

Proposed Competencies for Providing Integrated Care via Telepsychiatry

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Telepsychiatry is recognized for its potential to bridge gaps in access to specialist healthcare (Deslich et al. 2013; Hilty et al. 2013; McGinty et al. 2006; Simpson et al. 2001). However, there are limits in the ability of telepsychiatry to address the magnitude of need. When telepsychiatry is used as a mode of traditional consultation, in other words, one consultant to one patient, services can quickly be saturated and accrue unmanageable waitlists. Such models also miss opportunities to develop further capacity to manage mental illness within primary care in distal communities.

Integrated care models can also increase availability of high quality mental health care in the primary care setting and improve short- and long-term patient outcomes, including symptoms, functioning, and quality of life (Kates et al. 2011). Such programs vary in degree of integration along a spectrum including co-located, consultation-liaison, or collaborative care/chronic care models, with the latter being the most robustly evidenced to improve clinical outcomes and cost effectiveness of care (APA-APM 2016). It is thought that the most essential elements of the more comprehensive collaborative care interventions are: (1) evidence-based care, (2)

team-based care, (3) measurement-based treatment to target, and (4) population-based care (APA-APM 2016; Raney and American Psychiatric Association 2015).

Additional capacity and access can be created by using telepsychiatry to create integrated care teams when resources to build a team, particularly specialists, are not locally available. Emerging evidence supports the utility of televideo-based communication to effectively achieve collaborative care (Fortney et al. 2013; Fortney et al. 2015). To harness this synergy, integrated care team members including psychiatrists will require competencies to practice in evidence based integrated care models via a team at a distance.

These competencies will need to span those necessary for integrated care *and* those necessary for the effective use of telemedicine. Recent scholarship has identified the competencies necessary for telepsychiatry across stages of learning and practice (Hilty et al. 2015; Crawford et al. 2016) and curricular approaches to attaining them (Sunderji et al. 2015). Similarly, competencies for psychiatrists to practice integrated care have been identified. Sunderji et al. (2016) mapped 40 knowledge, skill, and attitude domains through expert consensus. Generalism or the clinical expertise to manage a broad range of mental health and addiction presentations across the lifespan seen in primary care was an important skillset, as were the interpersonal, attitudinal, and communication abilities that enable psychiatrists to build trusting working relationships. These relationships are the foundation that allows the collaborative co-management of complex patients and attendant risk management and additionally foster knowledge exchange, resulting in capacity building across the team. More advanced competencies include program consultation, quality improvement, and the ability to advocate for and implement higher degrees of integration (e.g., the collaborative care model) and to situate one's work in an interprofessional, organizational, and health system context (Sunderji and Jokic 2015).

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Table 1 Individual practitioner competencies

Area or topic	Competent/ proficient	Expert	Evaluation methods
Collaborative models of care	<ul style="list-style-type: none"> Knows the key components of integrated care models along the spectrum, the evidence in this area and its limitations 	<ul style="list-style-type: none"> Practices an evidence-informed integrated care approach adapted to context (e.g., population served, resources available); advocates for implementation of effective models Integrates indirect care (e.g., case, chart, or caseload review) into practice Engages providers to clarify questions and needs 	<p>Written assignments</p> <p>Observation of clinical practice (real and simulation), including direct and indirect care</p>
Interprofessional team work	<ul style="list-style-type: none"> Works effectively with inter-professional team, maintaining awareness of others' training and scopes of practice, and valuing a diversity of perspectives Uses consultation as an opportunity for building ongoing relationship 	<ul style="list-style-type: none"> Establishes and maintain relationships with communities Implements best-practices in knowledge exchange Practices and role models working with complex patients and subpopulations; makes effective decisions regarding delegation and entrustment; negotiates roles with other team members; assumes shared accountability for patient outcomes 	Multisource feedback
Communication	<ul style="list-style-type: none"> Clarifies and amplifies communication via technology Adjusts in consideration of patient culture and preference of patient and team members Elicits cultural meaning of illness/wellness Demonstrates awareness that social determinants may affect interest in, use of, and experience with telemedicine 	<ul style="list-style-type: none"> Trouble-shoots communication difficulties related to technology Uses technological solutions for team-based communication Follows cultural formulation frameworks 	Observation of direct and indirect care (real time and /or video and/ or simulation)
Patient care	<ul style="list-style-type: none"> Adjusts history taking to geographic, cultural and socioeconomic context Adjusts interview to technological and patient needs/ preferences Completes MSE, physical exam and administers tools collaboratively with team Formulates plan for calls, Rx at a distance Follows up with PCP by TP or phone 	<ul style="list-style-type: none"> Conducts in-depth, well-paced, and concise interview Teaches others how to do parts of PE and troubleshoot PE problems far end Tailors recommendations to available resources, sociocultural factors and patient preference For medication recommendations: considers safety, accessibility and adherence factors; plans for follow-up and monitoring; is aware of legal and jurisdictional issues related to prescribing Recommends management that maximizes care while minimizing cost; avoids zero-value care 	Observation (real time and /or video and/ or simulation)
Documentation	<ul style="list-style-type: none"> Tailors documentation for interprofessional team use Uses complex EHR (e.g. Cerner, Epic) 	<ul style="list-style-type: none"> Provides sufficient detail to allow implementation of plan over time and within local context/resources Embeds evidence and educational content in written communication Utilize shared EHR with distal sites 	Chart review
Health advocacy	<ul style="list-style-type: none"> Identifies relevant resources and needs within community Considers how technology addresses and contributes to health equity gaps 	<ul style="list-style-type: none"> Champions telepsychiatry and integrated care as means to address health inequities and needs 	<p>Case-based discussion</p> <p>Written assignments</p>

Table 1 (continued)

Area or topic	Competent/ proficient	Expert	Evaluation methods
Medicolegal and ethics	<ul style="list-style-type: none"> Practices within in-person and telemedicine standards 	<ul style="list-style-type: none"> Considers ways that the physician role can impact policy and advocacy (e.g. regarding community resources for health, funding models for integrated care, health professions training/scopes etc) Avoids pitfalls with technologies (e.g., cellular phones are not private; gmail is not HIPAA compliant) 	Case-based discussion
Population-based care	<ul style="list-style-type: none"> Considers population health needs Understands issues of rural access, epidemiology, economics 	Expert knowledge of distal sites' health status and resources in relation to population health	Written assignments, and case-based discussion
Health systems leadership	<ul style="list-style-type: none"> Reflects on how telepsychiatry may fit within local/ regional needs Identifies opportunities for QI based on case experiences 	<ul style="list-style-type: none"> Models effective contributions of specialist expertise in clinical teams where physicians may or may not hold formal leadership roles Integrates knowledge of evidence, and experience of actual practice, to identify and prioritize gaps; works in a team to select and apply QI methods Participates in coordination and development of health system, and integration of technology to strategically meet needs 	<ul style="list-style-type: none"> Observation of indirect care Quality improvement projects/ assignments Multisource feedback

Adapted from Crawford et al. 2016; Hilty et al. 2015; Sunderji et al. 2016

Based upon these competencies identified in the literature (Hilty et al. 2015; Crawford et al. 2016; Sunderji et al. 2016), we propose competencies for the practice of integrated care via telemedicine. In our framework, we suggested telemedicine competencies at beginner, competent/ proficient, and expert levels. While settings that provide integrated care via telepsychiatry may be rich learning environments for the beginner, we assume here that the practice of integrated care via telemedicine requires that all telepsychiatry competencies at the beginner level have been attained, such as standard history taking, establishing trust and building rapport with patients via telemedicine, administering tools, documentation, and understanding issues of confidentiality and ethics in the context of telemedicine. At the competent/proficient and expert levels, the competencies summarized in Table 1 form a foundation for delivering effective integrated care by telemedicine:

Assessing the development of these competencies should follow the same principles and methods recommended to assess other clinical competencies (Holmboe et al. 2010). Assessment should be workplace-based, continuous, and should include direct observation by supervisors as well as multisource feedback from other interprofessional team members. These approaches can be supplemented by additional methods, including case discussions, reflective exercises,

and review of documentation. While recognizing that these methods of assessment can be used across competencies, we have suggested methods of assessment that best suit each competency. We are also developing simulation methods that can be employed via telemedicine and telemedicine-based observed structured clinical examination (OSCE) formats. Simulations can be used to assess competencies that may not arise reliably or frequently in the practice setting.

In addition to individual practitioner competencies, a number of implementation factors related to both internal and external organizational structures also need to be considered when developing collaborative partnerships that involve telepsychiatry. Although outside of the scope of this article, important barriers to implementation include (1) challenges with traditional catchment-based funding and physician remuneration models; (2) legal, ethical, and political factors; (3) variability of processes, protocols, and service agreements between sites; (4) access, quality, and reliability of technology; (5) lack of quality assurance practices; (6) inconsistency of care by practitioners; (7) specialist knowledge of or access to local resources; (8) individual patient, provider, and organizational beliefs, attitudes, and expectations relating to telepsychiatry and integrated care; and (9) organizational champions who support telepsychiatry (Alvarez 2002; Batterham et al. 2015; Deslich et al. 2013; Godleski et al.

2008; Hailey et al. 2009; Hsiung 2001; Luxton et al. 2010; Rohland 2001; Shore et al. 2007). Each of these need to be addressed to ensure optimal functioning of integrated care models and to allow providers to practice within the full scope of their competencies.

In the Department of Psychiatry at the University of Toronto, we offer clinical experiences in integrated care via telepsychiatry that senior residents may select to fulfill their core training requirements in integrated mental health care. As evidence for integrated care models via telepsychiatry continues to accrue, future directions for training should include (a) developing pedagogical approaches, clinical training experiences, and curricula for current and future psychiatrists; (b) integrating these with training experiences for other members of the practice team; (c) developing valid assessment tools; and (d) targeting and evaluating for higher order outcomes (i.e., at the patient, organization, or population level).

Given the potential of both telepsychiatry and models of integrated care to increase access to mental healthcare, developing and sustaining competencies in both of these areas is a priority. These competencies, and means of evaluating them, are just beginning to be elaborated. Here, we begin this work by synthesizing the unique competencies required to provide integrated care and participate in interdisciplinary teams, using telepsychiatry.

References

- Alvarez, R. C. (2002). The promise of e-health—a Canadian perspective. *Ehealth international*, *1*(1), 4.
- American Psychiatric Association (APA) and the Academy of Psychosomatic Medicine (APM) (2016). Dissemination of integrated care within adult primary care settings—the collaborative care model.
- Batterham, P. J., Sunderland, M., Calcar, A. L., Davey, C. G., Christensen, H., Teesson, M., & Butow, P. N. (2015). Developing a roadmap for the translation of e-mental health services for depression. *Australian and New Zealand Journal of Psychiatry*, *49*(9), 776–784.
- Crawford, A., Sunderji, N., López, J., & Soklaridis, S. (2016). Defining competencies for the practice of telepsychiatry through an assessment of resident learning needs. *BMC Medical Education*, *16*, 28. doi:10.1186/s12909-016-0529-0.
- Deslich, S., Stec, B., Tomblin, S., Coustasse, A., (2013). Telepsychiatry in the 21st Century: Transforming Healthcare with Technology. *Perspect Health Inf Manag* [Internet]. Jul 1 [cited 2017 Feb 4];10(Summer). Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3709879/>.
- Fortney, J. C., Pyne, J. M., Mouden, S. B., Mittal, D., Hudson, T. J., Schroeder, G. W., Williams, D. K., Bynum, C. A., Mattox, R., & Rost, K. M. (2013). Practice-based versus telemedicine-based collaborative care for depression in rural federally qualified health centers: a pragmatic randomized comparative effectiveness trial. *The American Journal of Psychiatry*, *170*(4), 414–425. doi:10.1176/appi.ajp.2012.12050696.
- Fortney, J. C., Pyne, J. M., Turner, E. E., Farris, K. M., Normoyle, T. M., Avery, M. D., Hilty, D. M., & Unützer, J. (2015). Telepsychiatry integration of mental health services into rural primary care settings. *International Review of Psychiatry*, *27*(6), 525–539. doi:10.3109/09540261.2015.1085838.
- Godleski, L., Nieves, J. E., Darkins, A., & Lehmann, L. (2008). VA telemental health: suicide assessment. *Behavioral Sciences & the Law*, *26*(3), 271–286.
- Hailey, D., Ohinmaa, A., & Roine, R. (2009). Limitations in the routine use of telepsychiatry. *Journal of Telemedicine and Telecare*, *15*(1), 28–31. doi:10.1258/jtt.2008.080609.
- Hilty, D. M., Ferrer, D. C., Parish, M. B., Johnston, B., Callahan, E. J., & Yellowlees, P. M. (2013). The effectiveness of telemental health: a 2013 review. *Telemedicine and e-Health*, *19*(6), 444–454.
- Hilty, D. M., Crawford, A., Teshima, J., Chan, S., Sunderji, N., Yellowlees, P. M., Kramer, G., et al. (2015). A framework for telepsychiatric training and e-health: competency-based education, evaluation and implications. *International Review of Psychiatry*, *27*(6), 569–592. doi:10.3109/09540261.2015.1091292.
- Holmboe, E. S., Sherbino, J., Long, D. M., Swing, S. R., & Frank, J. R. (2010). The role of assessment in competency-based medical education. *Medical Teacher*, *32*(8), 676–682.
- Hsiung, R. C. (2001). Suggested principles of professional ethics for the online provision of mental health services. *Telemedicine Journal and E-health*, *7*(1), 39–45.
- Kates, N., Mazowita, G., Lemire, F., Jayabarathan, A., Bland, R., Selby, P., et al. (2011). The evolution of collaborative mental health care in Canada: a shared vision for the future. Ottawa, ON: Canadian Psychiatric Association. Available from: www.shared-care.ca/files/2011_Position_Paper.pdf. Accessed 2 Feb 2017.
- Luxton, D. D., Sirotnin, A. P., & Mishkind, M. C. (2010). Safety of telemental healthcare delivered to clinically unsupervised settings: a systematic review. *Telemedicine and e-Health*, *16*(6), 705–711.
- McGinty, K. L., Saeed, S. A., Simmons, S. C., & Yildirim, Y. (2006). Telepsychiatry and e-mental health services: potential for improving access to mental health care. *Psychiatric Quarterly*, *77*(4), 335–342.
- Raney, L. E., & American Psychiatric Association. (2015). *Integrated care: working at the interface of primary care and behavioral health* (First ed.). Washington, DC: American Psychiatric Publishing, a division of American Psychiatric Association.
- Rohland, B. M. (2001). Telepsychiatry in the heartland: if we build it, will they come? *Community Mental Health Journal*, *37*(5), 449–459.
- Shore, J. H., Hilty, D. M., & Yellowlees, P. (2007). Emergency management guidelines for telepsychiatry. *General Hospital Psychiatry*, *29*(3), 199–206.
- Simpson, J., Doze, S., Urness, D., Hailey, D., & Jacobs, P. (2001). Evaluation of a routine telepsychiatry service. *Journal of Telemedicine and Telecare*, *7*(2), 90–98.
- Sunderji, N., & Jokic, R. (2015). Integrated care training in Canada: challenges and future directions. *Academic Psychiatry*, *39*, 740–741.
- Sunderji, N., Crawford, A., & Jovanovic, M. (2015). Telepsychiatry in graduate medical education: a narrative review. *Academic Psychiatry*, *39*(1), 55–62.
- Sunderji, N., Waddell, A., Gupta, M., Soklaridis, S., & Steinberg, R. (2016). An expert consensus on core competencies in integrated care for psychiatrists. *General Hospital Psychiatry*, *41*(August), 45–52. doi:10.1016/j.genhosppsych.2016.05.003.