# Best Practices in Tele-Teaming: Managing Virtual Teams in the Delivery of Care in Telepsychiatry

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## Abstract

**Purpose of the Review** To review and organize best practices around management of virtual teams for psychiatrists working in team-based telepsychiatry services.

**Recent Findings** An early but evolving literature in telepsychiatric team-based care is beginning to examine the importance of team function. Psychiatrists will increasingly have opportunities to engage in team-based telepsychiatry in evolving models that improve outcomes, enhance quality, and expand access to behavioral health treatments. While the literature is limited in psychiatry and medicine on virtual teams, there is a growing literature from applied psychology and business. This article synthesizes these findings along with lessons learned from the field to provide recommendations for psychiatrists involved in team-based telepsychiatry.

**Summary** Providing this type of care involves mastering the management of virtual teams. Psychiatrists are well positioned to play a distinctive and central leadership role for team-based telepsychiatry.

**Keywords** Telepsychiatry · Virtual teams · Best practices · Team-based care · Mental health · Psychiatry

## Introduction

Telepsychiatry use, in the form of live interactive videoconferencing, within psychiatry continues to grow becoming an increasingly common method of delivering treatment. Deployed in care for over half a century, telepsychiatry has demonstrated its ability to increase access and quality of care with effectiveness equal to in-person treatments [1••, 2••, 3]. Its use has continued to evolve shaped by pressures the field of

psychiatry is currently facing involving challenges in health care system financing, mental health workforce adequacy, and societal mental health needs. In response to these trends, telepsychiatry services increasingly are providing team-based care shifting from models of care centered on individual providers such as psychiatric pharmacological management [4].

Opportunities are expanding for psychiatrists to be involved in team-based telepsychiatric services in a range of roles, from administrative to direct care provision. There is heightening recognition of the need to attend to hybrid patient-provider relationships in an era of technology-facilitated health care. Hybrid patient-provider relationships describe the management of relationships in a variety of mediums/settings from in-person to videoconferencing, telephone, email, patient-portals, text-based applications, and other technologies [5••, 6]. An extensive literature has demonstrated the criticality of the provider-patient relationship on treatment outcomes especially in mental health [7, 8]. Hybrid relationships are not limited to the provider-patient dyad and are particularly relevant to telepsychiatry team-based care where teams are often composed of members in separate locations with team work occurring across virtual space. The ability of a telepsychiatry team to work effectively

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in virtual/hybrid environments has significant implications for treatment outcomes. Current telepsychiatry practice requires the psychiatrist to be aware of issues impacting virtual team dynamics and how to manage and provide leadership to different configurations of virtual treatment teams. Unfortunately there is a paucity of training and limited guidance from the literature in this area.

This article's purpose is to review and organize current best practices around management of virtual teams for psychiatrists working in team-based telepsychiatry services. It begins with a brief historical overview of the development of team-based telepsychiatry. Different models of team-based telepsychiatry are defined and common features across these models described. It presents lessons learned from research on virtual teams. It closes with recommendations for psychiatrists involved in telepsychiatry team-based care drawing from current evidence and guidance from the field.

## Definitions: Telepsychiatry, Hybrid Relationships, Virtual Teams, and Tele-Teaming

It is important to provide clear definitions when discussing technology in medicine, an area often replete with overlapping and unclear terms. An article reviewing terminology in telehealth found 104 terms used in the scientific literature describing technology in health care [9]. This article will define telepsychiatry as live interactive video conferencing and when discussing other technologies (e.g., email, telephone, electronic health records (EHRs), patient-portals, mobile devices) will specifically indicate these. Hybrid relationships in the context of technologies in health care have previously been defined in the introduction. Virtual teams refer to health care teams working together through a range of communication technologies (e.g., videoconferencing, email, phone/mobile, EHRs). "Tele-teaming" is a term to describe the process of team-based health care delivery in telepsychiatry services [10]. Team-based care in telepsychiatry in this article denotes clinical care delivered to patients using a team, frequently interdisciplinary, of providers and administrative staff. This differs from general telepsychiatry services where care provision is often limited to treatment rendered by a single psychiatric provider with staff located on the patient side whose role is limited to logistic management (e.g., scheduling) or focal help with the examination of the patient ("tele-presenters").

## Maturation of Telepsychiatry Treatments

Medical care at a distance long proceeded modern telecommunications technologies with a myriad of historical examples from medieval city plague quarantines communicated through warning smoke signals [11] to letters between asylum-based psychiatrists and patients' families in the nineteenth century [12]. Telepsychiatry began in the late 1950s with early work consisting of government-sponsored feasibility pilots. The microprocessor revolution and the birth of the internet in the 1990s catalyzed telepsychiatry's move beyond feasibility pilots to sustainable programs starting in larger institutions in the early 2000s. Web-based videoconferencing, enabling the increased portability of videoconferencing, heralded a second wave of widespread dissemination and adaptation in large institutions along with smaller organizations and individual practices [4]. The general evidence base for telepsychiatry also developed in parallel starting with program descriptions of feasibility moving to a series of randomized controlled trials (RCT) supporting telepsychiatry's clinical effectiveness in comparison with in person treatment [4]. Despite its growing ubiquity in psychiatric practice, telepsychiatry continues to be conceptualized as a specific form of care delivery rather than a tool/technology/medium for the delivery of care. This conceptualization is driven by the administrative, regulatory, financing, and process considerations involved in successfully implementing telepsychiatry.

Earlier telepsychiatry delivery models (prior mid-2000s) worked to replicate in-person models of care. Predominant in these were consultative and psycho-pharmacology services driven by reimbursement incentives. In the 2000s, team-based care models of telepsychiatry began to emerge from evolving models of in-person team-based care in psychiatry such as integrated care [4]. Telepsychiatry, in some programs, has now began to move beyond replicating in-person treatment models to enabling new models/configurations of care through its abilities to bring together teams across distance, alter timing of care delivery (synchronous and ansynchronous), and restructure clinical work flow and processes. The trend has been facilitated by the addition of other technologies (e.g., email, EHRS, patient registries) to telepsychiatry services increasing choices for how clinical work is configured and performed. Figure 1 illustrates the historical development of models of telepsychiatric care showing the major trends in the context of general timeframes of other technologies' widespread adoption in medicine.

This shift in telepsychiatry has been driven not only by technology development but also by wider pressures in psychiatry and health care. From a public health perspective, there is a growing recognition of psychiatry's workforce challenges driven by mental health service needs, an aging workforce, and urban/rural workforce distribution disparities [4]. Team-based telepsychiatry serves as a workforce multiplier by allowing psychiatrists to cover a wider number of patients through team-based care models [13]. These models and the psychiatrists who work in them often attempt to balance attention between individual patient care and population health approaches [13–16]. By shifting activities from direct patient

**Fig. 1** Evolution of telepsychiatry practice models
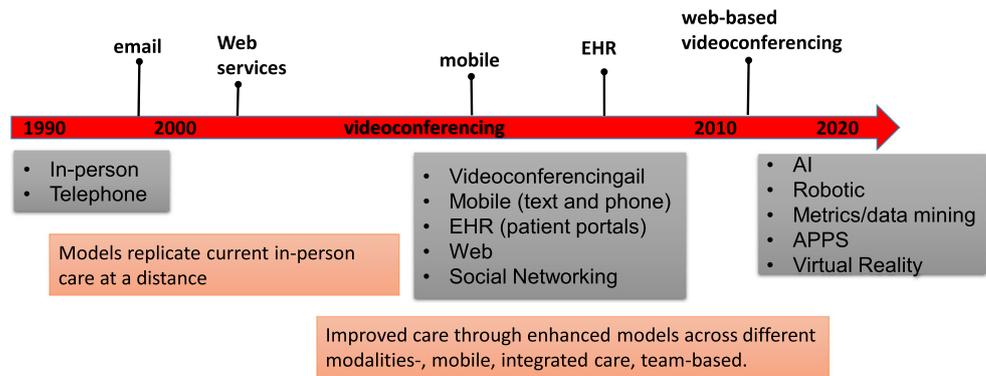


care and assessment to supervision, education and consultation telepsychiatrists move along a fulcrum from individual patient care to population management. Population based models of telepsychiatric integrated care have demonstrated improvement in individual and population health while decreasing overall costs. Cost reductions are created through medical cost savings as patients with mental health diagnoses receive better targeted care and experience decreased hospitalizations and increased compliance [13, 15].

Telepsychiatric team models are limited by the funding and resources available to support them. Traditional psychiatric reimbursement has been heavily geared towards pharmacological services favoring telepsychiatry commercial services that provide "doc in the box" services over team-based approaches to care, "tele-teaming" [12]. Recent developments in federal funding have begun to acknowledge the value of team-based care models with the Centers for Medicare and Medicaid Services creating reimbursement for integrated care in 2018 [17].

Future trends in telepsychiatry will continue to see the growth of these team-based approaches driven by the need to increase access to treatments, address workforce issues, and manage health care costs as well as the benefits of the more holistic, coordinated approach to care that working in teams can provide.

## Team Based Models of Care in Telepsychiatry

There are a growing number of models of team-based telepsychiatric care. Models include those composed of teams providing specific multi-person treatments/therapy such as family and group therapy or community-based treatments. A variety of models use direct care or consultation in a range of settings encompassing primary care, correctional institutions, inpatient units, residential treatment programs, and emergency departments. These often involve clinicians at both ends with additional site administrative support staff. Primary care telepsychiatry draws on integrated care models, employing multiple technologies to care for defined groups and panels

of patients. Many large health systems are moving to virtualizing services, with psychiatry supplied as a subset of a multi-disciplinary virtual offering. Team-based models are being executed in a variety of settings that can be broadly grouped into facility-based telepsychiatry, outpatient telepsychiatry, and telepsychiatry for specifically defined settings.

Facility-based settings have a distant provider virtually joining an inpatient psychiatric or psychiatric residential facility (e.g., residential substance use treatment) treatment team. The telepsychiatrist works with the on-site team to provide administrative and clinical team leadership, assessments, treatment, management, and treatment planning. In 2008, Holden and colleagues described telepsychiatry into a rural inpatient gero-psychiatric unit in southeastern Oklahoma. The psychiatrist provided 40-h a week services performing the same services as they would have in person working with on-site inpatient team of nurses, case managers, and social work and administrative staff. A Patient/Family Satisfaction Survey was administered pre- and post-telemedicine services with the post-telemedicine survey showing higher satisfaction by patient and family for use of telemedicine than that of the on-site visits [18]. There are also several unpublished examples that include larger psychiatric care systems using telepsychiatry to staff inpatient facilities as well as residential substance use treatment facilities.

Integrated care telepsychiatry services are the most prevalent examples of tele-teaming in outpatient settings. These models have various configurations of psychiatrists working virtually with primary care teams, with many models utilizing a patient site-located embedded mental health specialists such as a psychologist and/or social worker [13–16, 19]. The overall goal of these services is to provide a team-based approach to mental health within primary care by supporting and guiding primary care teams in the screening, assessment, and provision of treatment. A wide variety of models have been described with various team compositions and configuration. Fortney and colleagues tested within the VA, Telemedicine Outreach for PTSD (TOP). The model consisted of off-site-specialized PTSD care teams located at VA medical centers

supporting patient site community-based outpatient rural VA clinics. The off-site PTSD care teams consist of telephone nurse care managers, telephone pharmacists, telepsychologists, and telepsychiatrists. In this model, nurses conduct care management, pharmacists review medication histories, psychologists deliver cognitive processing therapy and psychiatrists supervise the team and conduct psychiatric consultations [14]. A group at UC Davis has created a system and workflow for asynchronous telepsychiatry to provide psychiatric consultations into primary care. In this system patients in primary care clinics receive a 30- to 60-min video recorded assessment by a trained interviewer which is then uploaded along with other patient data to a web-based information management program. A psychiatrist then reviews the uploaded data and provides a psychiatric formulation and treatment recommendations that are transmitted back to the primary care team for implementation with follow-up phone and email support from the psychiatrist as needed [20]. They have demonstrated this method to be a reliable and effective means to provide integrated care utilizing asynchronous team communication and processes.

The literature has numbers of other examples of tele-teaming that have evolved for specific service settings and defined populations. Prison/jail-based telepsychiatry is a long-standing example of system level tele-teaming. While many of these services focus on pharmacological management, they have often used team-based approaches with psychiatrists working with on-site social workers, therapists, and primary care providers [20]. The growing deployment of telepsychiatry in hospital emergency departments (EDs) has yielded several different models from one-time consultations to virtual teams of psychiatrists, social workers, and administrative staff supporting psychiatric triage and treatment with the context of the ED setting [21–23].

These virtual team based models share several important common characteristics. By definition they all feature a virtual/remote psychiatrist/psychiatric provider interfacing with an on-site team consisting of various mental health and medical providers, case managers, and administrative staff. Specific team composition is highly variable by service and can include other virtual team members. Although videoconferencing is the mechanism of psychiatric service delivery, team communication, coordination, and collaboration occur as a range of technologies including video-conferencing, telephone, EHRs, patient-portals, email, and mobile- and web-enabled medical platforms.

## Virtual Teaming: State of the Evidence

The literature is silent around virtual teaming in telepsychiatry, although there is some anecdotal and indirect information that begins helping to inform this area. There is a large and important literature linking therapeutic alliance with treatment outcomes in mental health across conditions, settings, and types of treatments [8]. A systematic review of RCTs demonstrated the primacy of the physician-patient relationships showing significant impact on outcomes [7]. A recent narrative review and synthesis of the literature proffered three core elements of patient-centered care: (1) patient participation and involvement, (2) relationship between the patient and the healthcare professional, and (3) context where care is delivered [24]. Although studies have shown equal effectiveness in outcomes for telepsychiatry when compared to in-person treatment, clinical processes and patient alliance are impacted [2••]. There is a growing recognition of the need to attend to and manage patient relationships across a range of mediums and technologies [5••, 6]. Multiple factors affect provider-patient process and communication in both video conferencing and other technologies altering the timing, medium, and nature the communication. Alliance and communication is further affected by the backgrounds, previous experiences, and environments of the psychiatrist and the patient [25]. For example, patients with trauma histories maybe more comfortable with videoconferencing vs. in-person treatment due to increased feelings of privacy, safety, and control in a clinical session [26]. Attuned telepsychiatrists work to manage hybrid relationships adapting clinical processes and communication tailored to specific patients [5••, 6].

In team-based telepsychiatry, the patient-provider relationship may be held by multiple members of a team. Even when there is a designated team member who has the majority of interactions with a patient, they are communicating the overall team's plans for care. Arguably, a team's dynamic, communication, and functioning has the potential to either positively or negatively impact a patient's care and treatment experience. This is further complicated not only by a team's background (composition, environment, individual team member backgrounds) but also by the technologies by which the team is interacting with the patient and each other.

While there is scant literature in psychiatry or medicine to illuminate the impact of tele-teaming on the patient-provider relationship, patient experience, or clinical outcomes, there is a growing literature on virtual teaming in the fields of applied psychology and the business [27–33]. Caution is warranted when drawing inferences for telepsychiatry given the differing content and significant limitations within these literatures [28]. Overarching themes of this literature comprise (1) continued rapid growth and deployment of virtual teams across fields, (2) evolution of studies from initialing examining in-person vs. virtual teams to strengths and challenges in virtual teaming, (3) delineation of best practices for virtual teams, (4) impact of organization and process on virtual teams, and (5) shortcomings of research including controversies around generalization of findings from in vitro vs. in vivo research [27–33]. More pragmatic perspectives in this area involve a

host of recommended best practices for virtual teaming that can be found on the web and in the mass market business literature including "Virtual Teams for Dummies" [30, 32–34]. A re-occurring theme across these sources is that best practices for in-person team management apply to virtual teams but often require further adaption to a virtual environment.

Drawing from literature on virtual team management, telepsychiatry as well as this author's cumulated experience in virtual teaming through clinical practice, administrative work, and discussion/interactions with colleagues engaged in this work nationally, presented below are initial recommendations for best practices in tele-teaming in telepsychiatry.

## Recommended Best Practices for Tele-Teaming in Telepsychiatry

### Team Composition and Culture

1. Think broadly and strategically about team member selection and composition. The type of clinical service will have significant influence on the clinical providers on the team (e.g., psychiatry, social work, psychology, nurse practitioners) and mix of expertise/specialization (e.g., general psychiatry, addiction, medicine, case management). In addition to providers selecting what administrative staff (e.g., schedulers, IT support, remote presenters, program managers) will be a part of, the core team is important. At times, administrative staff may not be part of a core telepsychiatry team but rather part of the larger services in which telepsychiatry is embedded. For example, a scheduler for an outpatient mental health clinic that has a telepsychiatry component may work with both telepsychiatry and in-person teams. Being clear about teams members roles, responsibilities, and expectations is critical, more so for those team members working across teams and services.
2. Diversify telepsychiatry team membership. Diversity of backgrounds of team members, including professional background, gender, age, and culture, enhances overall team knowledge and ability to service a broader range of patients, settings, and conditions. Having representation from team members located at the patient site and members of the patient site's organization, local cultural groups, and communities, instills important local knowledge and competence to the team. Illustrating this are telehealth services targeting rural American Indian veterans with posttraumatic stress disorder, which employ telehealth facilitators at the patient site who are rural American Indian veterans [35].
3. Balance the team composition between virtual and in-person/patient site team membership. Telepsychiatry tele-teams by their nature have both virtual/remote team members and team members located at the patient site. Often teams are heavily weighted with remote providers and patient site administrative staff. As clinical models, resources, and staffing allows attempting to achieve a degree of balance between virtual and in-person team members and member roles is desirable.
4. Foster shared team culture. Team culture is a result of team composition, setting, team communication, and team leadership (discussed below). Core team principles should be clearly articulated. In addition to inculcating the program mission and values, general principles valuable across all telepsychiatry services include the following:

   - Positive team dynamics, cultural, and communication are the responsibility of all team members
   - Value diversity (e.g., background, profession, remote/in-person) within the team
   - Adherence to core mission and values while fostering tactical flexibility to achieve team goals

Ongoing team building activities including regular team meetings, team socializing, and ongoing re-occurring in-person site visits (recommended at least quarterly for the initial stages of a services) to develop a team culture.

### Team Communication

1. Clearly define processes and methods for team communications and interactions. Guidelines in telepsychiatry [36] address the importance of having written protocols and procedures for telepsychiatry services. When developing protocols focusing on the both process (e.g., team meetings, treatment planning, 1:1,) and methods of communication including timing (synchronous/asynchronous) and median (Video, EHR, telephone, email, communications, scheduling procedures) provides guidance to team members, the "when, who and how," on team communications.
2. Attend to roles and responsibilities of interfacing with patients. It is also important to define roles and responsibilities of different team members for interfacing with patients. These include, who is doing the communication, the timing and the median of communication. Without a consistent team process the risk of miscommunication increases especially if the patient is receiving multiple communications from different team members.
3. Nurture an iterative approach to refining team communication. Teams should periodically discuss team communication processes and effectiveness and refine processes and methods to continue to enhance communication among the team.

**Table 1**   Recommend best practices for tele-teaming in telepsychiatry

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1. Think broadly and strategically about team member selection and composition
2. Diversify telepsychiatry team membership
3. Balance the team composition between virtual and in-person/patient site team membership
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Psychiatric Leadership in Tele-Teaming
1. Utilize a robust but egalitarian and supportive leadership style
2. Understand and disseminate best practices to the team
3. Challenges in team dynamics may not be your responsibility but they are your problem
4. Model the cultivating of relationships within hybrid settings

## Psychiatric Leadership in Tele-Teaming

1. Utilize a robust but egalitarian and supportive leadership style. Psychiatrist through the nature of their training, prominent role in telebehavioral health services, physician leadership and clinical experience are in a unique position to serve important leadership functions in tele-teaming. A leadership style that allows a psychiatrist to direct the telepsychiatric team while building a collaborative interdisciplinary approach can be a challenging balance to achieve. Familiarity with complex adaptive leadership [37••] can aid a psychiatrist in developing an appreciation of the value of role shifting within a team, changing one's role to fit with current team function. To be a successful tele-team leader, a psychiatrist must be able to be both non-hierarchal and consensus building without ceding central leadership roles and responsibilities.

2. Understand and disseminate best practices to the team. Psychiatrists should be familiar with both the best practice in telepsychiatry as well as the specific clinical setting and models in which they are working. They should work to help other team members become aware of and implement these.

3. Challenges in team dynamics may not be your responsibility but they are your problem. Psychiatric leadership needs to be monitoring team dynamics and communication. When significant issues arise, regardless of fault or direct involvement, psychiatrists should be prepared to lead the team into proactively problem-solving of these issues.

4. Model the cultivating of relationships within hybrid settings. Psychiatrists can play a vital role in demonstrating by example how to successfully cultivate hybrid relationships among the team and with patients. Best practices include proactive communication and relationships building, working to build relationships with virtual teammates through official as well as unofficial communication. Examples of this include acknowledging important events (e.g., team anniversaries), making sure some communication occurs synchronously and in real time with team members, expressing interest in events/activities occurring at the patient site, and seeking clarification when communication appears unclear.

## Conclusion

As telepsychiatry continues to expand across organizations and settings its use in team-based care will as well. Psychiatrist will increasingly have opportunities to engage in tele-teaming telepsychiatry enriching their professional growth thru participating in evolving models of care that improve outcomes, enhance quality, and expand access to behavioral health treatments. Providing telepsychiatry involves mastering the management of hybrid relationships with individual patients as well as teams. Hybrid relationship management has significant implications for both direct patient care but also team dynamics, with psychiatrists positioned to play a distinctive and fundamental leadership role in this area. A nascent but evolving literature in telepsychiatric team-based models of care is beginning to attend to the importance of team function within a larger general literature on virtual teams. More research with detailed focus on tele-teaming and virtual teams is required for the successful continued evolution of these models of care. The best practices proffered here, summarized in Table 1, are preliminary and drawn from the relatively early experiences of this field but are intended to provide initial guidance and framework for psychiatrists working with or hoping to work with virtual teams in the provision of telepsychiatry.

## Compliance with Ethical Standards

# References

Papers of particular interest, published recently, have been highlighted as:

•• Of major importance

1.•• Hubley S, Lynch SB, Schneck C, Thomas M, Shore J. Review of key telepsychiatry outcomes. World J Psychiatry. 2016;6(2):269. **Recent review, summarizing outcomes to date in telepsychiatry across a range of domains.**

2.•• Bashshur RL, Shannon GW, Bashshur N, Yellowlees PM. The empirical evidence for telemedicine interventions in mental disorders. Telemed e-Health. 2016;22(2):87–113. **Recent review article looking at level of evidence for telepsychiatry.**

3. Hilty D, Yellowlees PM, Parrish MB, Chan S. Telepsychiatry: effective, evidence-based, and at a tipping point in health care delivery? Psychiatr Clin. 2015;38(3):559–92.

4. Shore J. The evolution and history of telepsychiatry and its impact on psychiatric care: current implications for psychiatrists and psychiatric organizations. Int Rev Psychiatry. 2015;27(6):469–75.

5.•• Yellowlees P, Shore JH. Telepsychiatry and health technologies: a guide for mental health professionals. American Psychiatric Pub, 2018. **Textbook summarizing and providing guidance for the use of telepsychiatry and technologies in psychiatric practice.**

6. Yellowlees P, Richard Chan S, Burke Parish M. The hybrid doctor–patient relationship in the age of technology–Telepsychiatry consultations and the use of virtual space. Int Rev Psychiatry. 2015;27(6):476–89.

7. Kelley JM, Kraft-Todd G, Schapira L, Kossowsky J, Riess H. The influence of the patient-clinician relationship on healthcare outcomes: a systematic review and meta-analysis of randomized controlled trials. PLoS One. 2014;9(4):e94207.

8. Krupnick JL, Sotsky SM, Elkin I, Simmens S, Moyer J, Watkins J, et al. The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: findings in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. Focus. 2006;64(2):532–277.

9. Sood S, et al. What is telemedicine? A collection of 104 peer-reviewed perspectives and theoretical underpinnings. Telemed e-Health. 2007;13(5):573–90.

10. Shore J 'Doc in a box' vs.'tele-teaming': contending models of telepsychiatric care. Clinical Psychiatric News 2016.

11. Amadi-Obi A, Gilligan P, Owens N, O'Donnell C. Telemedicine in pre-hospital care: a review of telemedicine applications in the pre-hospital environment. Int J Emerg Med. 2014;7(1):29.

12. Wannell L. Patients' relatives and psychiatric doctors: letter writing in the York retreat, 1875–1910. Social History Med. 2007;20(2):297–313.

13. Hilty DM, Rabinowitz T, McCarron RM, Katzelnick DJ, Chang T, Bauer AM, et al. An update on telepsychiatry and how it can leverage collaborative, stepped, and integrated services to primary care. Psychosomatics. 2018;59(3):227–50.

14. Fortney JC, Pyne JM, Kimbrell TA, Hudson TJ, Robinson DE, Schneider R, et al. Telemedicine-based collaborative care for post-traumatic stress disorder: a randomized clinical trial. JAMA Psychiatry. 2015;72(1):58–67.

15. Pyne JM, Fortney JC, Mouden S, Lu L, Hudson TJ, Mittal D. Cost-effectiveness of on-site versus off-site collaborative care for depression in rural FQHCs. Psychiatr Serv. 2015;66(5):491–9.

16. Adaji A, Fortney J. Telepsychiatry in integrated care settings. Focus. 2017;15(3):257–63.

17. AIMS Center. Cheat sheet on Medicare payments for behavioral health integration services. (https://aims.uw.edu/resource-library/cms-collaborative-care-payment-cheat-sheet). Accessed 12.12. 2018.

18. Holden D, Dew E. Telemedicine in a rural gero-psychiatric inpatient unit: comparison of perception/satisfaction to onsite psychiatric care. Telemed e-Health. 2008;14(4):381–4.

19. Waugh M, Calderone J, Brown Levey S, Lyon C, Thomas M, DeGruy F, Shore JH. Using Telepsychiatry to enrich existing integrated primary care. Telemed e-Health. 2018.

20. Sales CP, McSweeney L, Saleem Y, Khalifa N. The use of telepsychiatry within forensic practice: a literature review on the use of videolink–a ten-year follow-up. J Forensic Psychiatry Psychol. 2018;29(3):387–402.

21. Shore JH, Hilty DM, Yellowlees P. Emergency management guidelines for telepsychiatry. Gen Hosp Psychiatry. 2007;29(3):199–206.

22. Yellowlees P, Burke MM, Marks SL, Hilty DM, Shore JH. Emergency telepsychiatry. J Telemed Telecare. 2008;14(6):277–81.

23. Narasimhan M, Druss BG, Hockenberry JM, Royer J, Weiss P, Glick G, et al. Impact of a telepsychiatry program at emergency departments statewide on the quality, utilization, and costs of mental health services. Psychiatr Serv. 2015;66(11):1167–72.

24. Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. J Adv Nurs. 2013;69(1):4–15.

25. Shore JH, Savin DM, Novins D, Manson SM. Cultural aspects of telepsychiatry. J Telemed Telecare. 2006;12(3):116–21.

26. Shore JH, Manson SM. Telepsychiatric care of American Indian veterans with post-traumatic stress disorder: bridging gaps in geography, organizations, and culture. Telemed J e-Health. 2004;10(Supplement 2):S-64–9.

27. Hoch JE, Kozlowski SW. Leading virtual teams: hierarchical leadership, structural supports, and shared team leadership. J Appl Psychol. 2014;99(3):390–403.

28. Purvanova RK. Face-to-face versus virtual teams: what have we really learned? Psychol-Manag J. 2014;17(1):2–29.

29. Krumm S, Kanthak J, Hartmann K, Hertel G. What does it take to be a virtual team player? The knowledge, skills, abilities, and other characteristics required in virtual teams. Hum Perform. 2016;29(2):123–42.

30. Watkins M Making virtual teams work: ten basic principles. Harv Bus Rev 2013.

31. Gilson LL, Maynard MT, Jones Young NC, Vartiainen M, Hakonen M. Virtual teams research: 10 years, 10 themes, and 10 opportunities. J Manag. 2015;41(5):1313–37.

32. Dargin S Top 6 best practices for managing virtual teams. (http://wwwcorpedgroupcom/resources/pm/6BestPracticesMVTasp) Accessed 12.6.18.

33. Hambley LA, O'Neill TA, Kline TJ. Virtual team leadership: the effects of leadership style and communication medium on team interaction styles and outcomes. Organ Behav Hum Decis Process. 2007;103(1):1–20.

34. Powers T Virtual teams for dummies. Wiley. 2018.

35. Shore J, Kaufmann LJ, Brooks E, Bair B, Dailey N, Richardson WB Jr, et al. Review of American Indian veteran telemental health. Telemed e-Health. 2012;18(2):87–94.

36. Shore JH, Yellowlees P, Caudill R, Johnston B, Turvey C, Mishkind M, et al. Best practices in videoconferencing-based telemental health April 2018. Telemed e-Health. 2018;24(11):827–32.

37.•• Lichtenstein BB, Uhl-Bien M, Marion R, Seers A, Orton JD, Schreiber C. Complexity leadership theory: an interactive perspective on leading in complex adaptive systems. Publ Emerg: Complexity and Organization. 2006;8(4):2–12. **Seminal article on managing in complex organizations and systems.**

38. Yellowlees PM, Odor A, Parish MB, Iosif AM, Haught K, Hilty D. A feasibility study of the use of asynchronous telepsychiatry for psychiatric consultations. Psychiatr Serv. 2010;61(8):838–40.