**Closing the Loop: Practice-Based Research Networks in Stakeholder-Driven Social Work Research**

Erin Kelly, Lisa Davis, Monique Holguin, Lizbeth Gaona, Rohini Pahwa, Sae Lee, Laura Pancake, Lezlie Murch, Leslie Giambone, & John Brekke

**Abstract**

The field of social work is evolving towards community-engaged, stakeholder-driven research in the context of evidence-based practice and practice-based evidence. We propose that practice-based research networks (PBRNs) are an approach to conducting stakeholder-driven research that can be uniquely valuable for the field of social work. We define the concept of a PBRN and demonstrate how it can address the development of complementary agendas for service improvement, social work science, policy development and advocacy, as well as highlight the challenges and rewards of participating in a PBRN.

**Closing the Loop: Practice-Based Research Networks in Stakeholder-Driven Social Work Research**

As a core mission, the field of social work has been devoted to delivering multi-faceted social services to individuals suffering in our society, with a significant focus on those who have been marginalized. The degree to which those services are founded upon and guided by notions of charitable care, practice wisdom, or science has changed over time (Stone & Floersch, 2019). Beginning with the work of Jane Addams, it has been suggested that scientific methods and knowledge should have a framing and even determinant role in the progression of social work knowledge (Franklin, 1986; Rosiek & Pratt, 2013). What form this scientific frame and definition should take has varied over time, but the current momentum towards scientific realism indicates a receptivity to the integration of scientific methods into practice domains that could reflect the next era of social work (Stone & Floersch, 2019). However, a persistent challenge for social work is the gap between practice and research, or more broadly, the gap between practice knowledge and scientific knowledge. This gap, which is evident in the tension between evidence-based practice and practice-based evidence (Ammerman et al., 2014; Green, 2008; Manderscheid, 2006), leads to the question of whether we can have both science-driven practice and practice-driven science in social work.

Central to the tension of the role of science in social work are the competing valuations of evidence-based practice and practice-based evidence (Palinkas, 2019). Evidence-based practices (EBPs) are policies, practices, programs, or interventions that were developed and tested in rigorous scientific settings, which can often favor the concerns of internal validity over generalizability. Conversely, practice-based evidence (PBE) is generated in real-world settings with diverse populations, which means that it has broad applicability. When applied to randomized clinical trials of interventions in practice settings they are called pragmatic trials, which generally means that there is a stronger focus on the applicability of the intervention to usual care conditions such as the practitioners involved, the heterogeneity and representativeness of the client samples, setting factors, and sustainability rather than on the conditions that favor internal validity and efficacy (Ford & Norrie 2016). A tremendous effort has been made to adopt EBPs into practice as the field has prioritized ensuring the quality of services and to improve the processes of implementation in the public sector (Aarons, Hurlbut, & Horwitz, 2010). Despite these efforts, the dissemination and implementation of evidence-based practices are notoriously persistent challenges for the field. There is a lag of almost two decades between research findings and their adoption into community-based practice (Contopoulos-Ioannidis, Alexiou, Gouvias, & Ioannidis, 2008; Morris, Wooding, & Grant, 2011), despite being highlighted as concern for decades by the National Institute of Mental Health Task Force (NIMH-TFSWR) on Social Work Research (Austin, 1992) and the Institutes of Medicine(2011). This lag has been traced back to factors like high staff turnover, training costs, time constraints, lack of flexibility in the protocols, insufficient resources for academics to do translational research, and a disconnect between research and real-world practice (Addis, Wade, & Hatgis, 1999; Horwitz et al., 2014; Powell, Proctor & Glass, 2014). There has been growing recognition of the value of overcoming these issues through developing more community-engaged and stakeholder-driven research initiatives (Holkup, Tripp-Reimer, Salois, & Weinert, 2004; Lizaola et al. 2013) so that scientific knowledge better reflects the needs and settings where it is used.

In recent years, there has also been a drive to develop a Science of Social Work (Brekke, 2011; 2012; 2014**;** Brekke & Anastas, 2019; Reid, 2001) and to pursue research on the Grand Challenges of Social Work (American Academy of Social Work and Social Welfare, 2018; Uehara et al., 2015). The Grand Challenges movement has led to a mobilization of resources at the federal, state, and university levels to elevate the field’s scientific contributions by addressing the most pressing issues of our society via research (Larkin et al., 2016; Uehara, Barth, Coffey, Padilla, & McClain, 2017). However, these changes are not without controversy (Anastas, 2014; Barth et al., 2014; Blau, 2017), with some social workers being concerned about a loss of service proficiency due to over-emphasis on research.

In order to bring social work into the forefront of applied research and to meet the Grand Challenges we need to preserve the core principals of service and social justice in social work by building them into social work’s research methods. There are numerous names for this kind of research across fields, such as *community-based participatory research*, *community-partnered participatory research,* participatory research, participatory action research, community-based research, or action research (Holkup et al., 2004; Lizaola et al., 2011; Sommerfeld, 2014). The central premise of these approaches is to change the traditional structure of academic-driven research towards empowering the community to guide the selection, conduct, and ultimate impacts of research. We propose that using *practice-based research networks* (PBRNs) is an approach to develop, design, and conduct research that can preserve the values of social work by prioritizing the voices of stakeholders while conducting high quality, rigorous research. In the next sections, we will define PBRNs, outline their structure and leadership, apply their principles to social work science and policy, and sketch out strategies that would facilitate their implementation and growth over time in social work.

**Practice-based research networks**

**Definition.** PBRNs are collaborations between service stakeholders and academics that create bidirectional pipelines between research and clinical practice (Kelly et al., 2015a; Westfall, Mold, & Fagnan, 2007). PBRNs are designed to specifically focus on improving services and systems of care, which is why they are most often housed in service settings (Westfall et al., 2007). The goals of PBRNs are to identify questions that center on stakeholders’ experiences and actively include stakeholders in research study development, data collection, data analysis, and disseminating and implementing research findings (Davis, Keller, DeVoe, & Cohen, 2012; Kelly et al., 2015a). The stakeholders in PBRNs can refer to clients, involved family, practitioners, supervisors, administrators, community members, and researchers who are explicitly engaged in social service environments.

PBRNs engage in practice-based research which fills critical gaps in our understanding of: (1) what leads to disconnections between recommended and actual care (challenges of daily practice); (2) whether EBPs work in applied settings with more diverse populations and contexts; and (3) creates a mechanism for testing whether improvements in care (due to policies, procedures, or programs) lead to benefits for the intended recipients (Westfall et al., 2007). Stakeholder involvement is critical as it leads to better targeting of questions that are both important and relevant to practice and research. PBRNs are built for continued collaboration, rather than a single project, which allows for cultivation of more effective dissemination and implementation of research findings into service settings.

PBRNs have been an engine for translational research in a number of disciplines in the U.S. health care system since the 1970s (Green, Simmons, Reed, Warren, & Morrison, 1978; Green, 1999; Green & Hickner, 2006). The federal government through the Agency for Healthcare Research and Quality (AHRQ), and the National Institutes of Health has often supported them. As of March 2019, the AHRQ listed 186 active PBRNs on its website, though only two explicitly include mental health providers (but it is important to note that there are non-registered PBRNs; AHRQ, 2019). Although the main focus of PBRNs has been on assessing and improving the quality of primary care, there is an increasingly broad range of providers that have created PBRNs (e.g., specialty care, dentists, mental health providers [Davis, Keller, et al., 2012; Kelly et al. 2015; Sellers et al. 2012]). However, social work has yet to leverage this mechanism despite it being highly congruent with the goals and values of social work research. PBRNs are an ideal model for social work because they mobilize stakeholders to develop research questions that center on their practice and priority areas while partnering with academic researchers to help to execute projects in a scientifically rigorous manner. The combination of university partners and stakeholder collaborators allows PBRNs to generate new research that can assess current services, and use that data to develop solutions that rapidly improve practice, and as a result, shorten the lag between research and implementation (Riley et al., 2013). We propose that the PBRN model is an important approach that can be harnessed to improve social work research across the multiple service domains and sectors that comprise social work. In Figure 1, we outline an exemplary model for the conduct of PBRN research.

**Figure 1. Model of community-academic partnerships within a Practice-Based Research Network model**

In a PBRN research model, stakeholder needs and preferences drive the selection of the research topics. By pursuing research topics that are relevant to practice, there is stronger buy-in and the team can focus on collecting and analyzing data with rigor, which in turn can be used to develop changes to practices, a mechanism that might not be otherwise supported by the existing agency structures and available resources. That said, participation in a PBRN also requires significant commitment from the agencies in the form of (1) time invested in listening to various stakeholders about the areas that are of most interest to them; (2) resources in the form of employee time; and (3) space to help conduct research (depending on the design of the research). PBRNs also necessitate investment from academic partners who need to develop research topics that can be funded, published, and completed with enough internal and external validity to become part of the scientific literature. The benefits of this partnership include development of research or new interventions that reflect real-world conditions and can be used rapidly to change how services are provided, as well as building a structure for the iterative progression of practice-based knowledge. The steps of research in a PBRN Model are presented in Figure 2.

**Figure 2. Steps of PBRN Infrastructure Building, Research Conduct, Dissemination, and Implementation that Close the Loop Between Research and Practice**

**Benefits of PBRN participation.** PBRNs are valuable for social work practitioners because they create partnerships with stakeholders and academics that can help them parse scientific literature and improve the quality of their services through monitoring, operation and on-going evaluation. Social work practitioners often collect data for local, state, and federal oversight and funding agencies, which is onerous, can have duplicated content, and is generally not designed or used to impact practice. PBRNs are an opportunity for agencies to reflect on their practices and to obtain usable information about their services, which can be disseminated back to the stakeholders rapidly. In our experience, stakeholders are genuinely concerned about whether their efforts have their intended effects, but they are rarely provided meaningful feedback through the data they collect for outside entities. Research is not limited to existing practices but can also identify treatment innovations that are collaboratively codified, studied, and implemented. PBRNs can provide direct care staff with feedback in an easily digestible format, while also creating a mechanism for the providers’ perspectives and experiences to reach the executive staff within these agencies, who have the leverage to use these findings to make changes. The engagement of all agency stakeholders in this feedback loop increases enthusiasm for developing data-driven service changes and thereby increases their likelihood of success. The agency partners can also use data collected through these projects to highlight areas for funders that deserve greater investment in applications for grants and contracts.

Academics can also benefit from participation in PBRNs. Collaboration with practitioners within a PBRN model means that research studies are conducted with committed partners, which translates into successful recruitment of participants, assistance in interpreting results, and discovery of new non-academic audiences. Projects conducted by PBRNs have a high likelihood of success due to the mutual investment in the project. Co-creation of the research questions ensures that they are theoretically grounded and informed by on-the-ground observations that relate to concerns central to those questions and their contexts. Collaborating on research methods ensures smoother execution of study recruitment and data collection. High levels of communication by the agency and academic partners throughout the process helps to prevent challenges related to data collection. This approach also provides valuable learning opportunities for undergraduate, graduate, and post-doctoral students who are exposed to the operations and concerns of participating agencies at a more intense level (Binienda, Neale, & Wallace, 2018). Lastly, there is higher likelihood for the findings to be adopted within the agencies, leading to a more rapid impact on the populations that we aim to help while also generating generalizable knowledge about services. Next, we will outline how a PBRN’s structure and leadership can establish and preserve their core values for all participants.

**PBRN Structure and Leadership**

**PBRN structures.** Unaware of the benefits of the PBRNs, both academic and social work practice organizations may be hesitant to adopt a new approach to problem solving (Pinto, Spector, & Rahman, 2019). PBRNs have been developed in many forms (for a review see Davis, Keller, et al., 2012), including differences in member composition (single versus multispecialty), affiliation (non-profits, health systems, academic institutions), size (number of members, locations, geographic regions), and organizational structure (community meetings, steering committees, executive leadership). The degree that the community is involved and the data structures are often dependent on funding for various projects. There are several common elements to the structure of PBRNs (Westfall et al., 2019; Kelly et al., 2015a, Hayes & Burge, 2012): (1) a mission statement; (2) selection of an overall leader (preferably a practitioner); (3) support staff to execute research tasks (post-doctoral fellow, research assistant); (4) a board or mechanisms within agencies to gather feedback (steering committee, client advocacy groups, stakeholder boards); and (5) a set of tools or processes that are used to disseminate findings within agencies. PBRNs tend to expand in scope over time, initially focusing on every day issues and gradually growing to take on more difficult projects with more involved methods (e.g., building shared data systems, testing system level interventions [Godfrey, West, Holmes, Keppel, & Baldwin, (2018]). The flexibility of the model which allows stakeholders to adapt it to their context is part of its value.

**The Recovery Oriented Care Collaborative.** Drawing on our experiences with the Recovery-Oriented Care Collaborative (ROCC), a PBRN focused on the integration of health and mental health services for the SMI population that was established in 2012 by four community-based mental health agencies (Kelly et al., 2015a), we will outline a structure and set of processes that we found useful. The ROCC consists of 4 community mental health agencies, Didi Hirsch Mental Health Services, Exodus Recovery, Mental Health America Los Angeles, and Pacific Clinics. These agencies collaborate with researchers at the Suzanne Dworak-Peck School of Social Work to develop research projects (www.roccpbrn.com). As of June 2019, the ROCC has completed data collection on 5 studies, published 4 manuscripts (Kelly et al., 2015a; 2015b; 2018; Pahwa, Dougherty, Kelly, Davis, Smith, & Brekke, in press), obtained 2 grants to support our network, and built collaborations and support with other mental health PBRNs in Ohio, Colorado, New York, and Washington.

**Mission statement.** Development of a mission statement serves to provide an overall conceptual understanding of the PBRN goals. Mapping out the population and domains that would be the focus of PBRN helps to avoid confusion among members while also reminding them of their commitment to share ownership. The ROCC’s mission statement reflected our shared commitment to addressing the care of individuals with serious mental illnesses.

*The ROCC is a Practice-Based Research Network (PBRN) with a mission to improve the quality of physical health and mental health services provided to individuals with serious mental illness living in Southern California and to help reduce socially determined disparities in physical health/mental health that lower quality of life for this population. The ROCC is designed to facilitate participatory research and partnerships among community-based organizations, physical health and mental health care providers, mental health consumers and experienced researchers to examine factors that directly impact innovations and best practices in treatment and service delivery systems for individuals with serious mental illness. The focus of the collaborative is to identify pertinent areas of research that can produce effective and immediate improvements in community-based health/mental health care for this vulnerable and underserved population.*

**Leadership.** In our experience, the director of the PBRN should be a person who has the ability to appreciate the perspectives of practitioners and academics, has resource leverage within their agency, and is well-respected by stakeholders. We suggest that the leader should be a person from the practitioner group as this reflects the mission of stakeholders driving the research agenda. High turnover at agencies is a challenge and the ROCC has had 4 changes in the director position as of 2019 (due to agency partners leaving their employers), although we have had good consistency in the membership on the Executive Committee. It is a testament to the value of this collaboration to the agencies and the academic partners that the network retained its cohesion under new leadership each time.

Formation of a steering committee consisting of agency executive staff members, other stakeholders, along with the research team is a key structure for facilitating communication and decision-making processes within a PBRN (Green et al. 2005; Hayes & Burge, 2012; Westfall, Roper, Gaglioti, & Nease, 2019). This committee provides a forum to help ensure that network activities reflect valued areas within the stakeholder community and have buy-in across agency levels as well as scientific merit. Regular, face-to-face and virtual communication among stakeholders to vet study ideas and plan study logistics and dissemination of findings are essential (Westfall et al., 2019; Hayes &Burge, 2012). The steering committee can also establish a participatory structure and process for developing and conducting the studies, which supports differing needs and goals among stakeholders while also obtaining consensus on projects. These structures must support a range of priorities that emerge from this collaboration, not simply practitioner versus researcher perspectives, and calls for a dialogic approach in which multiple viewpoints and voices are featured, and no singular voice claims final authority. Pre-established relationships between and among community partners and researchers can aid successful creation of social work PBRNs due to the existing trust between partners (Kelly et al., 2015a). In our experience, under the right partnership conditions, and with responsiveness to key struggles among partners, the tension between the research and practice traditions has a dynamic and creative function with potential for the participants to capitalize on their complementary strengths. In essence, this creates the practice-research partnership that social work has been challenged to find.

A joint steering committee also helps to maintain vigilance regarding power dynamics between community members and university-based researchers involved in PBRNs. Since academics possess expertise in research methodology as well as evidence-based practices and other relevant research-related areas, it is possible for them to influence the direction of projects, potentially in subtle ways, to align with their existing research agendas. This dynamic may be exacerbated by community members’ deference and view of academics as having ultimate authority pertaining to all aspects of the research process. Researchers have a special obligation to attend to the different interests of community stakeholders, especially as they relate to topic selection in practice-based research. While academics can drive major methodological considerations in PBRNs, without genuine ownership of topics under study among community members, they will disengage and the innovative potential of the approach will stall. Building a steering committee with agency partners and careful attention to featuring their voices in decision-making processes prevents academic partners from co-opting research agendas. It is also helpful to hold PBRN meetings at community-based locations on a frequent basis to reinforce the locus of power within the service community (Hayes & Burge, 2012; Kelly et al, 2015a).

**Stakeholder involvement.** Over the course of a PBRN’s activities there can be different levels of involvement from stakeholders. Research questions are generated by stakeholders and each PBRN can determine what methods they use to cultivate those ideas within their group. In the initial formation of the ROCC, agencies had representatives from peer, clinical, and executive positions attend three all day meetings with academic partners (Kelly et al., 2015a). These meetings were used to generate the mission statement of the PBRN, develop research questions, select a first project, and build relationships between partners. Another meeting of all those participants was completed after the initial study to disseminate the results and to begin development of a second project. Research questions for the first two projects were fully generated by the broader group and research questions were developed using input from mental health consumers, providers, and executive staff (Details on these processes are available in Kelly et al. 2015; 2018; Kelly, Davis, & Brekke, 2015). Subsequent projects have been developed (within the steering committee and in collaboration with academic and PBRN partners nationally) in domains that aligned with service deficits identified in the initial studies.

**Research support staff.** Across the stages of development there can different levels of resources available for supporting PBRN activities. Fully developed PBRNs may employ full time PBRN facilitators who help to preserve relationships with practitioners and ensure that PBRN activities (meetings, data collection) are prioritized while also performing the basic functions of research projects (Green et al., 2005). Basic tasks include creating the research instruments developed or selected by PBRN members, maintaining IRB protocols, performing literature reviews, completing data analysis, and preparing written materials (white papers, presentations, and manuscripts for peer review). Less well funded PBRNs may require a graduate student, post-doctoral fellow, agency intern, or research assistant staff who can perform these tasks for their professional development. The ROCC was supported by the Clinical and Translational Science Agency at the University of Southern California by initial funds to support the formation of the PBRN and by collaboration with a research navigator, who helped to facilitate the early coordination of the PBRN with agency staff (Kelly et al., 2015a). Those functions were eventually performed by a combination of agency and academic staff after USC invested additional funds in the PBRN initiative.

**Dissemination and implementation of findings.** Development of mechanisms for the dissemination and uptake of findings from practice-based research is critical (Creason et al., 2018; Palinkas, 2019). Communicating the relevance of study results to practitioners faced with the need for immediate solutions to clients’ everyday problems is a challenge that affects the successful uptake of findings in community settings. Identifying and engaging key agency champions who are dedicated to the unique potential of a PBRN and who can communicate its value to other providers at each community site is the first step to ensure better dissemination of findings. PBRN research partners focus on rapidly returning findings from studies in user-friendly and visually appealing formats with interpretation of findings in non-technical language. Infographic-style brief reports with findings represented using pictorial images and every-day language, as opposed to research jargon and graphs and charts, can make staff significantly more receptive to digesting the findings.

There is also a need to cultivate the infrastructure for implementing those findings. For example, in one study, we examined provider attitudes and training related to addressing substance use among clients with serious mental illness was developed with substance use staff members who saw value in the investigation. Results from the study are currently being used to develop trainings for providers, partly because these individuals promoted investigation in this area and the application of findings to make improvements in practice. There are many similar ways that PBRN models can be applied to existing social work initiatives that can enhance their success. Next, we will describe how the PBRN model can be applied to the Grand Challenges of Social Work, the Science of Social Work, and policy development and advocacy.

**Relevance to the Social Work Grand Challenges**

In 2013, the Academy of Social Work and Social Welfare shared the Grand Challenges of Social Work Initiative that outlined crucial national initiatives for the field of social work (Uehara et al., 2013; Barth, Gilmore, Flynn, Fraser, & Brekke, 2014). The importance of unifying the social work profession to begin to address diverse and immense social problems plaguing our country was one of the many reasons for the birth of the Academy of Social Work and Social Welfare (2009). A unified body of social work professionals and researchers from national social work organizations (such as the Council of Social Work Education, the National Association of Social Work, and the Society for Social Work and Research [Barth et al., 2014], and the Academy of Social Work and Social Welfare) coalesced under the mission of targeting enduring social ills.

**Grand Challenges domains**. The social work grand challenges are organized into three general social welfare domains (Table 1). The three overarching domains, individual and family well-being, stronger social fabric and a just society have subdomains comprised of the 12 grand challenges. The grand challenges were created to reflect salient, critical national priorities as outlined by various practice fields and by the public (Uehara et al., 2014). They revolve around national initiatives that according to scientific evidence are feasible, measurable and attainable within a decade (Barth et al., 2014). In an effort to move the field towards resolving chronic social problems, the grand challenges are designed to engender collaborative efforts and generate engagement of various stakeholders including social workers, the public, and policy makers (Uehara et al., 2014). The core values of PBRNs are to work in alliance and in equal partnership with community-based stakeholders to address pressing real-life problems as identified by stakeholders as practice areas that are of interest to the people receiving and delivering those services and using those results to improve practice rapidly. Therefore, PBRNs are a natural fit to the agenda of the Grand Challenges.

**Grand Challenges and PBRNs.** The Grand Challenges are designed to provide an over-arching framework for unifying organizations and partners that typically operate in silos. PBRNs are also designed for collaboration among diverse, invested community-based stakeholders from various disciplines such as practitioners, family members, researchers, faculty members, students, deans, directors, advocates, the public, and policy makers. The goals of the Grand Challenges projects are to create information that can be used rapidly to change practice. Practice-based research networks’ objective of quick dissemination of empirical findings aids the pursuit of accomplishing the grand challenges in an efficient and timely manner. PBRNs cultivate research agendas with practice constituencies, which may help develop questions and approaches to challenges that have a higher chance of success for eradicating social ills. PBRNs have a shared commitment and equal investment from practitioners and community-based stakeholders, which provides PBRNs with advantages for subsequent dissemination and implementation activities. For example, eradication of homelessness is a grand challenge that could utilize a PBRN approach to advance its impact.

**The Grand Challenge of Homelessness.** Homelessness is a complex and pressing issue that requires a multifaceted, interdisciplinary and immediate response. Through its National Homeless Social Work Initiative, the National Center for Excellence in Homeless Services (NCEHS) has focused efforts to build partnerships between schools of social work, homeless agencies, policy makers as well as promote dissemination and implementation of best practices to strengthen the homeless service workforce. The NCEHS has made some progress towards ending homelessness in the form of initiating pilot projects to test innovations, educating providers on evidenced informed homeless prevention and intervention services, increasing community and University partnerships and increasing field placements in agencies for homeless services (Larkin et al., 2016). However, the NCEHS efforts could be strengthened by adopting PBRNs’ bidirectional research model, in which homeless agencies work in unity with universities to create research initiatives to target practice-related problems, which can lead to the development and implementation of innovations more rapidly than would typically be possible. Practitioners can provide real-time feedback to their PBRN about those novel approaches and strategize on how to adjust their practices to refine their approach. The collaborative inclusion of homeless services agencies in creating the research agenda may enhance their motivation to implement findings relevant to the particular obstacles faced by their unique communities’ needs related to homelessness.

PBRNs can be an important tool to address local issues and create generalizable knowledge about practice issues that hinder homelessness services and help practitioners develop systems for tracking fidelity. The local contexts related to service delivery can influence their effectiveness. Gwadz and colleagues (2018) investigated the differences between higher and lower quality settings in regards to housing outcomes for homeless and runaway youth across 29 agencies. The Positive Youth Development (PYD) philosophy is the basis of services across agencies specializing on serving this population (Heinze et al., 2010). However, the effectiveness of this approach was influenced by the quality of their delivery settings. Relative to lower quality settings, higher quality settings had established mechanisms for ongoing quality assessment, program improvement and evaluations of youth outcomes (Gwadz et al., 2018). The lower quality settings struggled with high staff burnout, turnover, difficulty with implementing outcome measures, and did not have mechanisms in place to assess quality or program improvement. A PBRN approach may help to address these issues by mobilizing staff within these agencies to redress their lack of programmatic oversight and to develop quality and program improvement strategies.

PBRN approaches may help the agencies seek answers to their practice challenges and strengthen the utilization of practice-based evidence to improve the implementation of evidence-based practices. Academic partners can share the lessons learned in these PBRNs in the empirical literature so that others can learn from the processes enacted within these PBRNs so that generalizable knowledge is also created. Given the call for more collaborative relationships between research and practice (Bent-Goodley, 2016; Brekke, Ell, & Palinkas, 2007; Austin, 1992), PBRN models could be an appropriate model to bridge the divide between academics and practitioners working iteratively on the Grand Challenges.

**Science of Social Work**

Social work is a profession composed of individuals from diverse, multidisciplinary areas of practice, which makes the profession unified in mission, yet diverse and sometimes fragmented in areas such as interdisciplinary communication and practice, methods of translating science into practice and overall aims. Social workers operate in a range of settings, from providing services at hospitals, schools, workers, the public policy sector, prisons and community mental health clinics, which can make it challenging to disseminate information to the disparate components of the field.

Adoption of evidence-based practices is particular challenge. For social work practitioners, with considerable time and resource constraints, it is challenging to determine which evidence-based practices (EBPs) to adopt into their agencies. EBPs are services that have been tested for effectiveness in randomized controlled trials (RCTs); however, they may use samples that are more homogeneous or have more rigorous organizational oversights than is found in usual care practice.

Researchers may note the need to diverge from traditional paradigms and act flexibly. For example, by sharing preliminary findings with community partners before exhaustive analyses are completed to demonstrate sensitivity to the pace of community settings.

**Policy Impacts and Advocacy**

Social work is a field often shaped by local, state, and national policies that reflect the zeitgeist of their time, which can be highly variable. Social workers have a tremendous amount of knowledge and experience in delivering services in their domains, yet they are often asked to adapt to frequently shifting political agendas that may override their own judgments of what is efficacious. PBRNs offer a unique opportunity for helping to familiarize practitioners with the processes of research as well as opportunities to access and synthesize existing research. Part of the iterative process of developing stakeholder-driven research with academics may lead practitioners to become better informed of the latest research evidence and raise their awareness of other initiatives and approaches that have been tried before. Academics may become better acquainted with the many real-world complications that have led to the problems that they hope to research and this may alter how they conceptualize existing literature’s usefulness for implementation. By helping both academics and stakeholders become more aware of their counterpart’s perspectives, both would be better able to recognize how policies shape practice and how to better collaborate on advocacy on those policies.

**Application of policy.** The field of mental health is a prime example of how fragmented, conflicting policies are in an area that is ripe for improvement by the PBRNs. There is a growing concern in the United States to improve the fragmented health care system for individuals with mental and substance use disorders. The need to reform mental health care is further underscored by the nation’s numerous public health crises, including but not limited to, homelessness, incarceration, opiate addiction, and gun violence; all are increasingly associated and in some cases, causally linked to mental illness (Rich et al., 2014; Madras, 2017; Applebaum, 2013). It is estimated that 57.5 million Americans, or about 1 in 4, suffer from a diagnosable mental illness and yet further estimates indicate that less than half of individuals with serious mental illness receive mental health care due to various social, financial, and systemic barriers (Kessler et al., 2016; Demyttenaere et al., 2004). An abundance of literature continues to demonstrate disparities in access and quality of care, as well as health outcomes for individuals with mental illness and this holds particularly true for sexual, racial/ethnic, and gender minority and rural communities (McGuire & Miranda, 2008; Cook et al., 2014; Dinwiddie et al, 2013, Su et al., 2016, Fontanella et al., 2015). These countless disparities, along with staff burnout, provider shortages, and the overall healthcare affordability crisis, shine a dark light on just how broken the system truly is and offer a critical opportunity for PBRNs to champion policy reform.

In order to appreciate how we arrived at this present crisis and call for fundamental mental health reform by funders, policymakers and consumers alike, it is necessary to understand a critical juncture in the evolution of mental health service delivery in the United States. Mental health delivery was transformed with the advent of the deinstitutionalization government policy that moved patients with mental illness out of state-run asylums into federally funded community mental health centers through the Community Mental Health Act of 1963 (Anthony, 1993; Bassuk & Gerson, 1978). The push for community based mental health treatment stemmed from several forces: decades of inhumane treatment and worsening conditions in asylums, a strong desire to save money, and a hope that the newest antipsychotic medications could facilitate community-based treatment (Lamb & Weinberger, 2005). As a result, states closed most of their hospitals thus permanently, reducing the availability of long-term, in-patient care facilities, and releasing patients en masse.

Unfortunately, the deinstitutionalization process was poorly planned (Lamb, 1984) and many found themselves still enduring deplorable living conditions, homelessness, disproportionate incarceration, and insufficient access to adequate mental health care (Davis, Fulginiti, Kriegel, & Brekke, 2012; Lamb, 1983; Teplin, 1984). Subsequent policies, such as the Reagan administration’s decreased spending on food stamps, unemployment insurance, child nutrition, vocational education, the Job Corps, the AFDC and terminated public service employment(Thomas, 1998; Martins, 2008) exacerbated these issues. Discrimination and stigma towards individuals with a mentally illness have exacerbated the problem and contribute to social isolation(Martins, 2008), mistrust towards providers and community, which further limit access to systems of care (Clement et al., 2015). While there have been advances in treatment options, issues persist such as a lack of access to services, poor service coordination across systems of care and with the justice system, and a lack of parity of coverage of mental health issues compared to physical issues (National Academies of Sciences, Engineering, and Medicine, 2017; Priester et al., 2016). All of these issues affect both the access to, and the quality of care delivered, and thus negatively impact the mental health outcomes achieved.

**Policy, advocacy, and PBRNs.** PBRNs are positioned to conduct a thorough and realistic examination of the impact of mental health policies on providers and consumers, while also serving as a vehicle for policy advocacy. Due to their efficiency, flexibility and grounding in realistic practice expectations and needs, PBRNs offer the benefit of advocating for specific policies found to be successful when implemented on the ground and a funnel for developing new policies based on the lessons learned from the network’s findings. The network’s ability to disseminate and deploy research findings rapidly translates to relevant and meaningful knowledge for practitioners, policy makers and consumers. Practitioners can tell researchers about the issues that matter most to them, prioritize topics for study based on practice importance, help adjust study design to meet the realistic needs of clinical process and agency structure, contribute to data quickly, and participated in interpreting results and thus create a genuine space for science, policy and practice to come together.

PBRNs may be able to tackle investigations of complex clinical programs and further investigate the conditions under which and for whom services can be most effective. A PBRN approach could place greater emphasis on contextual factors such as, individuals, caregivers, stakeholder relationships, institutional settings, and infrastructure when evaluating services. This approach can also incorporate more realistic community contextual factors to examine the effectiveness, thus adding to the practical value needed to inform policy makers in their decision to continue or expand existing programs. Although practitioners are crucial to policy development and advocacy for PBRNs, they cannot be the only stakeholders involved in the process. Consumers and family members are necessary given their lived experience expertise. Advocacy groups, such as the National Alliance on Mental Illness (NAMI), have a long history in advocacy and can also play a vital role in shaping policy to more comprehensively support individuals with serious mental illness.

Frequent policy changes from funders, regulators and accreditors, who have increasing expectations of services and yet offer less in the way of resources to fulfill these expectations are challenges that are unlikely to be solved. However, we can change the degree that those policies are enacted without input from practitioners by cultivating community networks that can advocate for themselves and those they serve. Policy implementation without provider buy-in has been associated with staff burnout, poor morale, turnover and ultimately impacts the quality of care (Lloyd, King, & Chenoweth, 2002; Kim & Stoner, 2008). PBRNs are uniquely poised to incorporate practitioners in examining how policy changes affect practice in real settings given their emphasis on practitioner engagement, information consensus and real-world application. Furthermore, their focus on settings where services actually take place make them ideal platforms for addressing some of the most critical, complex and vexing issues within current mental health policies.

**Funding and Support of PBRNs**

Adequate resources to support and sustain PBRN partnerships are key to their future success. Existing funding for community-engaged support is insufficient and, historically, undervalued by federal funding agencies (Westfall et al., 2007). Particularly in public sector agencies, funding streams often dictate regimented productivity requirements for community partners and time allocated to research activities is in addition to, and not in place of, such requirements. Time demands are also an issue for academics, who are under pressure to produce results that warrant peer-reviewed publications, academic conference presentations, and that can secure competitive grant awards in order to obtain tenure and promotions. Securing initial financial support for the creation of a PBRN aimed at social work issues, such as mental health, may be a challenge due to the limited number of existing social work/welfare PBRNs in the network (Kelly et al., 2015a).

**Grant funding.** Development of funding mechanisms that will support the coalescence, infrastructure, and expansion of PBRN networks locally and nationally are essential to their success. For example, in 2007 the Robert Wood Johnson Foundation supported the development of 12 research networks in public health (Mays, 2013). Their support and guidance led to the creation of 30 PBRNs (18 were supported by RWJ but many were created with outside funds) and those PBRNs conducted 62 research projects as of 2013. Importantly, they boosted participation in research activities compared to a national sample of public health agencies, and 87.4% of PBRN agencies applied the findings within their own agencies compared to 32.1% nationally. PBRN agencies were also successful at dissemination of their findings as 76.5% helped others apply findings compared to 18% nationally. This suggests that investment in PBRNs has observable benchmarks of success for both academic and agency partners.

Grant mechanisms need to be developed that allow for the building of PBRN infrastructure and conduct of multiple studies across multiple years. Funding for infrastructure building should include funds for practice facilitator staff (allowing for release from billing obligations), some support for training of graduate and doctoral students, and funds to offset costs for staff participation by agency partners (Borkovec, Echemendia, Ragusea, & Ruiz, 2001). Funding mechanisms should also support for the dissemination and implementation of findings within practices and in academic settings. Logistical strategies can help alleviate some time constraints, such as using virtual platforms for meetings and aligning study topics with agency initiatives to capitalize on staff time and effort. Ultimately, significant will to invest in this approach is needed from both agency and academic partners’ respective organizations if social work is to capitalize on PBRNs as a means of finding solutions to dynamic, complex and ever-changing social problems.

**Creating learning collaboratives.** PBRN conferences need to be created that include workshops regarding how to develop academic-practice partnerships, how to support established PBRNs, and how to improve rapid, immediate dissemination and implementation of findings. The conferences could promote development of local learning collaboratives to help find agencies that are receptive to PBRN concept and to generate research topics. There are a wide variety of structures possible for PBRNS (Green et al. 2005), and numerous articles that help to guide how to build a PBRN (Hayes & Burge, 2012; Kelly et al., 2015a) and conferences could be an important venue to discuss the merits of various models. Importantly, within the PBRN conferences, there would need to be opportunities for agency partners to discuss how they implement their findings and create learning opportunities for how to better use findings rapidly. Conferences could also be important opportunities for encouraging existing mental health PBRNs to register with AHRQ so that mental health PBRNs are accurately captured in the national landscape and to make it easier for PBRNs to find each other for learning opportunities and collaborations.

**Training Opportunities.** PBRNs can be training grounds for graduate students, practitioners, and executive leadership. Helping to conduct research projects for a PBRN helps to expose social work students to a broader variety of applied settings than they normally would be. They learn how to design projects within the settings that they will be conducted, which can sensitize them to how their work may affect those settings and how to conduct research responsibly with regard to the time demands made of participating agencies. The insights gained from PBRN projects may help agencies to prioritize and develop training for their staff in areas of deficit. This is a key outcome for agencies who participate in a PBRN to help develop iterative improvements in their services and requires careful attention from all partners.

Linkages to the Field Departments in School of Social Work.

**Lessons Learned**

One of the first questions that we are often asked is why PBRNs haven’t taken off in social sciences as they have with medicine. There are several reasons that we have observed. First, funding is traditionally built around specific projects and do not support the long-term infrastructure required to support collaborations across projects. Without significant investments in PBRNs for all the stages of their development, their research, and also, critically, for the dissemination and implementation of those findings, PBRNs will struggle to gain foothold. PBRNs have been heavily invested in by numerous federal and private agencies, such as AHRQ, NIH, and the Robert Wood Johnson Foundation but they rarely have provided funding for PBRNs in other disciplines and their funding has also been time limited. There are encouraging signs of investment in stakeholder-driven research by PCORI, but more funds must be made available to ensure that these initiatives are supported over time instead of only supporting project specific activities.

Second, time is a premium for practitioners and for academics. It can take significant time and effort to develop the relationships and trust required to build a PBRN collaboration and to complete a study to completion. Having a dedicated support person or persons who can help to execute the tasks of the PBRN and to alleviate burden from other partners can greatly ease the time commitment from many members. However, regardless of the structure of the PBRN this form of research is an investment and may take several years to reach it’s full potential.

PBRNs may be best viewed across longer frames. Numerous articles have been written about the lessons learned by other PBRNs, which allow for thoughtful review of how infrastructures and forms of collaboration with PBRNs have changed over time and how PBRNs have impacted practices (Hickner & Green, 2015; Westfall et al., 2019). PBRNs are subject to the same forces that impact practitioners and systems of care. In retrospective examinations on the changes among U.S. PBRNs since the 1970s, the growth of PBRNs and their persistence is clear (Hickner & Green, 2015; Westfall et al., 2019). Some established networks have been able to set up data linkage across practices, which is allowing them to conduct multiple, larger-scale projects than was previously possible (Hickner & Green, 2015; Westfall et al., 2019). However, national policies continue to shift how practices are managed and operated, which has created opportunities and difficulties for PBRNs. For example, among primary care based PBRNs Hickner and Green (2015) note that the Affordable Care Act (ACA) increased demand for their services, but also led to more consolidation of smaller practices into large healthcare systems. The loss of autonomy at the local practice level may have led to decreased clinician time and energy to investment in PBRN studies evaluating ways to improve primary care. Conversely, when management appreciates the value of PBRN research, the consolidation of practices has allowed for more sophisticated projects than were previously possible and are a promising approach that should be monitored for the future.

Research by PBRNs has also proven to have value for addressing issues of health equity among communities and populations that are often overlooked in traditional RCTs (Wallerstein & Duran, 2010; Westfall et al., 2019). Due to their location within the community and their relationships with populations that might otherwise avoid research participation (by choice or exclusion), PBRNs are an important means for investigations of race, ethnicity, and the social determinants. They can also provide a means to note potential issues of health disparities within their practices, investigate, and monitor if changes were made effectively as a result of attempts to redress the health equity issues (Westfall et al., 2019). This is particularly important when implementing treatment guidelines, as PBRNs can be important testing grounds for testing whether guidelines are effective for all clients (Hickner & Green, 2015).

**Research process tensions.** The processes of research pose challenges that are constantly negotiated between the academic and practitioner partners. Research completed with academics is slower than fast-paced, action-oriented agencies may expect. There are delays due to applications for funding, obtaining IRB approvals, pilot testing, and rigorous analysis that may be frustrating to community partners (Kelly et al., 2015a; Davis, Keller, et al., 2012). Conversely, the time consuming nature of community-engaged research may be a source of frustration for academics, who must meet benchmarks for productivity for tenure and academic promotions. Managing expectations of all stakeholders requires vigilance and creativity to ensure that all partners are benefiting from participation (Kelly et al., 2015a).

**Conclusion**

Those who believe that the growth of science and research in social work is critical to its future (Brekke et al., 2007) and those who would prefer social work to remain a largely applied field have divided social work. PBRNs are a model that would help to facilitate research that augments rather than detracts from the application of social work. PBRNs can be a tool that allows for a smooth integration of research and practice concerns for practitioners and researchers that are willing to make the investments of time, energy, and resources. Each participant can be enriched by participating in these processes as they learn more about their practices and the worlds in which they are operating. The ultimate goal of PBRNs is to help shape the systems of care towards meaningful improvements. In sum, PBRNs in the field of social work have great promise in their capacity to generate rigorous knowledge and timely solutions aimed at addressing the complex needs of vulnerable populations in real-world settings, thereby helping to bridge the practice-research gap. Though the approach may challenge both practitioners and academics to re-evaluate their respective roles and priorities, such a course could advance both theory and practice to better address problems of living that unite the field.

**References**

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(1), 4-23.

Addis, M. E., Wade, W. A., & Hatgis, C. (1999). Barriers to dissemination of evidence‐based practices: Addressing practitioners' concerns about manual‐based psychotherapies. *Clinical Psychology: Science and Practice*, *6*(4), 430-441.

Agency for Healthcare Research and Quality. Practice based research network registry. . n.d.

American Academy of Social Work and Social Welfare (2018). The 12 Grand Challenges. <http://grandchallengesforsocialwork.org/>

Ammerman et al, (2014) Annu. Rev. Public Health 2014. 35:47–63

Anastas, J. W. (2014). The science of social work and its relationship to social work practice. *Research on Social Work Practice*, *24*(5), 571-580.

Anthony, W. A. (1993). Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial rehabilitation journal*, *16*(4), 11.

Appelbaum, P. S. (2013). Public safety, mental disorders, and guns. *JAMA psychiatry*, *70*(6), 565-566.

Austin, D. (1992). Findings of the NIMH task force on social work research. *Research on social work practice*, *2*(3), 311-322.

Barth, R. P., Gilmore, G. C., Flynn, M. S., Fraser, M. W., & Brekke, J. S. (2014). The American academy of social work and social welfare: History and grand challenges. *Research on Social Work Practice*, *24*(4), 495-500.

Bassuk, E. L., & Gerson, S. (1978). Deinstitutionalization and mental health services. *Scientific American*, *238*(2), 46-53.

Bent-Goodley, T. B. (2016). Social work's grand challenges: Mobilizing the profession.

Binienda, J., Neale, A. V., & Wallace, L. S. (2018). Future directions for practice-based research networks (PBRNs): a CERA survey. *J Am Board Fam Med*, *31*, 917-923.

Blau, J. (2017). Science as a strategy for social work. *Journal of Progressive Human Services*, *28*(2), 73-90.

Borkovec, T. D., Echemendia, R. J., Ragusea, S. A., & Ruiz, M. (2001). The Pennsylvania Practice Research Network and future possibilities for clinically meaningful and scientifically rigorous psychotherapy effectiveness research. *Clinical Psychology: Science and Practice*, *8*(2), 155-167.

Brekke, J. S., Ell, K., & Palinkas, L. A. (2007). Translational science at the National Institute of Mental Health: Can social work take its rightful place?. *Research on Social Work Practice*, *17*(1), 123-133.

Brekke, J. S. (2011, January). *It’s not about fish and bicycles- We need a science of social work.* Aaron Rosen Lecture. Paper presented at the Society for Social Work and Research annual conference, Tampa, FL.

Brekke, J. S. (2012). Shaping a science of social work. *Research on Social Work Practice*, *22*(5), 455-464.

Brekke, J. S. (2014). A science of social work, and social work as an integrative scientific discipline: Have we gone too far, or not far enough?. *Research on Social Work Practice*, *24*(5), 517-523.

Brekke, J. S., & Anastas, J. W. (Eds.). (2019). *Shaping a Science of Social Work: Professional Knowledge and Identity*. New York: Oxford University Press.

Contopoulos-Ioannidis, D., Alexiou, G., Gouvias, T., & Ioannidis, J. (2008). Life Cycle of Translational Research for Medical Interventions. *Science*, *321*(5894), 1298-1299.

Cook, B., McGuire, T. G., Lock, K., & Zaslavsky, A. M. (2010). Comparing methods of racial and ethnic disparities measurement across different settings of mental health care. *Health services research*, *45*(3), 825-847.

Creason, A. H., Ruscio, A. C., Tate, K. E., & McGraw, K. L. (2019). Accelerating Psychological Health Research Findings into Clinical Practice Through the Practice-Based Implementation Network Model. *Military medicine*, *184*(Supplement\_1), 409-417.

Cripps, S. N., & Swartz, M. S. (2018). Update on Assisted Outpatient Treatment. *Current psychiatry reports*, *20*(12), 112.

Davis, L., Fulginiti, A., Kriegel, L., & Brekke, J.S. (2012). Deinstitutionalization? Where have all the people gone? *Current Psychiatry Reports*, *14*, 259-269.

Davis, M. M., Keller, S., DeVoe, J. E., & Cohen, D. J. (2012). Characteristics and lessons learned from practice-based research networks (PBRNs) in the United States. *Journal of healthcare leadership*, *4*, 107.

Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general*. Retrieved from http://www .surgeongeneral.gov/library/mentalhealth/home.html

Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., Lepine, J., ... & Kikkawa, T. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *Jama*, *291*(21), 2581-2590.

Dinwiddie, G. Y., Gaskin, D. J., Chan, K. S., Norrington, J., & McCleary, R. (2013). Residential segregation, geographic proximity and type of services used: evidence for racial/ethnic disparities in mental health. *Social science & medicine*, *80*, 67-75.

Franklin, D. L. (1986). Mary Richmond and Jane Addams: From moral certainty to rational inquiry in social work practice. *Social Service Review*, *60*(4), 504-525.

Fontanella, C. A., Hiance-Steelesmith, D. L., Phillips, G. S., Bridge, J. A., Lester, N., Sweeney, H. A., & Campo, J. V. (2015). Widening rural-urban disparities in youth suicides, United States, 1996-2010. *JAMA pediatrics*, *169*(5), 466-473.

Gwadz, M., Freeman, R., Leonard, N. R., Kutnick, A., Silverman, E., Ritchie, A., ... & Powlovich, J. (2018). Understanding Organizations Serving Runaway and Homeless Youth: A Multi-setting, Multi-perspective Qualitative Exploration. *Child and Adolescent Social Work Journal*, 1-17.

Green, L. A., Simmons, R. L., Reed, F. M., Warren, P. S., & Morrison, J. D. (1978). A family medicine information system: the beginning of a network for practicing and resident family physicians. *The Journal of family practice*, *7*(3), 567.

Green, L. A., & Hickner, J. (2006). A short history of primary care practice-based research networks: from concept to essential research laboratories. *J Am Board Fam Med*, *19*(1), 1-10.

Green, L. A. (1999). The history of PBRNs: the establishment of practice-based primary care research networks in the United States. In *Proceedings from the conference convened by the AAFP Task Force to Enhance Family Practice Research*.

Green, L. A., White, L. L., Barry, H. C., Nease, D. E., & Hudson, B. L. (2005). Infrastructure requirements for practice-based research networks. *The Annals of Family Medicine*, *3*(suppl 1), S5-S11.

Haggerty, K. P., Barton, V. J., Catalano, R. F., Spearmon, M. L., Elion, E. C., Reese, R. C., & Uehara, E. S. (2017). Translating Grand Challenges from concept to community: The “Communities in Action” experience. *Journal of the Society for Social Work and Research*, *8*(1), 137-159.

Hayes, H., & Burge, S. (2012). Creating a practice-based research network from scratch: where do i begin?. *Progress in community health partnerships: research, education, and action*, *6*(3), 369-380.

Heinze, H. J., Jozefowicz, D. M. H., & Toro, P. A. (2010). Taking the youth perspective: Assessment of program characteristics that promote positive development in homeless and at-risk youth. *Children and Youth Services Review, 32*(10), 1365–1372.

Holkup, P. A., Tripp-Reimer, T., Salois, E. M., & Weinert, C. (2004). Community-based participatory research: an approach to intervention research with a Native American community. *ANS. Advances in nursing science*, *27*(3), 162.

Horwitz, S. M., Hurlburt, M. S., Goldhaber-Fiebert, J. D., Palinkas, L. A., Rolls-Reutz, J., Zhang, J., ... & Landsverk, J. (2014). Exploration and adoption of evidence-based practice by US child welfare agencies. *Children and youth services review*, *39*, 147-152

Institute of Medicine. (2000). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy of Science.

Lamb, H. R. (1984). Deinstitutionalization and the homeless mentally ill. *Psychiatric Services*, *35*(9), 899-907.

Lamb, H. R., & Weinberger, L. E. (2005). The shift of psychiatric inpatient care from hospitals to jails and prisons. *Journal of the American Academy of Psychiatry and the law Online*, *33*(4), 529-534.

Larkin, H., Henwood, B., Fogel, S. J., Aykanian, A., Briar-Lawson, K., Donaldson, L. P., . . . Streeter, C. L. (2016). Responding to the grand challenge to end homelessness: The national homelessness social work initiative.*Families in Society, 97*(3), 153-159. doi:http://dx.doi.org.libproxy1.usc.edu/10.1606/1044-3894.2016.97.31

Lizaola, E., Schraiber, R., Braslow, J., Kataoka, S., Springgate, B. F., Wells, K. B., & Jones, L. (2011). The Partnered Research Center for Quality Care: developing infrastructure to support community-partnered participatory research in mental health. *Ethnicity & disease*, *21*(3 0 1), S1.

Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health*, *11*(3), 255-265.

Kelly, E. L., Kiger, H., Gaba, R., Pancake, L., Pilon, D., Murch, L., ... & Brekke, J. S. (2015). The Recovery-Oriented Care Collaborative: A practice-based research network to improve care for people with serious mental illnesses. *Psychiatric Services*, *66*(11), 1132-1134.

Kelly, E.L.,Davis, L., & Brekke, J.(2015). PBRN Findings: Integrated care for individuals with serious mental illnesses. *Psychiatric Services*, *66*,1253.

Kelly, E.L., Davis, L., Mendon, S., Kiger, H., Murch, L. Giambone, L., Pancake, L., & Brekke, J. (2018). Provider and consumer perspectives on the usefulness of community mental health services delivered in usual care settings: Implications for consumer driven care. *Psychological Services.* [http://dx.doi.org/10.1037/ser0000244](https://psycnet.apa.org/doi/10.1037/ser0000244)

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593-602.

Kim, H., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. *Administration in Social work*, *32*(3), 5-25.

Knickman, J., Krishnan, R., & Pincus, H. (2016). Improving access to effective care for people with mental health and substance use disorders. *JAMA*, *316*(16), 1647-1648.

Madras, B. K. (2017). The surge of opioid use, addiction, and overdoses: responsibility and response of the US health care system. *JAMA psychiatry*, *74*(5), 441-442.

Manderscheid, R. (2006). Some thoughts on the relationships between evidence based practices, practice based evidence, outcomes, and performance measures. *Administration and Policy in Mental Health and Mental Health Services* *Research,* 33(6), 646-647.

Martins, D. C. (2008). Experiences of homeless people in the health care delivery system: a descriptive phenomenological study. *Public health nursing*, *25*(5), 420-430.

Mays, G.P. (2013). The Public Health PBRN program: A summative report.

McGuire, T. G., & Miranda, J. (2008). New evidence regarding racial and ethnic disparities in mental health: Policy implications. *Health Affairs*, *27*(2), 393-403.

Mechanic, D., & Rochefort, D. A. (1992). A policy of inclusion for the mentally ill. *Health Affairs*, *11*(1), 128-150.

Morris, Z. S., Wooding, S., & Grant, J. (2011). The answer is 17 years, what is the question: understanding time lags in translational research. *Journal of the Royal Society of Medicine*, *104*(12), 510-520.

National Academies of Sciences, Engineering, and Medicine.(2017). Communities in action: Pathways to health equity. Washington, DC: The National Academies Press. doi.org/10.17226/24624

New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America: Final report* (No. SMA-03-3832). Rockville, MD: Department of Health and Human Services.

O’Brien, A., Fahmy, R., & Singh, S. P. (2009). Disengagement from mental health services. *Social psychiatry and psychiatric epidemiology*, *44*(7), 558-568.

Ojeda, V. D., & Bergstresser, S. M. (2008). Gender, race-ethnicity, and psychosocial barriers to mental health care: An examination of perceptions and attitudes among adults reporting unmet need. *Journal of health and social behavior*, *49*(3), 317-334.

O’Reilly, R., & Vingilis, E. (2018). Are randomized control trials the best method to assess the effectiveness of community treatment orders?. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*(4), 565-574.

Priester, M. A., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. D. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. *Journal of substance abuse treatment*, *61*, 47-59.

Powell, B. J., Proctor, E. K., & Glass, J. E. (2014). A systematic review of strategies for implementing empirically supported mental health interventions. *Research on social work practice*, *24*(2), 192-212.

Rich, J. D., Chandler, R., Williams, B. A., Dumont, D., Wang, E. A., Taxman, F. S., ... & Osher, F. C. (2014). How health care reform can transform the health of criminal justice–involved individuals. *Health affairs*, *33*(3), 462-467.

Riley, W. T., Glasgow, R. E., Etheredge, L., & Abernethy, A. P. (2013). Rapid, responsive, relevant (R3) research: a call for a rapid learning health research enterprise. *Clinical and translational medicine*, *2*(1), 10.

Robertson AG, Swanson JW, Lin H, et al. Influence of criminal justice involvement and psychiatric diagnoses on treatment costs among adults with serious mental illness. Psychiatr Serv. 2015;66:907-909.

Rosiek, J. L., & Pratt, S. (2013). Jane Addams as a resource for developing a reflexively realist social science practice. *Qualitative Inquiry*, *19*(8), 578-588.

Palinkas, L. A., Allred, C. A., & Landsverk, J. A. (2005). Models of research-operational collaboration for behavioral health in space. *Aviation Space and Environmental Medicine*, *76*(6 Suppl.), B52-B60

Palinkas, L. A., (2019) Rigor and relevance in Social Work science. In John Brekke and Jeane Anastas (Eds.), *Shaping a Science of Social Work*. (pp.3-21). New York: Oxford University Press.

Pinto, R. M., Spector, A. Y., & Rahman, R. (2019). Nurturing Practitioner-Researcher Partnerships to Improve Adoption and Delivery of Research-Based Social and Public Health Services Worldwide. *International journal of environmental research and public health*, *16*(5), 862.

Powell BJ, Proctor EK, Glass J. A systematic review of strategies for implementing empirically supported mental health interventions. *Research on Social Work Practice.* 2014;24(2):192-212.

Sellers, R. V., Salazar, R., Martinez, C., Gelfond, S. D., Deuter, M., Hayes, H. G., ... & Pollock, B. H. (2012). Difficult encounters with psychiatric patients: a south Texas psychiatry practice-based research network (PBRN) study. *The Journal of the American Board of Family Medicine*, *25*(5), 669-675.

Stone, S. & Floersch, J. (2019) The Science of Social Work Roundtables. In John Brekke and Jeane Anastas (Eds.), *Shaping a Science of Social Work*. (pp.3-21). New York: Oxford University Press.

Substance Abuse and Mental Health Services Administration. Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010-2020. [http://store.samhsa.gov/shin/content//SMA14-4883/SMA14-4883.pdf](http://store.samhsa.gov/shin/content/SMA14-4883/SMA14-4883.pdf). Accessed February 25, 2017.

Teplin, L. A. (1984). Criminalizing mental disorder: the comparative arrest rate of the mentally ill. *American Psychologist*, *39*(7), 794-803.

Thomas, A. R. (1998). Ronald Reagan and the commitment of the mentally ill: Capital, interest groups, and the eclipse of social policy. *Electronic Journal of Sociology*, *3*(4), 1-13.

Uehara, E. S., Barth, R. P., Coffey, D., Padilla, Y., & McClain, A. (2017). An introduction to the special section on Grand Challenges for Social Work. *Journal of the Society for Social Work and Research*, *8*(1), 75-85.

Uehara, E. S., Barth, R. P., Olson, S., Catalano, R. F., Hawkins, J. D., Kemp, S., & Sherraden, M. (2014). Identifying and tackling grand challenges for social work. *Baltimore, MD: American Academy of Social Work and Social Welfare*.

United States Department of Health and Human Services. Practice based research networks, research in every day practice, registry map. Available online: <https://pbrn.ahrq.gov/pbrn-registry/pbrn-registry-map> (accessed on 20 March 2019).

Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. *American journal of public health*, *100*(S1), S40-S46.

Westfall, J. M., Mold, J., & Fagnan, L. (2007). Practice-based research—“Blue Highways” on the NIH roadmap. *Jama*, *297*(4), 403-406.

Westfall, J. M., Roper, R., Gaglioti, A., & Nease Jr, D. E. (2019). Practice-Based Research Networks: Strategic Opportunities to Advance Implementation Research for Health Equity. *Ethnicity & disease*, *29*(Suppl 1), 113-118.

|  |  |
| --- | --- |
| Table 1  *Grand Challenges in Social Work* | |
|  |  |
| Challenges 1-4 | Ensure healthy development for all youth |
| Individual and Family Well-Being | Close the health gap |
|  | Stop family violence |
|  | Advance long and productive lives |
|  |  |
| Challenges 5-8 | Eradicate social isolation |
| Stronger Social Fabric | End homelessness |
|  | Create social responses to a changing environment |
|  | Harness technology for social good |
|  |  |
| Challenges 9-12 | Promote smart decarceration |
| A Just Society | Reduce extreme economic inequality |
|  | Build financial capital for all |
|  | Achieve equal opportunity and justice |

Ford I, Norrie, J (2016). N Engl J Med 2016; 375:454-463

DOI: 10.1056/NEJMra1510059