input into otherwise "top-down" approaches that appear to move faster to address urgent population health problems; others incorporate participatory approaches throughout the project to nurture ownership for lasting change [26, 27], and can be perceived as "slowing things down." Amidst such tension, many in the field of implementation research are realizing the necessity for effective community partnering and that there are no shortcuts that effectively balance time, costs, and quality for getting evidence into practice that benefits people and communities [28]. Incorporating community partnering throughout the process of implementation may actually result in community and organizational systems that are more hospitable to and capable of attending to the leadership and management, delivery support, and problem solving functions that are necessary for complex and adaptive systems to support consistent delivery of effective strategies [29–31].

With a focus on sustainable rather than demonstrated change, the field of implementation research is calling for active, community-partnered processes across a full range of implementation activities that engage community members as producers of outcomes [14, 28, 32–34]. Responses to this call lie along a continuum. Some focus on community partnering as the implementation intervention itself (e.g., community development teams as the strategy for delivering multidimensional treatment for foster care [35]; community health workers as the implementers [36]), while others adopt more of a co-creation approach that engages community and other stakeholders at multiple phases of the work to build, organize, and align essential and visible infrastructure to support effective implementation [31, 37]. For example, the Washington Statewide Tribal Mental Health Gathering identified a roadmap for stakeholder inclusion along a continuum of implementation activities that emphasize a learning community model across governance, community,

and individual levels [38]. In other research related to policy work, authors discovered the critical nature of community engagement in early exploration, preparation, readiness, and quality management activities as being essential for successful implementation [39]. Particularly for marginalized populations, implementation research needs to invest resources to create stable partnerships with community for ongoing collaboration that leverages the value of their life experience into creating culturally relevant and appropriate responses to change [28]. Such efforts involve flexibility, humility, and commitment to partnership for both the programmatic intervention and the implementation processes for effective delivery as intended within complex systems.

While specific approaches such as community-based participatory research (CBPR) [22] and stakeholder engagement [40, 41] have been applied to implementation research [42], conceptual guidelines for applying them across the practice of implementation can be difficult to operationalize into real-world practice. Framed by a knowledge base of partnership and collaborative capacity in public health [29, 30], particular contributions of community-partnering components can be difficult to decipher when part of more generalized factors related to capacity to create change (i.e., clear vision, action planning). In addition, CBPR terminology or language, often developed for academic or professional audiences (i.e., "involves a cyclical and iterative process"), may not easily translate for the understanding and application to implementation practice by community groups and organizations [43]. Recent details from the operationalization of CBPR [44, 45] describe variations in the application of defined principles, suggesting that the translation of some partnering aspects (e.g., building on community strengths, facilitating co-learning) occurs more often and may be easier to put into practice than others (i.e., sharing power, striving for sustainability) [46]. Translating community-partnering principles into common, action-oriented language that is specific to the issue under consideration may indeed be critical when building new partnerships and related capacities in implementation practice and systems with little to no partnership experience [47]. Finally, developing organizational and system capacities that go beyond grant-funded projects to formalize and embed structures and processes for community partnering is critical for the viability and durability of collective action [48, 49].

More recently, the field of implementation research is deliberately calling on the use of partnership strategies for sustainable translational research and quality improvement. Many researchers already recognize the contributions of CBPR and other partnership strategies at various stages of the research process (i.e., to strengthening the relevance of research questions, increasing acceptability of data collection tools, designing relevant interventions, and improving data interpretation). In contrast to the application of community

partnering and engagement approaches as instrumental strategies for individual research project goals and outcomes [32, 50–53], system-based participatory research in implementation would engage community and tribal partners with agency workers and operational and administrative leaders of organizations in capacity building and organizational change [54, 55]. This more deliberate integration of community engagement and partnership capacities into such system-based approaches to implementation may be key in moving from intervention "delivery systems" to host organizations for sustainable change.

Guided by a focus on systems-based approaches for organizational capacity and change [56, 57], this paper builds on previously established active implementation and scaling functions [31] by outlining key community-partnership components, developed and applied in service delivery agencies, that may be necessary for effective implementation to close the research to practice gap. Through case example, we describe a set of active, involved, community partnership (AICP) functions and activities that emerged from operationalizing community-partnering principles for implementation in a child welfare system. The child welfare system is a group of public and private services that are focused on ensuring that all children live in safe, permanent, and stable environments that support their well-being. Similar to other studies [30], the term "system" used herein refers to any part or combination of inter-connected and inter-dependent service delivery and support agencies (i.e., mental health,) decision makers (i.e., courts), and policymakers (i.e., federal government) that together provide a safety net for vulnerable children. Across varied forms, activities attending to AICP blended research and organizational knowledge with relationships, context, culture, and local wisdom, and cultivated community and tribal members as agents along a continuum of implementation activities for sustainable change. Shared community member and system roles included defining the problems, developing solutions, detecting practice changes, aligning organizational supports, and nurturing shared responsibility, accountability, and ownership for implementation. Part of a federal initiative, California Partners for Permanency (CAPP) integrated AICP functions for implementation and system change to reduce disproportionality and disparities in long-term foster care. This paper outlines their experience defining and embedding five AICP functions: (1) relationship-building; (2) addressing system barriers; (3) establishing culturally relevant supports and services; (4) meaningful involvement in implementation; and (5) ongoing communication and feedback for continuous improvement. Through concrete examples in applied practice, this paper brings multilevel AICP functions and roles to life, and discusses the implications of community engagement and partnering as system change approaches for organizational change in implementation research and practice.

CONTEXT

CAPP was part of the federal Permanency Innovations Initiative (PII), a 5-year, $100 million Presidential Initiative designed to develop and implement innovative intervention strategies to reduce long-term foster care stays and improve child and family outcomes. CAPP implemented a Child and Family Practice Model that was co-created by four counties and their community and tribal partners to address institutional racism and trauma as identified in institutional assessments. Core components and elements of the Practice Model include culturally sensitive engagement; empowerment of family, tribal, and community networks; and use of culturally based healing practices and practice adaptations (http://www.cfpic.org/practice-models/cfpmcapp). Child welfare and other systems have traditionally failed to seek out, value, or integrate community perspectives and contributions into service efforts, limiting the fit, utility, and responsiveness of even the best evidence-based program [34]. Throughout phases of CAPP work, from assessment and planning to implementation and evaluation, community and tribal partners have taken on meaningful roles as cultural coaches, fidelity assessment observers, and key advisers in local practice and system change efforts. Together, shedding light on "blind spots" of hidden barriers [31], agency, community, and tribal partners worked together to strengthen practice, system supports, and accountability to shared goals and outcomes. Similar to the practice model itself, AICP functions outlined herein draw from conceptual frameworks for partnership from trauma-informed organizational practices and systems of care [58–62].

AICP FUNCTIONS

With active and involved community, local leadership, demonstrated organizational commitment, and system capacity and support for implementation, all parts of the organization and system can work in concert to address systemic barriers, support quality practice, and positively impact outcomes for children and families. While a deeper review of both the multilevel leadership and coordination and the delivery support functions [31] is beyond the scope of this manuscript, the CAPP project indeed established local and visible infrastructure for these important functions for effective implementation (see sample in Fig. 1). Teaming structures that involved and linked executive and cross-agency leadership with community and other system partners hosted and operationalized AICP functions in service to fidelity and improved outcomes for children and families. While the "who" being partnered with (i.e., case worker supervisors, foster parents, youth, tribal elders, biological parents, community-based agency leaders) and the "form" of partnership processes varied across
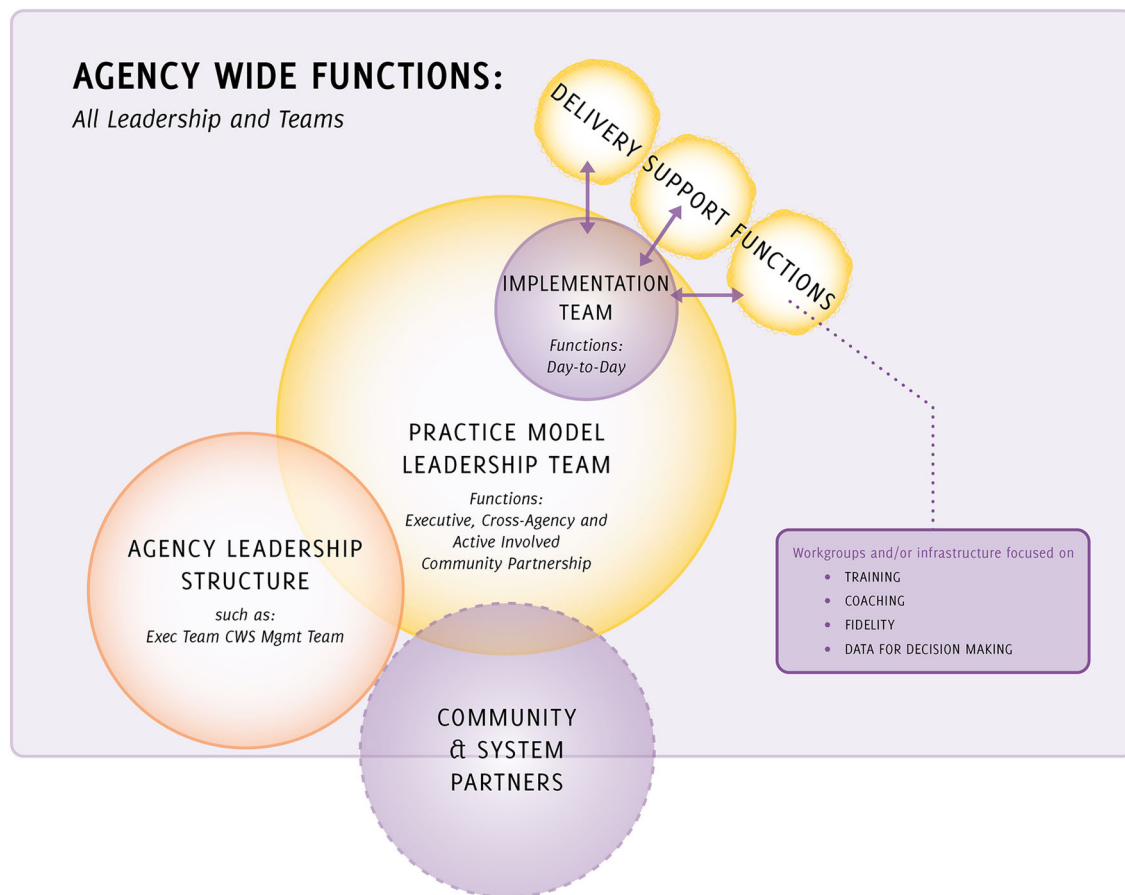
AGENCY WIDE FUNCTIONS:
All Leadership and Teams

DELIVERY SUPPORT FUNCTIONS

IMPLEMENTATION TEAM
Functions: Day-to-Day

PRACTICE MODEL LEADERSHIP TEAM
Functions: Executive, Cross-Agency and Active Involved Community Partnership

AGENCY LEADERSHIP STRUCTURE
such as: Exec Team CWS Mgmt Team

Workgroups and/or infrastructure focused on
- TRAINING
- COACHING
- FIDELITY
- DATA FOR DECISION MAKING

COMMUNITY & SYSTEM PARTNERS

Fig 1 | Sample of agency-wide implementation functions among all leadership and implementation teams

agencies, at their core, the AICP functions included the following: relationship-building, addressing system barriers, culturally relevant supports and services, meaningful involvement in implementation, and communication and feedback. Table 1 outlines the AICP functions that emerged from and guided CAPP work, along with concrete examples. The following sections describe each AICP function, elaborate on CAPP's experience, and provide concrete examples of community-partnering roles in organizational change for implementation.

Relationship-building

Active listening with community partners was in service to the system both learning about features of priority problems and then using that understanding to collaboratively design responsive strategies to address the problems. Listening sessions and forums with community partners created a safe space for ongoing, meaningful inclusion and involvement of both internal and external stakeholders who likely had some measures of reluctance due to past trauma or for whom this level of engagement is a new experience. To manage anticipated challenges, groups co-developed shared agreements, terminology, values, and vision/mission for desired outcomes that were meaningful to both the system and the community. As such, the listening

sessions provided space for the system to demonstrate "cultural humility" through self-evaluation and critique, to redress the power imbalances in the worker/client dynamic, and to develop mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations being served.

Upon determining assessment findings, agency, community, and tribal partnerships continued with a focus on designing an intervention for the system that was relevant and responsive to identified needs. What began as four themes about barriers was translated into 8 core practice elements and subsequently 23 practice behaviors to guide staff and the system's interactions with children and families. Together, staff and community members worked to clarify a "usable" practice model that could be taught, understood, implemented, assessed, and repeated in practice [6, 63]. In particular, co-development of a practice profile focused on connecting the intervention to barriers that surfaced in system reviews and working with community, cross-system, and tribal partners to define practice not by what social workers and families are mandated to do, but by what children and families need to experience to help them attend to their needs. While CBPR principles in implementation research may engage community partners for designing culturally relevant research practices, the function of relationship-building

Table 1 | Active, involved community partnership functions for active implementation and scaling

Functions	Examples
Relationship-building • Listening sessions to learn about and begin to address historical trauma, mistrust of agencies and systems, and other long-standing and institutional barriers to safety, health, and well-being	• Agency and tribal partners identified a need for cultural training of staff to help them better understand the histories, culture, and needs of children and families being served
Addressing system barriers • Working with community and tribal partners to identify system barriers to improved outcomes for children and families and implement action plans to address those barriers	• Convene key advisors (community members and community provider organizations) to meet monthly with high-level leadership and share seats on policy and other decision-making teams
Culturally relevant supports and services • Collaborating with community and tribal partners to establish culturally relevant supports and services to meet the underlying needs of children and families	• Seek out information about natural and traditional supports and services to help staff link families to programs sensitive to culture (e.g., regalia making in the tribal community; parenting classes taught in local churches by trusted clergy)
Meaningful involvement in implementation • Meaningfully involving community and tribal partners in training, coaching, fidelity, and ongoing system supports for effective, sustained implementation of the practice model	• Design and delivery of a 3-day cultural immersion training provided by tribal partners as part of local practice model implementation • Cultural coaches from the community are co-located in the agency to coach staff at all levels
Communication and feedback • Ensuring partnership meetings, forums, and feedback loops is sustained so that community and tribal partners are continuously connected to and help guide ongoing practice and system changes	• Convene a community action team—with community and system leaders that is linked to the agency to identify needs and link with leadership and implementation teams

described herein also focuses on building community partners as agents of system change.

Addressing system barriers

Early in the project, CAPP counties participated in system analyses in partnership with community, tribal, and cross-agency partners to reveal how institutional actions, behaviors, and decisions are, or are not, organized to support intended system and community goals. Via community task forces, focus groups, policy-practice working groups within the system, and conference calls, webinars, and video conferences, agency staff and community partners mined through data reports, system assessments, individual and group interviews, direct observations (i.e., shadowing of system staff), strategic improvement plans, quality assurance reviews, and other local or regional reports and assessments. Together, agency staff and community partners clarified priority populations experiencing disproportionate and disparate outcomes, summarized findings, and extrapolated key themes that defined shared priorities and goals. Overall, collaborative analyses provided opportunities to co-create the Practice Model, begin to manage adaptive challenges, and explore clear roles for partners in supporting implementation. From the perspective of *organizational change* in service delivery systems and *system redesign* aspects of translational research, community and tribal partners remained key stakeholders in building capacity for understanding and using data for change and ongoing improvement.

Developing culturally relevant supports and services

As operationalized through formal implementation and leadership team roles and other activities, AICPs helped the system understand, develop, and make available services and supports that were culturally responsive, community-based, and sensitive to multiple layers of painful experiences that may be affecting lives of those being served. Community partners helped service delivery systems meet the needs of children and families by honoring their history and culture and empower networks of support. In one jurisdiction, partners recognized that native children and families would benefit from culturally based services and providers, yet the agency had to use typical contract providers as these services were court-recognized and approved. Together, agency leadership and tribal community partners developed strategies to build the court's awareness of the issues and needs (i.e., traditional healers), resulting in a blanket court order recognizing tribal drug/alcohol services, domestic violence and parenting programs as part of case plan completion. Another site, recognizing funding restrictions, successfully adjusted local agency administrative processes to more flexibly support individualized services that are responsive to families' culture and needs (e.g., pay for a child in foster care to participate in a cultural event). Upon learning about cultural needs, what is available to address them, and

how to access services, agencies and community partners can work to establish business, funding, and communication pathways to culturally responsive services for children and families. Herein, while community and tribal partners guided development of services, their role was less about developing culturally relevant interventions for a research study as it was about helping service systems to identify and address system barriers to change.

Meaningful involvement in implementation

Beyond community engagement in research design and intervention development, AICP functions highlight partners' active roles in implementation activities to address common barriers to implementation. Agencies and community partners co-created concrete, visible, and supported roles in agency infrastructure and linked teaming processes to support implementation practice. In doing so, agency leadership leveraged communities and tribes bringing their expertise to local practice training, coaching, and fidelity assessment activities.

Partnering in co-creation and delivery of staff training and skill building—Community and tribal members identified early the insufficiencies in practice model training regarding the history, context, cultures, and life experiences of local residents. These partners challenged system leaders to consider that their perspectives and wisdom must be incorporated into training content, design, and delivery in order to help staff better understand and engage the community, as well as better develop culturally relevant supports and services for effective service delivery. In collaboration with agency staff, community and tribal partners co-created learning objectives and training content; delivered training as trainers, content experts, and panelists; and facilitated simulated family interactions, experiential activities, and role plays in the training room. Training content included local community members, former system-involved parents and youth, researchers, spiritual leaders, and respected elders from the community. Community often sat at tables with staff throughout the training to allow for varied training interaction, group discussion, and interaction during shared activities. Community partners and trainers also reviewed evaluation data for continuous improvement of the training experience.

Partners in coaching processes and approaches—Community and tribal members partnered with system leaders to develop coaching processes and approaches that fostered and supported cultural humility, reflection, and continuous improvements to practice. Partners observed and described behavior; shared personalized and practice-related rationales; solicited, prioritized, and responded to feedback by providing educational "praise" and support and developmental feedback; and reviewed and used data to inform decisions to improve training and coaching. As such, community partners supported competency in training and helped staff develop culturally responsive approaches and generalize new skills to real-world interactions with children and families.

Fidelity assessment design and observation—Building from community partners' role to help the system define and design what quality practice should look like in their community, agencies engaged partners in the process of detection, support, and continuous improvement of the practice and necessary system changes to support it. Community and tribal partners co-created the design of CAPP's fidelity protocol. In partnership with agency leadership, community and tribal partners developed measures, tools and processes for measurement, and scoring rubrics to guide consistency in measurement. A team of an agency staff member and a community or tribal partner conducts direct observation of a teaming interaction between the system and a family, with each team member independently observing and rating using a shared, Likert-scaling guide (1–low to 5–high). Together, agency and community partners prepare for fidelity assessments; act as key observers during observations; and review and analyze the data to strengthen system supports for the practice model.

Figure 2 provides a sample excerpt of fidelity assessment data collected from a team of agency and community or tribal partners from a CAPP county. Together, staff and community partners were able to identify the issues of incorporating culture (Q.4) and seeking to understand trauma (Q.7) as priority areas for strengthening training and coaching supports. Generally, overlap in ratings from staff and community observers was often strong; in cases where ratings varied more widely across observers, the agency rated itself more negatively than community partners. Discussion between observers revealed a varying understanding of family culture that opened the door for the system to reconsider the way they were framing family and community culture in their training and coaching processes. The result was a change to the ways that social work staff inquire in to family and community perspectives, attitudes, and behaviors that go beyond notions of race, ethnicity, and heritage to a deeper understanding of familial interactions, daily traditions, and relational activities that better describe family and community functioning than labels and categories alone. Overall, the CAPP fidelity assessment protocol combines the necessary rigor of fidelity assessment coupled with the important insights of community and tribal partners about practice. Community involvement, consistent from design and implementation of the practice model to examining its delivery and impact, serves to strengthen the ability to detect, improve, and ensure a supportive, transparent, accountable delivery system for the practice model.

Ensuring communication and feedback

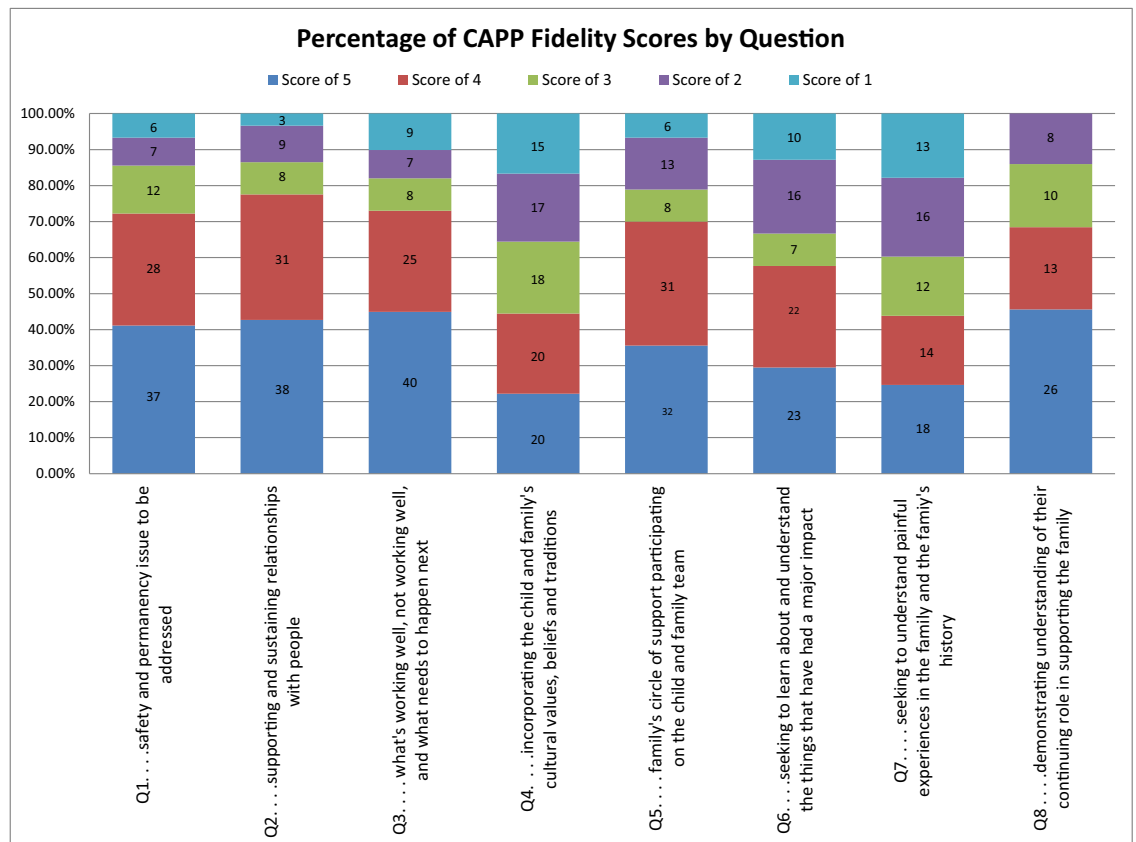As displayed in Fig. 1, formalizing visible structures and processes that attend to AICP functions is a critical

Percentage of CAPP Fidelity Scores by Question

■ Score of 5 ■ Score of 4 ■ Score of 3 ■ Score of 2 ■ Score of 1

Fig 2 | Fidelity assessment ratings (sample) from a team of agency and community and tribal partner observers

step in implementation practice. Additionally, linking these functions with leadership and implementation teams attending to other cross-agency and day-to-day implementation functions is critical for the integration and sustainability of AICP functions. In the absence of linkages that enable complete communication loops (both feed-forward and feedback), community partnering is passive, providing perspective and contributions but absent of active roles to apply and learn from them. Agency-led activities included creating an engagement liaison position to coordinate partnership activities in close coordination with agency leadership and implementation teams and ensure timely and consistent communication, coordination, and follow-through. The active roles of community and tribal partners crossed boundaries of internal and external systems, and formal linkages with implementation and leadership teams ensured that partnership was embedded in meetings, activities, and feedback loops of agency infrastructure and teaming processes.

Early on, community partners reported feeling marginalized and out-of-place, invisible, disengaged, and disrespected. As agencies began to listen to the stories of their failed past attempts at community engagement, they also began to hear how to better engage the communities toward more active and meaningful partnerships. As relationships grew, community partners not only became more verbal, but the stories

between partners and the system shifted toward support that is more visible. Having community partner and system perspectives on both challenges and opportunities, partners were more likely to speak up in support of the child welfare system in times of crisis (i.e., with the media, Board of Supervisors). As external partners with an internal "seat at the table," partners were able to provide perspectives and advocate in ways that would be considered self-serving if the same information were delivered by agency staff or leadership. These visible and active relationships and processes strengthened the willingness and ability of community partners to act as ambassadors within their own communities and tribes, helping others to understand how the system was taking different and more authentic steps toward culturally responsive practice and system change.

CONCLUSIONS AND DISCUSSION

Systematic attention to AICP functions is a key component for building organizational capacity and practice context for effective and sustained implementation. As illustrated by the CAPP case example, community and tribal members joined agencies as partners in visible, linked leadership and implementation teaming structures to explore, create, install, support,

troubleshoot, and sustain practice innovations. Together, community partners and agencies analyzed and used data to identify needs, and intentionally partnered to jointly define culturally relevant strategies to address needs and necessary changes in local system functioning to support them. Community and tribal partners supported the installation of the practice model, including designing and delivering ongoing professional development services and acting as observers in fidelity assessments. Shared responsibility for the AICP functions, as embedded into the roles and responsibilities of leadership and implementation teams, also supported ongoing processes whereby multiple perspectives were continuously connected to and informing the work and decision-making processes for quality improvement.

With a focus on sustainable rather than demonstrated change, and a focus on strengthening delivery agencies capacities and practice context [49, 57], this case example illustrates the active, ongoing roles for communities as partners with agencies in implementation. In doing so, researcher-agency partnerships are not testing a distinct community-partnering delivery strategy, per se. Instead, agencies are integrating specific AICP capacities into how the system operates, fostering shared responsibility, accountability, and ownership for getting to social impact. While fiscal policies and contracting processes were often challenging, stipends or childcare supports helped to formalize community partner roles to operationalize AICP functions. Attention to the AICP functions of relationship-building, addressing system barriers, creating culturally relevant and responsive services, meaningful involvement in implementation support activities, and ongoing communication and feedback for quality improvement can enable agencies to analyze aspects of delivery systems through the eyes and experiences of community members. Subsequently, attention to AICP functions can facilitate service delivery agencies in respectfully, actively, and meaningfully inviting community members into the system as partners to support, monitor, and leverage external pressure for change. This expansion to an established set of active implementation functions [31] further acknowledges that participants at multiple levels of a system and community can be engaged, committed, and accountable in both real time and long-term to strengthen organizational capacities and support effective use of an innovation.

Similar to yet different from CBPR, AICP functions draw on principles of ongoing involvement and collaborative decision making, but from the perspective of delivery agencies and practice contexts rather than research design and activities, per se. AICP functions focus on developing necessary infrastructure for implementation, but concentrate on strengthening internal agencies' teaming, communication, and use of data processes and capacities of rather than community-academic partnerships for research. From the perspective of building organizational capacity for change, the AICP functions may help to clarify the kinds of

structural and operational adaptations (i.e., community engagement liaisons and teams; full-time-equivalent (FTE) positions in implementation support activities) as well as the dedicated time, funding, and other organizational resources necessary to transform systems from delivering services to hosting sustainable change.

While the case example herein described the context for the emergence and operationalization of AICP functions, authors are unable at this time to describe the durability of AICP capacities, evidence of their impact on outcomes, or how the application of AICP functions compares to use of other community engagement and more traditional implementation approaches. Indeed, questions remain about the contribution of AICP functions to improving implementation and intervention outcomes and optimizing AICP functions in implementation practice, especially to develop organizational capacities as a viable and durable basis to operationalize AICP activities over significant periods. However, process evaluation of CAPP contextual factors, as guided by the continuum of research to practice [4], describes a number of testable antecedents that may be critical for the sustainability of AICP-related factors leading to population outcomes, particularly those related to infrastructure development, ongoing data monitoring and shared review to define meaning, and a system orientation for change [48].

Implementation researchers are coming to acknowledge a blending among research, policy, and practice [14, 23]. It may be time for a kind of "Copernican" shift in attention from getting the community involved in research to how research becomes engaged with community to optimize evidence in real-world practice. Some researchers in implementation are calling for separate community prevention/professional prevention support and delivery systems as additional components to the interactive systems of support in implementation [9]. Rather than just being aligned and in close communication while serving different types of organizations, the case example herein suggests a deliberate joining among community members and agencies to blend perspectives, enhance organizational capacities for change, and share in supporting use of innovations. Additionally, as implementation research integrates AICP, the design of community engagement measures that explore the construct from multiple perspectives is critical. For example, a modified assessment [46] of agency readiness for community partnering in implementation might use the AICP functions to measure progress along a continuum from no planning or discussion to AICP activities being in place and sustained (i.e., outreach and in-reach as active partners with agencies structures; frequent communication; involvement in local coaching and fidelity assessments). Measurement based on a consistent set of criteria can help to further define and operationalize AICP, but would still need to be adapted to local context and needs and also measured directly from partners being involved in the process [41]. Finally, agencies' attention to AICP functions would benefit from exploring co-creation questions [31] to guide

infrastructure development for and sustainability of AICP functions (i.e., where will functions live in your agency? Who will be accountable? What are the plans to operationalize them?).

The conditions under which attention to AICP functions occurs vary. In many cases, specific attention is sponsored by funding and policy organizations (e.g., Patient-Centered Outcomes Research Institute (PCORI); Agency for Healthcare Research and Quality's (AHRQ) Effective Healthcare Program and NIH Clinical and Translational Science Awards (CTSA); Robert Wood Johnson Foundation's Culture of Health) [23, 41]. Communities may feel slighted and further marginalized when systems apply for funding and initiate plans that will impact their communities without their being included from the beginning. Alternatively, when communities are engaged early on and continuously in meaningful activities, partners can feel valued and take ownership in both successes and setbacks. Research suggests that pre-established AICPs can ease implementation challenges [34]. High sustainment most likely occurs where partnerships and relationships with local stakeholders are already strong, so relationship-building should occur well before a project begins. Funding that protects initial and then subsequent time for assessment, collaborative planning, and ongoing engagement activities can nurture stable investments in relationships and strengthen the respect and trust that may be critical to address barriers and facilitate effective implementation. Funders may also support intermediary or backbone organizations to work with community agencies to ensure ongoing support for attending to AICP functions, especially when capacities likely vary across agencies [23]. With such support, key perspectives and resources across community, tribal, and system partners can come together to identify and address shared priorities, co-create implementation supports, and continuously refine and improve implementation amidst the dynamic context of real-world systems striving to sustain social impact to improve the lives of people and communities.

Funders and policymakers at federal, state, and local levels may continue to commit resources for the structures and processes in implementation research and practice that ensure core components of AICP functions [51]. It is worth stating, though, even with evidence outlining benefits, that building relationships with communities and tribes and working together in partnership to support use of innovations is a choice [25] among agencies and systems trying to coordinate and manage efforts in pursuit of their goals (i.e., choose two: good, fast, cheap). While the time it takes to build effective AICP for improved outcomes may be viewed as a "trade-off," the lack of achieved or sustained population outcomes remains a current challenge of implementation research and practice. The systems' direct and visible attention to AICPs can serve to strengthen transparency, accountability, and

cultural responsiveness as well as enable more timely and adaptive problem solving to leverage strengths and resources from multiple perspectives for relevant and sustained change. Systematic attention to AICP can assist in strengthening organizational change necessary for getting evidence into practice that benefits people and communities.

1. Balas, E. A., & Boren, S. A. (2000). *Managing clinical knowledge for health care improvement*. In J. Bemmel & A. T. McCray (Eds.), *Yearbook of Medical Informatics 2000: Patient-Centered Systems* (pp. 65–70). Stuttgart: Schattauer Verlagsgesellschaft.
2. Green, L. W. (2008). Making research relevant: if it is an evidence-based practice, where's the practice-based evidence? *Fam Pract, 25,* 20–24.
3. Rangachari, P., Rissing, P., & Rethemeyer, K. (2013). Awareness of evidence-based practices alone does not translate to implementation: insights from implementation research. *Qual Manag Health Care, 22,* 117–125.
4. Trochim, W., Kane, C., Graham, M. J., & Pincus, H. A. (2011). Evaluating translational research: a process marker model. *Clin Transl Sci, 4,* 153–162.
5. Fixsen DL, Naoom SF, Blase KA, Friedman RM, Wallace F. 2005 *Implementation research: a synthesis of the literature.* Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network; .

6. Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Except Child Win, 79*, 213–230.

7. Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *Milbank Q, 82*, 581–629.

8. Graham, P. W., Kim, M. M., Clinton-Sherrod, A. M., et al. (2016). What is the role of culture, diversity, and community engagement in transdisciplinary translational science? *Transl Behav Med, 6*, 115–124.

9. Firesheets, E. K., Francis, M., Barnum, A., & Rolf, L. (2012). Community-based prevention support: using the interactive systems framework to facilitate grassroots evidenced-based substance abuse prevention. *Am J Community Psychol, 50*, 347–356.

10. Gregory, H., Van Orden, O., Jordan, L., et al. (2012). New directions in capacity building: incorporating cultural competence into the interactive systems framework. *Am J Community Psychol, 50*, 321–333.

11. Guerra, N. G., & Knox, L. (2008). How culture impacts the dissemination and implementation of innovation: a case study of the families and schools together program (fast) for prevention violence with immigrant Latino youth. *Am J Community Psychol, 41*, 304–313.

12. Meyers, D. C., Durlak, J. A., & Wandersman, A. (2012). The quality implementation framework: a synthesis of critical steps in the implementation process. *Am J Community Psychol, 50*, 462.480.

13. Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: models for dissemination and implementation research. *Am J Prev Med, 43*, 337–350.

14. Chambers, D. A., & Azrin, S. T. (2013). Research and services partnerships: partnership: a fundamental component of dissemination and implementation research. *Psychiatr Serv, 64*, 509–511.

15. Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Adm Policy Ment Health, 38*, 4.

16. Glasgow, R. E., Cynthia Vinson, M., Chambers, D., Khoury, M. J., Kaplan, R. M., & Hunter, C. (2012). National institutes of health approaches to dissemination and implementation science: current and future directions. *Am J Public Health, 102*.

17. Powell, B. J., McMillen, J. C., Proctor, E. K., et al. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Med Care Res Rev, 69*, 123–157.

18. Fawcett, S. B., Boothroyd, R., Schultz, J. A., Francisco, V. T., Carson, V., & Bremby, R. (2003). Building capacity for participatory evaluation within community initiatives. *J Prev Interv Community, 26*, 21–36.

19. Mendel, P., Meredith, L. S., Schoenbaum, M., Sherbourne, C. D., & Wells, K. B. (2008). Interventions in organizational and community context: a framework for building evidence on dissemination and implementation in health services research. *Adm Policy Ment Health, 35*, 21–37.

20. Minkler, M., Vasquez, V. B., Tajik, M., & Petersen, D. (2008). Promoting environmental justice through community-based participatory research: the role of community and partnership capacity. *Health Educ Behav, 35*, 119–137.

21. Wallerstein, N., Minkler, M., Carter-Edwards, L., Avila, M., & Sanchez, V. (2015). Improving health through community engagement, community organization, and community building. *Health Behav Theory Res Pract, 5*.

22. Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health, 19*, 173–202.

23. Towe, V. L., Leviton, L., Chandra, A., Sloan, J. C., Tait, M., & Orleans, T. (2016). Cross-sector collaborations and partnerships: essential ingredients to help shape health and well-being. *Health Aff, 35*, 1964–1969.

24. International Association for Public Participation. The iap2 public participation spectrum. 2014; Retrieved from https://www.iap2.org.au/resources/public-participation-spectrum. Accessed June 6, 2016.

25. Liu, C. L., & Layland, J. W. (1973). Scheduling algorithms for multiprogramming in a hard real-time environment. *J Assoc Comput Mach., 20*, 46–61.

26. Barnes M, Schmitz P. 2016. Community engagement matters (now more than ever). *Stanford Social Innovation Review*: Stanford Center on Philanthropy and Civil Society, Stanford University. 16.

27. Hood, N. E., Brewer, T., Jackson, R., & Wewers, M. E. (2010). Survey of community engagement in NIH-funded research. *Clin Transl Sci, 3*, 19–22.

28. Woolf, S. H., Purnell, J. Q., Simon, S. M., et al. (2015). Translating evidence into population health improvement: strategies and barriers. *Annu Rev Public Health, 36*, 463–482.

29. Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: a review and integrative framework. *Am J Community Psychol, 29*, 241–261.

30. Roussos, S. T., & Fawcett, S. B. (2000). A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health, 21*, 369–402.

31. Aldridge II, W. A., Boothroyd, R. I., Fleming, W. O., et al. (2016). Transforming community prevention systems for sustained impact: embedding active implementation and scaling functions. *Transl. Behav. Med., 6*, 135–144.

32. Bodison, S. C., Sankaré, I., Anaya, H., et al. (2015). Engaging the community in the dissemination, implementation, and improvement of health-related research. *Clin Transl Sci, 8*, 814–819.

33. Chambers, D. A., Glasgow, R. E., & Stange, K. C. (2013). The dynamic sustainability framework: addressing the paradox of sustainment amid ongoing change. *Implement Sci, 8*, 1–11.

34. Willging, C. E., Green, A. E., Gunderson, L., Chaffin, M., & Aarons, G. A. (2015, 20). From a "perfect storm" to "smooth sailing": policymaker perspectives on implementation and sustainment of an evidence-based practice in two states. *Child Maltreat*, 24–36.

35. Saldana, L., & Chamberlain, P. (2012). Supporting implementation: the role of community development teams to build infrastructure. *Am J Community Psychol, 50*, 334–346.

36. Yamey, G. (2011). Scaling up global health interventions: a proposed framework for success. *PLoS Med, 8*, e1001049.

37. Metz, A., & Albers, B. (2014). What does it take? How federal initiatives can support the implementation of evidence-based programs to improve outcomes for adolescents. *J Adolesc Health, 54*, S92–S96.

38. Walker, S. C., Whitener, R., Trupin, E. W., & Migliarini, N. (2013). American Indian perspectives on evidence-based practice implementation: results from a statewide tribal mental health gathering. *Adm Policy Ment Health Ment Health Serv Res, 42*, 29–39.

39. D'Angelo, G., Pullmann, M. D., & Lyon, A. R. (2015). Community engagement strategies for implementation of a policy supporting evidence-based practices: a case study of washington state. *Adm Policy Ment Health Ment Health Serv Res*, 1–10.

40. Deverka, P. A., Lavallee, D. C., Desai, P. J., et al. (2012). Stakeholder participation in comparative effectiveness research: defining a framework for effective engagement. *J Comp Eff Res, 1*, 181–194.

41. Lavallee, D. C., Williams, C. J., Tambor, E. S., & Deverka, P. A. (2012). Stakeholder engagement in comparative effectiveness research: how will we measure success? *J Comp Eff Res, 1*, 397–407.

42. Lindamer, L. A., Lebowitz, B., Hough, R. L., et al. (2009). Establishing an implementation network: lessons learned from community-based participatory research. *Implement Sci, 4*, 17.

43. Smith, S. A., Whitehead, M. S., Sheats, J. Q., Ansa, B. E., Coughlin, S. S., & Blumenthal, D. S. (2015). Community-based participatory research principles for the African American community. *J Georgia Public Health Assoc, 5*, 52.

44. Hébert, J. R., Satariano, W. A., Friedman, D. B., et al. (2015). Fulfilling ethical responsibility: moving beyond the minimal standards of protecting human subjects from research harm. *Prog Community Health Partnerships: Res Educ Action, 9*, 41.

45. Simonds, V. W., Wallerstein, N., Duran, B., & Villegas, M. (2013). Community-based participatory research: its role in future cancer research and public health practice. *Prev Chronic Dis, 10*, E78.

46. Braun, K. L., Nguyen, T. T., Tanjasiri, S. P., et al. (2011). Operationalization of community-based participatory research principles: assessment of the national cancer institute's community network programs. *Am J Public Health, 102*, 1195–1203.

47. Burke, J. G., Hess, S., Hoffmann, K., et al. (2013). Translating community-based participatory research (cbpr) principles into practice: building a research agenda to reduce intimate partner violence. *Prog Community Health Partnerships: Res Educ Action, 7*, 115.

48. Hearld LR, Bleser WK, Alexander JA, Wolf LJ. 2015 A systematic review of the literature on the sustainability of community health collaboratives. *Med Care Res. Rev.* 1077558715607162.

49. Leeman, J., Calancie, L., Kegler, M. C., et al. (2017). Developing theory to guide building practitioners' capacity to implement evidence-based interventions. *Health Educ Behav, 44*, 59–69.

50. Arroyo-Johnson, C., Allen, M. L., Colditz, G. A., et al. (2015). A tale of two community networks program centers: Operationalizing and assessing CBPR principles and evaluating partnership outcomes. *Prog Community Health Partnerships: Res Educ Action, 9*, 61.

51. Williams, R. L., Shelley, B. M., & Sussman, A. L. (2009). The marriage of community-based participatory research and practice-based research networks: can it work?—a research involving outpatient settings network (RIOS Net) study. *J Am Board Fam Med, 22*, 428–435.

52. Trickett, E. J. (2011). Community-based participatory research as worldview or instrumental strategy: is it lost in translation(al) research. *Am J Public Health, 101*, 1353–1355.

53. Katz, D. L., Green, L. W., Murimi, M., Gonzalez, A., & Njike, V. (2012). The multisite translational community trial and community-based participatory research: a failure to communicate. *Am J Public Health, 102,* 581–582.

54. Schmittdiel, J. A., Grumbach, K., & Selby, J. V. (2010). System-based participatory research in health care: an approach for sustainable translational research and quality improvement. *Annals Fam Med, 8,* 256–259.

55. Hopkins, A. L., Moore-Monroy, M., Wilkinson-Lee, A. M., et al. (2016). It's complicated: negotiating between traditional research and community-based participatory research in a translational study. *Prog Community Health Partnerships: Res Educ Action, 10,* 425–433.

56. Heslin, K., & Marr, J. A. (2008). Building organizational capacity for change. *Health Manag Forum Winter, 21,* 44–49.

57. Hanson, R. F., Self-Brown, S., Rostad, W. L., & Jackson, M. C. (2016). The what, when, and why of implementation frameworks for evidence-based practices in child welfare and child mental health service systems. *Child Abuse Negl, 53,* 51–63.

58. Harris ME, Fallot RD. 2001 *Using trauma theory to design service systems.* Jossey-Bass.   Please provide complete bibliographic details for this reference.→

59. Hodas, G. R. (2006). Responding to childhood trauma: the promise and practice of trauma informed care. *Pennsylvania Off Ment Health Subst Abus Serv,* 1–77.

60. Pynoos, R. S., Fairbank, J. A., Steinberg, A. M., et al. (2008). The national child traumatic stress network: collaborating to improve the standard of care. *Prof Psychol: Res Pract, 39,* 389.

61. Hummer, V. L., Dollard, N., Robst, J., & Armstrong, M. I. (2010). Innovations in implementation of trauma-informed care practices in youth residential treatment: a curriculum for organizational change. *Child Welfare, 89,* 79.

62. Esaki, N., Benamati, J., Yanosy, S., et al. (2013). The sanctuary model: theoretical framework. *Fam Soc: J Contemp Soc Serv, 94,* 87–95.

63. Metz, A., Bartley, L., Ball, H., Wilson, D., Naoom, S., & Redmond, P. (2015). Active implementation frameworks for successful service delivery: Catawba county child wellbeing project. *Res Soc Work Pract, 25,* 415–422.