



An Update of Peer Support/Peer Provided Services Underlying Processes, Benefits, and Critical Ingredients

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Abstract

The purpose of this article is to delineate the current state-of-the-knowledge of peer support following the framework employed in the 2004 article (Solomon, *Psychiatr Rehabil J*. 2004;27(4):392–401 [1]). A scoping literature was conducted and included articles from 1980 to present. Since 2004, major growth and advancements in peer support have occurred from the development of new specializations to training, certification, reimbursement mechanisms, competency standards and fidelity assessment. Peer support is now a service offered across the world and considered an indispensable mental health service. As the field continues to evolve and develop, peer support is emerging as a standard of practice throughout various, diverse settings and shows potential to impact clinical outcomes for service users throughout the globe. While these efforts have enhanced the professionalism of the peer workforce, hopefully this has enhanced the positive elements of these services and not diluted them.

Keywords Peer support · Mental health · Lay interventionist

Introduction

Peer support/peer-supported services can be found across the world [2–5]. Peer support/peer-supported services include inpatient, outpatient, digital, and community-based services for people with mental health conditions and/or substance use challenges by individuals who identify as experiencing similar lived experiences [1, 6]. More than 30,000 peer support specialists (also called: peer providers, peers, peer specialists, peer supporters, peer mentors, peer navigators, certified peer support specialists) in the United States offer Medicaid reimbursable services in 43 states [7–9]. The spread of peer support and its' growth in evidence related to the effectiveness for service users [2–4], have led to major advancements. As such, an update to the seminal article on peer support by Solomon [1], which was published over 17 years ago, is warranted.

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The intent of this article is to delineate the current state-of-the-knowledge of peer support following the framework employed in the 2004 article [1]. Initially, we will define peer support and the various types of peer services and innovations in the current context, followed by advancements in underlying psychosocial processes. Next, the authors present the benefits of peer support services, and lastly, how critical ingredients are assessed today.

Updated Definition of Peer Support

Originally, peer support was defined as social and/or emotional support that combines expertise from lived experience that is mutually offered and provided by persons with a mental health condition to others sharing similar conditions to bring about their self-determined personal change [1]. Given the broadness of this definition for the most part it still holds. However, there are some nuances that require updating and enhanced recognition.

First, at the time of the original publication, peer support was largely informal such as self-help groups or somewhat semi-structured with a few agencies hiring peers to offer help to other peers, and predominately focused on being mutually supportive. However, today it is more about supportive service provision based on experiential knowledge delivered to service users by those sharing a mental health challenge. Thus, rather than being mutually offered, where the intent was to benefit both parties to some extent, currently the purpose of peer support services emphasizes assisting those served, with benefit to the deliverer being a secondary gain, as noted by peers workers themselves [10]. Therefore, the definition needs to be modified from mutually offered and provided to being delivered by mutual agreement.

Second, it is frequently about delivering a service that can be paid for through program dollars or reimbursed by governmental insurance, although in some organizations, it also offered on a voluntary basis. Consequently, the service is more structured today, rather than primarily providing informal support, and may involve the delivery of evidence-based interventions, such as self-management programs including Wellness Recovery Action Planning [11], developed by a peer, and Illness Management and Recovery [12], which was developed by professionals and is delivered by both peers and non-peers [13]. Other programs provided have been developed by peers such as emotional CPR [14] or co-produced by peers and non-peer scientists such as PeerTECH [15, 16]. These interventions offer important and practical information and skill teaching while still providing assistance in accessing needed resources and enhancing companionship by sharing experiences and knowledge.

Third, “mental health condition” in the original definition was considered to be a severe psychiatric disorder [1]. However, today “mental health challenges” maybe a more appropriate term, as these challenges are far more inclusive of mental health issues such as trauma, extreme stress, feelings of loneliness, as well as the full spectrum of mental health diagnoses.

Fourth, while peer support services remain focused on enhancing and maintaining wellness and recovery of mental health status, there is recognition of numerous comorbidities of people with mental health challenges, including substance use disorders and chronic medical conditions [17] as well as involvement in multiple human service and governmental systems, such as criminal justice and child welfare. Thus, the concept of lived experience expertise goes beyond just mental health per se to include living with chronic medical conditions and having experienced forensic and child welfare involvement and being a parent with a mental illness [18]. This has led to specialized chronic disease self-management

programs delivered by peers, such as Health and Recovery Peer program (HARP) [19, 20] and peer navigators to enhance health and health care utilization [21], wellness coaches [22, 23], and employment of forensic peer specialists. In parts of the world that are impoverished and have experienced countrywide trauma such as in Rwanda Africa, peers in non-profits for example, Opromamer offer entrepreneurial peer support services to enhance economic empowerment of service users of the mental health system.

Lastly, peer support services often support individuals in the community as adjunctive to traditional mental health care encounters with licensed clinical professionals, comprised of social workers, psychologists, and psychiatrists [2, 3]. Peer support continues to be offered as an independent service by organizations unaffiliated with the traditional mental health system as well. Generally, peer support services are commonly delivered in-person, in-group sessions or through "digital peer support," a relatively new category of service delivery that has become particularly prominent globally during the COVID-19 pandemic [3, 24]. Digital peer support or digital peer support specialist is defined as live or automated services delivered through technology media by peers [3]. These technology media include peer-to-peer networks on social media or online groups such as Peer Support Solutions and ForLikeMinds, and peer-delivered interventions supported with smartphone apps, video games, and virtual reality.

While there has been much growth and enhancements, the core of the service remains unchanged. However, there is a need for slight modifications to the definition to reflect these important advancements. Thus, the updated definition of peer support is social and/or emotional support that combines expertise from lived experience that is delivered with mutual agreement by persons who self-identify as having or had mental health as well as other social, psychological and medical challenges to service users sharing similar challenges to bring about self-determined personal change to the service user. Self-identification is important today given designated positions and reimbursement requirements. The definition is not confined to any particular mode of service delivery, but leaves the modality unspecified. This definition is consistent with the definition of the role of peer support worker defined by Mead et al. [6] that is used globally as "offering and receiving help, based on shared understanding, respect and mutual empowerment between people in similar situations".

Defining and Delineating Categories of Peer Support

In the original manuscript, the categories of peer support were delineated into six categories: self-help groups, internet support groups, peer delivered services, peer run or operated services, peer partnerships, and peer employees. Although these categories remain relevant today, it is apparent that there is overlap among some categories (e.g., peer delivered and peer employees) and mixes mode of delivery with support types (e.g., internet self-help versus self-help); therefore, this categorization requires refinement. Swarbrick and Schmidt [25] offered a taxonomy that maintains the integrity of this classification with enhanced mutuality of categories: peer-delivered self-help, peer-run services, peer partnerships, and peers in recovery as employees. For purposes of this article, these categories will be utilized. However, some of these categories have been greatly expanded in terms of settings, substantive content and mode of delivery, particularly in the use of technology, compared to an earlier time. All of which will be elaborated upon below.

Before we delineate and define each of the categories, it is important to note that in this period of consumerism and distrust of professionals, there has been increasing recognition internationally of the value of employing people who share common characteristics such as residence in similar or same neighborhood or community (e.g., community health workers). As with the initial article, the focus will be maintained on mental health and so far as other domains, they will only be discussed when serving people with dual challenges of, for example, substance use and/or chronic health conditions and mental health challenges or with the need to make distinctions from services with the primary focus of the article. Each category will be defined and a discussion will follow on how these have changed in the past 17 years since publication of the original article [1].

Peer Delivered Self-help

Peer delivered self-help is informally offered on a voluntary basis to another peer to mutually assist each other to satisfy a common need/goal to bring about personal change. Peer self-help is more commonly delivered in a group format, such groups are defined as "voluntary small group structures for mutual aid in the accomplishment of a specific purpose... usually formed by peers who have come together for mutual assistance in satisfying a common need, overcoming a common handicap or life-disrupting problem, and bringing about desired social and/or personal change" [26]. This is the fastest growing category of peer support services in low and middle-income countries. Peer self-help groups for mental health challenges gained increasing prominence in the era of deinstitutionalization, as people were frequently discharged into communities with limited community-based mental health services and many had negative experiences with professional mental health services, particularly state psychiatric hospitals. Thus, these support services were more acceptable, feasible, and accessible to people with mental health challenges. Self-help groups cover just about every mental health-related challenge/condition and co-morbid physical health or social health challenge (e.g., loneliness). The most noted ones relevant to the current topic that offer global self-help services, some exist for many years, are Recovery International, Schizophrenics Anonymous, Emotions Anonymous, Depression and Bipolar Support Alliance, and the Hearing Voices Network. Recently, self-help groups have arisen to meet the growing demand for additional services, including those that focus on mental health and physical health challenges and aging with a serious mental illness such as the COAPS Facebook group.

Self-help groups are also expanding on digital platforms such as formal websites (e.g., peersupportsolutions.com and [ForLikeMinds](http://ForLikeMinds.com)), social media (e.g., Facebook) [27], Twitter [28], listservs (e.g., Reddit) [29], and Youtube [30]. These self-help groups are not restricted to location, size, or time. Generally, these groups are informal and facilitated by untrained, often voluntary, peers [3], but may be facilitated or co-facilitated by a professional (hybrid self-help groups) [31]. While the use of technology for support groups has been around for about 20 years, they are now much more pervasive and sophisticated than previously. At the time of the original article, the technology that was used was more listservs, bulletin boards or email, and very limited, if at all, plus synchronous communication was only possible through a telephone. Currently, synchronous communication is readily available via platforms like Zoom, What's App, or Facetime. Thus, with advanced technology, the face-to-face element may be facilitated within the digital environment, which was not the case previously.

Peer Run Services

Peer-run services are those that are planned, administered and led by peers [1]. These service programs may be legally independent entities, but often these service programs are embedded within a larger non-peer organization. These differ with regard to size and the nature of the services provided and the number of paid and voluntary staff. Yet, all value freedom of choice and maintaining operational control by peers [1], as these service programs emerged as an alternative to traditional mental health services by consumers who were part of the antipsychiatry movement [32]. Thus, they wanted to maintain independence from the traditional mental health system. Examples of peer run services include (1) peer respite (i.e., a voluntary, short-term, overnight program that provides community-based, non-clinical crisis support to help people outside of a clinical environment) [33], (2)warmlines (i.e., 24/7 non-emergency telephone line that provides accessible emotional support offered voluntarily by peers in recovery to help other peers to assist in preventing a psychiatric crisis from occurring) [34], and (3) drop-in centers such as BRIDGES (i.e., psychosocial educational programs that support self-management of mental health conditions [35].

Peer-run organizations have expanded to include social entrepreneurial organizations. For example, Dr. Patricia Deegan, an internationally-known disability rights advocate and an individual with lived experience of a mental health challenge developed Com-monground as a set of tools to restructure how individuals with psychiatric disabilities and medication prescribers work together in treatment planning. Individuals with lived experience of a mental health challenge thus created this web-based program [36]. The company now offers training and materials/guides/tools for using Personal Medicine in recovery.

Peer Partnership

Peer partnership has remained unchanged. These are organizations where fiduciary responsibility lies with non-peers and administrative and operational responsibilities is mutually shared by both peers and non-peers, but primary control is with peers. These entities are not unlike hybrid self-help groups where professional non-peers have a primary role in developing and/or facilitating the groups [1].

Peers in Recovery as Employees

Peers in recovery as employees are individuals who are hired into designated peer positions or traditional mental health positions who must publicly self-identify as a peer and have been or are a service user themselves for their own mental health challenge [1]. This is the fastest growing category of peer support services in the United States, as it is viewed as a means to operationalize recovery-oriented services, which is mandated federally and by most states, and an incentive to this service provision is that they can be reimbursed by federal public health insurance. Beginning in 2001 with the state of Georgia, United States public health insurance, Medicaid, reimburses for peer delivered services meeting certification standards [37, 38]. Twenty years later, 43 states now reimburse for peer support services [8, 9] and have developed peer support certification to meet Medicaid standards for qualifications and training. Hence, these peers are often

referred to as certified peer specialists. Requirements range in eligibility criteria (e.g., some states require a high school diploma, training topics and hours, required number of hours of services provision, and training in peer support models to be delivered (e.g., Intentional Peer Support, Recovery International model) [7]. Australia, New Zealand, United Kingdom, and many European nations have followed suit in employing peers as service providers [39].

Commonly, certified peer support specialists work in conjunction with traditional psychiatric care [40] and increasingly are integrated within medical and psychiatric treatment settings [41]. Guidelines require training for peer support specialists in order to deliver services and to be supervised by a qualified mental health professional, which can be a peer or non-peer [37]. In 2015, the Substance Abuse for Mental Health Services (SAMHSA) defined peer support competencies (2015) and delineated core competencies based on the principles of recovery-oriented and person-centered care, being voluntary, relationship-focused and trauma-informed. Later enhancements build on these competencies and include ones for digital peer support [42].

New endorsements or peer support specializations that build on state peer support training and certifications include training on older adult peer support [43], digital peer support [44], and forensic peer support [45]. Professional development may include training in specific interventions, some empirically-supported, such as Whole Health Action Management to improve health for high incidence chronic medical conditions [46], Wellness Recovery Action Planning [11], trauma-informed peer support for people living with HIV [47], and peer support for mothers with mental health challenges [48].

Furthermore, mental health peer support employees are currently being integrated within general healthcare [41], such as primary care clinics [49] and behavioral health homes [41]. The likely precipitant for this integration may be due to people with serious mental illness dying up to 32 years earlier than the general population [50], most notably from co-morbid mental health and physical health conditions [17], and the needed interaction for treating both mental health and physical health conditions in addressing these comorbidities [51]. Further, is the increasing evidence of peer support successfully augmenting general healthcare between encounters and impacting chronic disease self-management skill development and promoting positive medical outcomes [15, 19, 20, 52].

In emerging cases in low and middle-income countries, peers are delivering mental health care. For example, peer support in Uganda began in 2011 and peers offer peer support services in exchange for food or transportation [53]. These services may include one-on-one peer support or delivery of prescriptions to service users' homes. In India, peer support specialists (or "peer support volunteers") offer peer support via home visitation, which is a government-sponsored service established in 2015 [53]. Increasingly due to the COVID-19 crisis, these services are now offered over the telephone or through smartphone apps such as "What's App" [53].

The first digital peer support program in the scientific literature dates to 2005 in the United States with a web-based program that provided online group therapy and education to dyads (i.e., a person with a lived experience of schizophrenia and a support person). Each dyad had a web-based bulletin board to informally support one another [54]. Since 2005, there have been advancements in digital peer support including smartphone apps, web-based platforms, and social media tools [3]. Soon after 2005, Asia, Europe, and Australia developed digital peer support programs financed through grant-funded positions or commercial health insurers [3]. Many peers in the United States own or have a smartphone provided to them by their employer for business use [16]. The COVID-19 outbreak and

the subsequent National Emergency Declaration [55] allowed for many states with Medicaid reimbursable peer support services to offer Medicaid reimbursable digital peer support through telehealth. Globally the United Kingdom's response to COVID resulted in a National Emergency Declaration in Europe [56], followed by the National Emergency Declaration in Canada, both of which allowed for many provinces and territories to offer reimbursable digital peer support services issued under national safety and privacy laws [57].

As is evident, peer support delivered as employees has greatly expanded in the United States and internationally since the publication of the original article. As noted previously, the pervasiveness of consumerism, increasing distrust of professionals and the growing value placed on lived experience to enhancing access to health care has resulted in the rise of similar positions in the medical care system, specifically Community Health Workers (CHW). However, it is important to note that they are not peer support employees as CHWs lack self-identification as having a lived experience of a mental health challenge [58]. As defined in the Affordable Care Act, a community health worker (CHW) is an individual based in the community who promotes health or nutrition through liaison activities between health care agencies and the community, provides social assistance and guidance to community residents, enhances communication between residents and health care providers, offers health and nutritional education that is culturally and linguistically appropriate, supports referrals and follow-up services, and proactively identifies and advocates for the enrollment of eligible individuals in covered health service programs [59]. Although CHW share similar positive benefits and outcomes as peer supporters; there are important distinctions between the two positions. A CHW is an individual with little to no formal clinical training, but are members of the community in which they work with medical patients who share similar ethnic and racial characteristics by providing support for medical-related issues such as long-term medication management, rides to and from appointments [8]. Different terms are used to describe CHWs, including patient navigators, peer whole health coach/wellness coach, and promoters. Unlike peers, they do not have a mental health challenge or for that matter do not share the common lived experience of a medical challenge, but rather share cultural and community characteristics.

Advancements in the Underlying Psychosocial Processes of Peer Support

In the original article, peer support was explained by a variety of psychosocial processes/theoretical foundations delineated by Salzer and Shear [10] that underlie peer-delivered services, which included social support [60], experiential knowledge [61], helper-therapy principle [62], social learning theory [63], and social comparison theory [64]. While these continue to be relevant, Fortuna et al. [65] expands on this theoretical basis by the addition of self-determination theory [66]. Self-determination theory proposes that when psychological needs for autonomy/control, self-sufficiency, competence, and connectedness to others are met, then individuals strive for continuing psychological development in terms of well-being and recovery [66]. As the consumer movement has highlighted the importance of choice in treatment and relationship to others like themselves, this naturally extends to the service approach of the peer support workforce. Peers regard autonomy as a key objective in their work with people with a lived experience of a mental health challenge and collaboratively assist in fulfilling their self-determined goals [65].

In addition, empowerment theory delineates strategies from which peers work with other peers. Empowerment is a process by which people are involved in meaningful sharing of power, which is consistent with shared decision-making regarding life issues as well as treatment planning [67]. As Deegan [67] eloquently noted it is a belief in that all people are capable of acting, and subsequently, changing their situation. Peers help other peers to enhance their power so they are able to obtain essential resources, and attain control over their life to successfully achieve their own personal goals. They offer strategies for and information about accessing needed resources, therefore helping to critically enhance awareness and appraisal of their environment enabling them to more effectively participate in decisions relevant to their own well-being [68].

Benefits Derived from Peer Support Services

Benefits/Value of Peer Support/Peer Provided Services to Individuals Receiving Them

In the original publication, Solomon summarized the outcome research at the time, but the service was in its infancy, and consequently, rigorous empirical research was limited. Since the original publication in 2004, there has been a number of systematic reviews of peer provided services (e.g., [2, 69–73], and specialized ones on digital peer support [3], on one-to-one peer support [4] and another on low-and middle income countries [74]. Reviewers have had different criteria for inclusion and exclusion, and studies have been diversified with regard to designs (i.e. experimental, quasi- experimental, etc.) and in outcomes and measures. Reviews with more rigorous designs employing meta-analyses have found less impact [75]. All have found some positive effects, but most reviews have noted small to moderate effects. A consistent challenge has been the lack of methodological rigor in studies (i.e., lack of randomized designs) [2, 3], which has precluded reviews from establishing peer support services as achieving an evidence-based practice status.

The positive outcomes identified in the prior article are retained in this article. However, the best approach to delineating the benefits for purposes of this update is to identify the outcomes indicated in the SAMHSA pamphlet entitled [76] based on the research, which was included within many of the recent systematic reviews. The issuance produced a list of the value of peer support or from peer support specialists service provision. Due to the lack of consistent methodological rigor, we highlight these outcomes as *promising* to the field. These outcomes included increased self-esteem and efficacy, sense of control, empowerment, hope, belief in bringing about change in their lives, sense of belonging, social support, engagement in self- management, services, treatment and community; and improved social functioning, quality of life and life satisfaction. Further, peer support also resulted in decreases in hospitalizations, self-stigma, psychotic symptoms, depression, substance use and fewer feelings of social isolation. Most relevant research usually determined some positive results, although they may not have found support for all outcomes hypothesized. Clearly, not all who engage in peer support services will receive all of these benefits, each has a chance for some benefit from receipt of peer support services, although there was a lack of consistency across study outcomes.

Benefits to Peer Employees

Benefits to peer employees have remained unchanged from those specified in the original article. Solomon [1] identified a reduction in hospitalization, enhanced personal growth, which included “increased confidence in their own capabilities, ability to cope with the illness, self-esteem, and sense of empowerment and hope” (p. 396). Further, being a peer employee helps to challenge self-stigma, to engage in one’s own recovery and self-discovery, to enhance their social support network, find positive means to spend their time, and gainful employment therefore, achieving a better quality of life. Moreover, they are offered opportunities for professional growth in terms of learning positive work habits and job skills, as well as having the potential for developing and achieving career goals. While these benefits have remained unchanged from those designated in the original publication, they have been greatly enhanced given the extensive expansion of this workforce.

Benefits to the Mental Health Service Delivery System

A primary benefit noted in the prior article was the *potential* cost saving to the mental health service delivery system [1]. These savings are likely accrued through fewer hospitalizations or days of hospitalization, which are by far the most costly treatment. Potentially, reduced financial costs to systems can emanate from participating in self-help and peer run programs and receipt of peer employee service provision—not the traditional mental health system. Furthermore, the teaching of medical, psychiatric, and social health self-management may impact inappropriate service use from the system. However, as was cautioned in the original article, these savings should not result from paying peer employees less for having the same job tasks and responsibilities as non-peers.

Another positive outcome to the system is the modification of detrimental attitudes of non-peer employees by their having direct contact with individuals with mental health challenges who are successfully functioning in positive social roles rather than at their worst when in need of services. These attitude changes help to combat societal stigma of persons with mental health conditions.

Peer support services are possibly more likely to be used by those who eschew the traditional mental health services, such as those who are homeless, who have had negative interactions with the system, or for other reasons feel alienated from and mistrustful of professional services. Peer supporters help to engage or re-engage these individuals into the professional treatment system, are more inclined to do outreach to those in need and to make referrals to self-help groups. The addition of peers to existing mental health services enhances the value and benefits of these services [1].

Benefits to Society

The employment of peers to complement traditional mental health services in areas where the services and professionals are limited such as rural areas, low income communities and countries with scarce resources is clearly an added value. This societal need is a benefit that has greatly expanded in recent years in serving under resourced and underserved areas nationally and internationally, as indicated previously by engaging in task-shifting activities.

Peers as employees offer positive role models of people with mental health conditions. This then helps to alleviate societal stigma and discrimination against individuals with mental health issues and seeing them in a more positive light. Further, they are able to contribute to society by being productive citizens and paying taxes and therefore reduce government expenditures and resources.

Critical Ingredients of Peer Support Services

At the time of the writing of original publication, there were no standards for peer employees, consequently the critical ingredients were determined by Solomon based on the limited available research. These ingredients were delineated into three categories: service elements, characteristics of peer providers, and characteristics of mental health service delivery system, which were supported by the available evidence at the time. Although these elements remain relevant, there are now guidance and standards for peer employees that are up to date in their conceptualization and more appropriate as standards. SAMHSA issued competencies for peer workers in behavioral health services in 2015 and in 2016 Chinman et al. engaged in preliminary efforts for the development of a fidelity measure for peers. These will both be discussed below. It is also important to note that the proliferation of peers and their expansion in the past two decades such that now even accrediting bodies such as the Commission on Accreditation of Rehabilitation Facilities (CARF) has developed standards to include peer support specialists in the workforce [77]. For example, human resource policies and practices within an organization need to promote integration of the peer workforce in the following areas, including responsive hiring practices, acceptance of lived experience expertise in place of formal credentials, and job structures offering opportunities for advancement.

Core Competencies for Peers in Behavioral Health Services

Core competencies were developed with the input of a diversity of experts in the content area. Core competencies are the ability to carry out a specific role or function. The competencies are described as the integration of the three dimensions of knowledge

Table 1 Core Competencies for Peers

Engages peers in collaborative and caring relationships
Provides support
Shares lived experiences of recovery
Personalizes peer support
Supports recovery planning
Links to resources, services, and supports
Provides information about skills related to health, wellness, and recovery
Helps peers to manage crises
Values communication
Supports collaboration and teamwork
Promotes leadership and advocacy
Promotes growth and development

skills and attitudes that are necessary prerequisites to performing a designated role or job. Core competencies offer guidance for training, certification and job descriptions [78]. Based on SAMHSA efforts five foundational principles of the core competencies for peer workers were identified: recovery oriented, person-centered, voluntary, relationship focused and trauma informed. These essential competencies were delineated into fourteen categories (see Table 1 with listing of categories).

The document acknowledges that these are foundational competencies that require continual updating and may necessitate specialized competencies for specific populations such as homeless or particular contexts such as correctional institutions.

Intervention Fidelity

Without a fidelity to the critical components of peer support, the quality of peer support or its impact can be examined. To date, it is not known, which peer support models produce which outcomes. A recent narrative review found none of the scientific evidence on peer support considers which model of peer support is being employed. Chinman et al. [75] developed a nineteen service item fidelity measure (see Table 2 for listing of service activities).

These investigators found that their final set of service domains matched well with a job delineation study of peer workers, which provides further support at defining the activities engaged in by peer workers. However they do indicate that the results are preliminary and require further research. Also, there may be other activities engaged in by working with a specialized population or in a particular service environment such as correctional facilities. Future psychometric testing can examine the utility of this tool to measure fidelity.

Table 2 Peers Service Activity Domains

Promote hope
Serve as role model
Share recovery story
Help reduce isolation
Do recovery planning
Have flexible time and meeting places
Engage clients in treatment
Increase client’s participation in own illness management
Help link clients to community resources
Serve as liaison between staff and clients
Increase access to services
Run recovery groups
Focus on strengths
Provide empathy
Promote empowerment
Develop trusting relationship
Teach coping skills
Teach problem solving
Help their team focus on recover

Conclusion

Since 2004, advancements in peer support range from the development of new specializations (i.e., older adult, forensic, digital) to training, certification, country-wide reimbursement, competencies, and a fidelity assessment. Peer support is a service now provided across the globe and considered an essential service [5]. As peer support continues to evolve, it is emerging as a standard of recovery in multiple settings and empirical evidence demonstrates impact on recovery and clinical outcomes.

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Declarations

Conflict of Interest The authors have no conflicts of interest to disclose.

References

1. Solomon P. Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatr Rehabil J.* 2004;27(4):392–401. <https://doi.org/10.2975/27.2004.392.401>.
2. Chinman M, George P, Dougherty RH, Daniels AS, Ghose SS, Swift A, Delphin-Rittmon ME. Peer support services for individuals with serious mental illnesses: Assessing the evidence. *Psychiatr Serv.* 2014;65(4):429–41. <https://doi.org/10.1176/appi.ps.201300244>.
3. Fortuna KL, DiMilia PR, Lohman MC, Cotton BP, Cummings JR, Bartels SJ, Batsis JA, Pratt SI. Systematic review of the impact of behavioral health homes on cardiometabolic risk factors for adults with serious mental illness. *Psychiatr Serv (Washington, D.C.).* 2020;71(1):57–74. <https://doi.org/10.1176/appi.ps.201800563>.
4. White S, Foster R, Marks J, Morshead R, Goldsmith L, Barlow S, Gillard S. The effectiveness of one-to-one peer support in mental health services: A systematic review and meta-analysis. *BMC Psychiatry.* 2020;20(1). <https://doi.org/10.1186/s12888-020-02923-3>.
5. World Health Organization. Promoting recovery in mental health and related services. World Health Organization. 2017.
6. Mead S, Hilton D, Curtis L. Peer support: A theoretical perspective. *Psychiatr Rehabil J.* 2001;25(2):134–41. <https://doi.org/10.1037/h0095032>.
7. Cronise R, Teixeira C, Rogers ES, Harrington S. The peer support workforce: Results of a national survey. *Psychiatr Rehabil J.* 2016;39(3):211–21. <https://doi.org/10.1037/prj0000222>.
8. Daniels AS, Bergeson S, Myrick KJ. Defining peer roles and status among community health workers and peer support specialists in integrated systems of care. *Psychiatr Serv.* 2017;68(12):1296–8. <https://doi.org/10.1176/appi.ps.201600378>.
9. Kaufman BG, Reiter KL, Pink GH, Holmes GM. Medicaid expansion affects rural and urban hospitals differently. *Health Aff.* 2016;35(9):1665–72. <https://doi.org/10.1377/hlthaff.2016.0357>.
10. Salzer MS, Shear SL. Identifying consumer-provider benefits in evaluations of consumer-delivered services. *Psychiatr Rehabil J.* 2002;25(3):281–8. <https://doi.org/10.1037/h0095014>.
11. Cook JA, Copeland ME, Floyd CB, Jonikas JA, Hamilton MM, Razzano L, Boyd S. A randomized controlled trial of effects of Wellness Recovery Action Planning on depression, anxiety, and recovery. *Psychiatr Serv.* 2012;63(6):541–7. <https://doi.org/10.1176/appi.ps.201100125>.
12. Mueser KT, Meyer PS, Penn DL, Clancy R, Clancy DM, Salyers MP. The Illness Management and Recovery program: Rationale, development, and preliminary findings. *Schizophr Bull.* 2006;32(Suppl 1):S32–S43. <https://doi.org/10.1093/schbul/sbl022>.
13. Petros R, Solomon P. How adults with serious mental illness learn and use wellness recovery action plan's recovery framework. *Qual Health Res.* 2020;31(4):631–42. <https://doi.org/10.1177/1049732320975729>.

14. Myers AL, Collins-Pisano C, Ferron JC, Fortuna KL. Feasibility and preliminary effectiveness of a peer-developed and delivered program: Emotional CPR. *J Participat Med*. 2021;13(1):e25867. <https://doi.org/10.2196/25867>.
15. Fortuna KL, Storm M, Naslund JA, Chow P, Aschbrenner KA, Lohman MC, DiMilia P, Bartels SJ. Certified peer specialists and older adults with serious mental illness' perspectives of the impact of a peer-delivered and technology-supported self-management intervention. *J Nerv Ment Dis*. 2018;206(11):875–81. <https://doi.org/10.1097/NMD.0000000000000896>.
16. Fortuna KL, Aschbrenner KA, Lohman MC, Brooks J, Salzer M, Walker R, St George L, Bartels SJ. Smartphone ownership, use, and willingness to use smartphones to provide peer-delivered services: Results from a national online survey. *Psychiatry Q*. 2018;89(4):947–56. <https://doi.org/10.1007/s1126-018-9592-5>.
17. De Hert M, Cohen D, Bobes J, Cetkovich-Bakmas M, Leucht S, Ndeti DM, Newcomer JW, Uwakwe R, Asai I, Möller HJ, Gautam S, Detraux J, Correll CU. Physical illness in patients with severe mental disorders. II. Barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level. *World Psychiatr Official J World Psychiatr Assoc (WPA)*. 2011;10(2):138–51. <https://doi.org/10.1002/j.2051-5545.2011.tb00036.x>. PMID: 21633691. PMCID: PMC3104888.
18. Nicholson J, de Girolamo G, Schrank B. Editorial: Parents with mental and/or substance use disorders and their children. *Front Psych*. 2019;10:915. <https://doi.org/10.3389/fpsy.2019.00915>.
19. Druss BG, Singh M, von Esenwein SA, Glick GE, Tapscott S, Tucker SJ, Sterling EW. Peer-led self-management of general medical conditions for patients with serious mental illnesses: A randomized trial. *Psychiatr Serv*. 2018;69(5):529–35. <https://doi.org/10.1176/appi.ps.201700352>.
20. Druss BG, Zhao L, Esenwein SAV, Bona JR, Fricks L, Jenkins-Tucker S, Lorig K. The Health and Recovery Peer (HARP) Program: A peer-led intervention to improve medical self-management for persons with serious mental illness. *Schizophr Res*. 2010;118(1–3):264–70. <https://doi.org/10.1016/j.schres.2010.01.026>.
21. Kelly E, Fulginiti A, Pahwa R, Tallen L, Duan L, Brekke JS. A pilot test of a peer navigator intervention for improving the health of individuals with serious mental illness. *Community Ment Health J*. 2014;50(4):435–46. <https://doi.org/10.1007/s10597-013-9616-4>.
22. Gao N, Solomon P, Clay Z, Swarbrick P. A pilot study of wellness coaching for smoking cessation among individuals with mental illness. *J Ment Health*. 2022. <https://doi.org/10.1080/09638237.2021.1922630>.
23. Swarbrick M, Gill KJ, Prat CW. Impact of peer delivered wellness coaching. *Psychiatr Rehab J*. 2016;39(3):234–8. <https://doi.org/10.1037/prj0000187>. Epub 7 Apr 2016. PMID: 27054901.
24. Wolf J. Mental health peer support workforce designline mental health peer support workforce designline. *Peer Support*. 2020. <https://www.hca.wa.gov/assets/program/mental-health-peer-support-workforce-designline.pdf>.
25. Swarbrick M, Schmidt L. People in recovery as providers of psychiatric rehabilitation: Building on the wisdom of experience. *US Psychiatr Rehab Assoc*. 2010.
26. Katz AH, Bender EI. Self-help groups in Western society: History and prospects. *J Appl Behav Sci*. 1976;12(3):265–82. <https://doi.org/10.1177/002188637601200302>.
27. Naslund JA, Aschbrenner KA, Marsch LA, Bartels SJ. Feasibility and acceptability of facebook for health promotion among people with serious mental illness. *Digital Health*. 2016;2:205520761665482. <https://doi.org/10.1177/2055207616654822>.
28. Berry N, Lobban F, Belousov M, Emsley R, Nenadic G, Bucci S. #WhyWeTweetMH: Understanding why people use twitter to discuss mental health problems. *J Med Internet Res*. 2017;19(4): e107. <https://doi.org/10.2196/jmir.6173>.
29. Sowles SJ, Krauss MJ, Gebremedhn L, Cavazos-Rehg PA. I feel like I've hit the bottom and have no idea what to do: Supportive social networking on Reddit for individuals with a desire to quit cannabis use. *Substance Abuse*. 2017;38(4):477–82. <https://doi.org/10.1080/08897077.2017.1354956>.
30. Naslund JA, Grande SW, Aschbrenner KA, Elwyn G. Naturally occurring peer support through social media: the experiences of individuals with severe mental illness using YouTube. *PLoS One*. 2014;9(10): e110171. <https://doi.org/10.1371/journal.pone.0110171>.
31. Muralidharan A, Peeples AD, Hack SM, Fortuna KL, Klingaman EA, Stahl NF, Phalen P, Lucksted A, Goldberg RW. Peer and non-peer co-facilitation of a health and wellness intervention for adults with serious mental illness. *Psychiatry Q*. 2020. <https://doi.org/10.1007/s1126-020-09818-2>.
32. Chamberlin J. The ex-patients' movement: Where we've been and where we're going. *J Mind Behav*. 1990;11(3/4):323–36.
33. Ostrow L, Croft B. Peer respites: A research and practice agenda. *Psychiatr Serv*. 2015;66(6):638–40. <https://doi.org/10.1176/appi.ps.201400422>.

34. Pudlinski C. Contrary themes on three peer-run warm lines. *Psychiatr Rehabil J*. 2001;24(4):397–400. <https://doi.org/10.1037/h0095065>.
35. Petros R, Solomon P. Reviewing illness self-management programs: A selection guide for consumers, practitioners, and administrators. *Psychiatr Serv*. 2015;66(11):1180–1193.
36. Deegan PE. A Web application to support recovery and shared decision making in psychiatric medication clinics. *Psychiatr Rehabil J*. 2010;34(1):23–8. <https://doi.org/10.2975/34.1.2010.23.28>.
37. Department of Health and Human Services. CMS, SMDL 07–011. COVID-19 emergency declaration. 2007.
38. Salzer MS, Schwenk E, Brusilovskiy E. Certified peer specialist roles and activities: results from a national survey. *Psychiatr Serv (Washington, DC)*. 2010;61(5):520–3. <https://doi.org/10.1176/ps.2010.61.5.520>.
39. Davies K, Gray M, Butcher L. Lean on me: the potential for peer support in a non-government Australian mental health service. *Asia Pac J Soc Work Dev*. 2014;24(1–2):109–21. <https://doi.org/10.1080/02185385.2014.885213>.
40. Shalaby R, Agyapong V. Peer support in mental health: Literature review. *JMIR Ment Health*. 2020;7(6): e15572. <https://doi.org/10.2196/15572>.
41. Fortuna KL, Myers AL, Walsh D, Walker R, Mois G, Brooks JM. Strategies to increase peer support specialists' capacity to use digital technology in the era of COVID-19: Pre-post study. *JMIR Ment Health* 2020;7(7). <https://doi.org/10.2196/20429>.
42. Collins-Pisano C, Court JV, Johnson M, Mois G, Brooks J, Myers A, Muralidharan A, Storm M, Wright M, Berger N, Kasper A, Fox A, MacDonald S, Schultze, Fortuna K. Introduction to the co-production of core competencies for digital peer support: Efforts to promote consistency and standardization of best practices. Under review. *Core Competencies to Promote Consistency and Standardization of Best Practices for Digital Peer Support: Focus Group Study*. 2021 Dec 16;8(12):e30221. <https://doi.org/10.2196/30221>.
43. Mba M, Collins-Pisano C, Fortuna K. Older adult peer support specialists' age-related contributions to an integrated medical and psychiatric self-management intervention: Qualitative study of text message exchanges. *JMIR Form Res*. 2021;5(3): e22950. <https://doi.org/10.2196/22950>.
44. Fortuna KL, Naslund JA, LaCroix JM, Bianco CL, Brooks JM, Zisman-Ilani Y, Muralidharan A, Deegan P. Digital peer support mental health interventions for people with a lived experience of a serious mental illness: Systematic review. *JMIR Mental Health*. 2020;7(4): e16460. <https://doi.org/10.2196/16460>.
45. Adams WE, Lincoln AK. Forensic peer specialists: Training, employment, and lived experience. *Psychiatr Rehabil J*. 2020;43(3):189–96. <https://doi.org/10.1037/prj0000392>.
46. Whole Health Action Management (WHAM). Peer support training participant guide, published by the SAMHSAHRSA center for integrated health solutions (www.integration.samhsa.gov). 2012.
47. Peterson JL, Rintamaki LS, Brashers DE, Goldsmith DJ, Neidig JL. The forms and functions of peer social support for people living with HIV. *J Assoc Nurses AIDS Care*. 2012;23(4):294–305. <https://doi.org/10.1016/j.jana.2011.08.014>.
48. Nicolson J, Valentine A. Key informants specify core elements of peer supports for parents with serious mental illness. *Front Psych*. 2019 Mar 4. <https://doi.org/10.3389/fpsyg.2019.00106>.
49. Shepardson RL, Johnson EM, Possemato K, Arigo D, Funderburk JS. Perceived barriers and facilitators to implementation of peer support in Veterans Health Administration primary care-mental health integration settings. *Psychol Serv*. 2019;16(3):433–44. <https://doi.org/10.1037/ser0000242>.
50. Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications. *JAMA Psychiatr*. 2015;72(4):334. <https://doi.org/10.1001/jamapsychiatry.2014.2502>.
51. Rodgers M, Dalton J, Harden M, Street A, Parker G, Eastwood A. Integrated care to address the physical health needs of people with severe mental illness: A mapping review of the recent evidence on barriers, facilitators and evaluations. *Int J Integr Care*. 2018;18(1):9. <https://doi.org/10.5334/ijic.2605>.
52. O'Hara K, Stefancic A, Cabassa LJ. Developing a peer-based healthy lifestyle program for people with serious mental illness in supportive housing. *Transl Behav Med*. 2017;7(4):793–803. <https://doi.org/10.1007/s13142-016-0457-x>.
53. Mpango R, Kalha J, Shamba D, Ramesh M, Ngakongwa F, Kulkarni A, Korde P, Nakku J, Ryan GK. Challenges to peer support in low- and middle-income countries during COVID-19. *Glob Health*. 2020;16(1):90. <https://doi.org/10.1186/s12992-020-00622-y>.
54. Rotondi AJ, Haas GL, Anderson CM, Newhill CE, Spring MB, Ganguli R, Rosenstock JB. A clinical trial to test the feasibility of a telehealth psychoeducational intervention for

- persons with schizophrenia and their families: Intervention and 3-Month findings. *Rehabil Psychol*. 2005;50(4):325–36. <https://doi.org/10.1037/0090-5550.50.4.325>.
55. Wu AW, Connors C, Everly GS Jr. COVID-19: Peer support and crisis communication strategies to promote institutional resilience. *Ann Intern Med*. 2020;172(12):822–3. <https://doi.org/10.7326/M20-1236>.
 56. Pierce M, Hope H, Ford T, Hatch S, Hotopf M, John A, Abel KM. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatr*. 2020. [https://doi.org/10.1016/s2215-0366\(20\)30308-4](https://doi.org/10.1016/s2215-0366(20)30308-4).
 57. Johnston A. Prevention is better than the cure: Getting privacy compliance right is essential practice management. *Aust J Gen Pract*. 2019;48(1–2):17–21. <https://doi.org/10.31128/AJGP-09-18-4702>.
 58. Myrick K, del Vecchio P. Peer support services in the behavioral healthcare workforce: State of the field. *Psychiatr Rehabil J*. 2016;39(3):197–203.
 59. Shah M, Heisler M, Davis M. Community health workers and the patient protection and affordable care act: An opportunity for a research, advocacy, and policy agenda. *J Health Care Poor Underserved*. 2014;25(1):17–24. <https://doi.org/10.1353/hpu.2014.0019>.
 60. Sarason IG, Levine HM, Basham RB et al. Assessing social support: The Social Support Questionnaire. *J Pers Soc Psychol*. 1983;44:127–39.
 61. Borkman T. (1999). *Understanding self-help/mutual aid: experiential learning in the commons*. Rutgers University Press.
 62. Skovholt TM. The client as helper: A means to promote psychological growth. *Couns Psychol*. 1974;4(3):58–64. <https://doi.org/10.1177/001100007400400308>.
 63. Bandura A. Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior*. New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998). 1994;4:71–81. <https://doi.org/10.1037/prj0000392>.
 64. Festinger L. A theory of social comparison processes. *Hum Relat*. 1954;7(2):117–40. <https://doi.org/10.1177/001872675400700202>.
 65. Fortuna KL, Brooks JM, Umucu E, Walker R, Chow PI. Peer support: A human factor to enhance engagement in digital health behavior change interventions. *J Technol Behav MSci*. 2019. <https://doi.org/10.1007/s41347-019-00105-x>.
 66. Deci EL, Ryan RM. *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum. 1985.
 67. Deegan P. Recovery and empowerment for people with psychiatric disabilities. *Soc Work Health Care*. 2006;25(3):11–24.
 68. Linhorst D. *Empowering people with severe mental illness: A practical guide*. New York: Oxford University Press. 2006.
 69. Davidson L, Bellamy C, Guy K, Miller R. Peer support among persons with severe mental illnesses: a review of evidence and experience. *World Psychiatr*. 2012;11(2):123–8. <https://doi.org/10.1016/j.wpsyc.2012.05.009>.
 70. Fuhr D, Salisbury TT, DeSilva M, Auf N, Van Gmneken N, Rahman A, Patel V. Effectiveness of peer-delivered interventions for severe mental illness and depression on clinical and psychosocial outcomes. A systematic review and meta-analysis. *Soc Psychiatry Psychiatr Epidemiol*. 2014;49:1691–702.
 71. Lloyd-Evans B, Mayo-Wilson E, Harrison B, Istead H, Brown E, Pilling S, Kendall, T. A systematic review and meta-analysis of randomized controlled trials of peer support for people with severe mental illness. *BMC Psychiatr*. 2014;14:39.
 72. Repper J, Carter T. A review of the literature on peer support in mental health services. *J Ment Health*. 2011;20:382–411.
 73. Rogers E, Farkas M, Anthony W, Kash M, Maro, M. *Systematic review of peer delivered services literature 1989–2009*. Boston, MA Center for Psychiatric Rehabilitation, Boston University. 2009.
 74. Vally Z, Abrahams L. The effectiveness of peer-delivered services in the management of mental health conditions: A meta-analysis of studies from low and middle-income countries. *Int J Adv Couns*. 2016;38:330–44.
 75. Chinman M, McCarthy S, Mitchell-Miland C, Daniels K, Youk A, Edelen M. Early stages of development of a peer specialist fidelity measure. *Psychiatr Rehabil J*. 2016;39(3):256–65. <https://doi.org/10.1037/prj0000209>.
 76. Substance Abuse and Mental Health Services Administration. Value of peers. 2017. Available at: https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacsvalue-of-peers-2017.pdf.
 77. CARF International. Peer Support. 2014. Available at: <http://bookstore.carf.org/product/INT-3520.18-25.html>.
 78. SAMHSA. Core Competencies for Peer Workers in Behavioral Health Services. 2015. https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacsvcore-competencies_508_12_13_18.pdf

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