### **SMI Resources**

The following is a non-exhaustive list of research-related readings in SMI. This list is meant to provide resources for topic areas within the field of SMI. If you are new to the SMI field, we suggest you start with the "Recovery to Practice Initiative Curriculum".

American Psychological Association & Jansen, M. A. (2014). Recovery to Practice Initiative Curriculum: Reframing Psychology for the Emerging Health Care Environment. Washington DC: American Psychological Association.

I. History and Systems in Recovery-based Psychological Practice for SMI

### a. <u>Deinstitutionalization</u>

Articles in this section describe the process of deinstitutionalization, the impact on individuals receiving care, and ideas for improving quality of care.

Dvoskin, J.A., Knoll, J.L., & Silva, M. (2020). A brief history of the criminalization of mental illness. *CNS Spectrum*, *25*(5), 638-650.

• This article describes the process of deinstitutionalization in the United States.

Mechanic, D., & Rochefort, D.A. (1990). Deinstitutionalization: An appraisal of reform. *Annual Review of Sociology, 16,* 301-327.

• This article describes the process of deinstitutionalization in the United States and the emergence of community-based programs.

Solomon, P., & Petros, R. (2020). Finding common ground for diverging policies for persons with severe mental illness. *Psychiatric Quarterly*, *91*, 1193–1208.

Article describes anti-deinstitutionalization and anti-institutionalization perspectives.
 Risk management practices for working with individuals with serious mental illness are described.

Talbott, J.A. (2004). Deinstitutionalization: Avoiding the disasters of the past. *Psychiatric Services*, 55(10), 1112-1115.

 Deinstitutionalization is described and ideas offered to guide future practices changes to minimize harm to individuals.

## b. History of Treatment of SMI

Articles in this section describe the history of treatment for persons with SMI and include descriptions of systems of care over the years.

Daugherty, B. (2020). A social history of serious mental illness. CNS Spectrum, 25(5), 584-592.

Drake, R.E., Green, A.I., Mueser, K.T., & Goldman, H.H. (2003). The history of community mental health treatment and rehabilitation for persons with severe mental illness. *Community Mental Health Journal*, 39, 427-440).

Metzl, J. M. (2009). The protest psychosis: How schizophrenia became a black disease. Beacon Press.

Rosenberg, K. (2019). *Bedlam: An intimate journey into America's mental health crisis.* Avery Publishing Company.

Scull, A. (2016). Madness in civilization: A cultural history of insanity, from the Bible to Freud, from the madhouse to modern medicine. Princeton University Press.

Sundararaman, R. (2009). *U.S. Mental Health Delivery System Infrastructure: A Primer.* Diane Publishing Co.

## c. Psychiatric Rehabilitation

Articles in this section have been selected to represent foundational information related to psychiatric rehabilitation (PSR). Another recommendation for review of research and services literature regarding PSR, follow the APA-published *Psychiatric Rehabilitation Journal* for most up-to-date studies and evidence-informed programs. <a href="https://www.apa.org/pubs/journals/pri">https://www.apa.org/pubs/journals/pri</a>

Anthony, W. A., & Farkas, M. D. (2012). *The essential guide to psychiatric rehabilitation practice*. Center for Psychiatric Rehabilitation.

• Describes the underlying principles of psychiatric rehabilitation and how to implement them in practice.

Barrett, N. M., Gill, K. J., Pratt, C. W., & Roberts, M. M. (2016). *Psychiatric rehabilitation, 3<sup>rd</sup> edition.* Academic Press.

• Reviews interventions consistent with psychiatric rehabilitation principles.

Bernccio, C. & Burker, E. (2016). Psychiatric rehabilitation of persons with co-occurring disorders and corrections involvement. *Rehabilitation Research, Policy, & Education, 30*(3).

 This article is a review psychiatric rehabilitation practices that can be use in correctional facilities with individuals with serious mental illness an co-occurring substance use conditions.

Bond, G. R., & Drake, R. E. (2017). New directions for psychiatric rehabilitation in the USA. *Epidemiology and Psychiatric Sciences*, 26(3), 223-227.

• This article summarizes the challenges and new roles for psychiatric rehabilitation given the continued evolution of mental health care and services.

Corrigan, P. W., Mueser, K. T., Bond, G. R., Drake, R. E., & Solomon, P. (2012). *Principles and practice of psychiatric rehabilitation: An empirical approach.* Guilford Press.

 Reviews best practices in psychiatric rehabilitation and provides examples of model programs.

Hensley, M. A. (2014). Patient-centered care and psychiatric rehabilitation: What's the connection. *International Journal of Psychosocial Rehabilitation*, 18(2), 62-68.

• Discusses use of patient-centered care models within medical systems.

Nemec, P.B. & Norman, K. (2014). *Best Practices in Psychiatric Rehabilitation, 2<sup>nd</sup> edition*. The Psychiatric Rehabilitation Association: McLean, VA

 Reviews effectiveness of psychiatric rehabilitation interventions and identifies emerging practices.

Swildens, W., van Busschbach, J. T., Michon, H., Kroon, H., Koeter, M. W., Wiersma, D., & van Os, J. (2011). Effectively working on rehabilitation goals: 24-month outcome of a randomized controlled trial of the Boston psychiatric rehabilitation approach. *The Canadian Journal of Psychiatry*, 56(12), 751-760.

 Empirical study of the impact of the Boston Psychiatric Rehabilitation Approach in a sample of individuals with serious mental illness in the Netherlands.

Vita, A., & Barlati, S. (2019). The implementation of evidence-based psychiatric rehabilitation: Challenges and opportunities for mental health services. *Frontiers in Psychiatry*, 10, 147.

 Review identifies current challenges in the implementation of psychiatric rehabilitation practices.

Whitley, R., & Lawson, W. B. (2010). The psychiatric rehabilitation of African Americans with severe mental illness. *Psychiatric Services*, *61*(5), 508-511.

• The article discusses mental health disparities and offers recommendations for effective practice.

## d. Recovery Movement

This section summarizes the history of the recovery movement; describes definitions of recovery; identifies practices, competencies, and interventions designed to support recovery; offers examples of how to measure recovery; and summarizes some of the empirical support for recovery-oriented practices.

Ahmed, A. O., Marino, B. A., Rosenthal, E., Buckner, A., Hunter, K. M., Mabe, P.A., Buckley, P. F. (2016). Recovery in schizophrenia: What consumers know and do not know. *Psychiatry Clinical North America Journal*, *39*, 313-330.

Description and review of recovery-oriented interventions.

Carr, E. R. & Ponce, A. N. (2022). Supporting mental health recovery, citizenship, and social justice. *Community Mental Health Journal*, *58*, 11-19.

 Describes intersection and implementation of recovery, citizenship, and social justice principles.

Chen, S-P., Krupa, T., Lysaght, R. McCay, E., & Piat, M. (2013). The development of recovery competencies for in-patient mental health providers working with people with serious mental illness. *Administration and Policy in Mental Health and Mental Health Services Research*, 40, 96-116.

 Describes application of recovery-oriented principles and practices in an inpatient setting.

Davidson, L., O'Connell, M. J., Tondora, J., Lawless, M., & Evans, A. C. (2005). Recovery in serious mental illness: A new wine or just a new bottle? *Professional Psychology: Research and Practice*, 36(5), 480.

• Review of the early literature. The article distinguishes mental health recovery from other types of recovery.

Davidson, L. (2016). The recovery movement: Implications for mental health care and enabling people to participate fully in life. *Health Affairs*, 35(6), 1091-1097.

Describes legislation that has supported provision of recovery-oriented care.

Leonhardt, B. L., Huling, K., Hamm, J. A., Roe, D., Hasson-Ohayon, I., McLeod, H. J., & Lysaker, P. H. (2017). Recovery and serious mental illness: A review of current clinical and research paradigms and future directions. *Expert Review of Neurotherapeutics*, 17, 1117-1130.

 Reviews subjective and objective definitions of recovery, measures of recovery, and outcomes.

Malinovsky, I., Lehrer, P., Silverstein, S. M., Shankman, S. A., O'Brien, W., Samuelson, T., & Van Nostrand, G. (2013). An empirical evaluation of recovery transformation at a large community psychiatric rehabilitation organization. *Psychological Services*, 10(4), 428.

• Empirical evaluation of a system of care's transformation to recovery-oriented practice.

van Weeghel, J., van Zelst, C., Boertien, D., & Hasson-Ohayon, I. (2019). Conceptualizations, assessments, and implications of personal recovery in mental illness: A scoping review of systematic reviews and meta-analyses. *Psychiatric Rehabilitation Journal*, 42, 169-181.

• Defines personal recovery, identifies factors promoting and inhibiting recovery, and describes instruments to measure recovery.

Vera San Juan, N., Gronholm, P. C., Heslin, M. Lawrence, V., Bain, M., Okuma, A., Evans-Lacko, S. (2021). Recovery from severe mental health problems: A systematic review of service user and informal caregiver perspectives. *Frontiers in Psychiatry*, 12, 712026.

Comprehensive review of personal recovery from consumer and caregiver perspectives.

Winsper, C., Drawford-Docherty, A., Weich, S., Fenton, S-J. & Singh, S. P. (2020). How do recovery-oriented interventions contribute to personal mental health recovery? A systematic review and logic model. *Clinical Psychology Review*, 76, 101815.

 Review of 309 studies to examine recovery-oriented interventions, mechanisms of action, and moderators of mechanisms.

## e. Consumer and Peer Movement

Articles in this section describe the evolution and historical developments in the consumer movement and provide evidence to support use of peers as professionals in the workforce. Some of the recent technological advancements are also presented.

Agnetti, G. (2008). The consumer movement and compulsory treatment: a professional outlook. *International Journal of Mental Health*, *37*(4), 33-45.

Aschbrenner, K. A., Naslund, J. A., & Bartels, S. J. (2016). A mixed methods study of peer-to-peer support in a group-based lifestyle intervention for adults with serious mental illness. *Psychiatric rehabilitation journal*, 39(4), 328.

Bellamy, C., Schmutte, T., & Davidson, L. (2017). An update on the growing evidence base for peer support. *Mental Health and Social Inclusion*, 21(3), 161-167.

Beard, P. R. (2000). The consumer movement. In Menninger, R.W., & Nemiah, J. (Eds.) *American Psychiatry After World War II:(1944-1994),* (pp. 299-342). American psychiatric association publishing.

Cabassa, L. J., Camacho, D., Vélez-Grau, C. M., & Stefancic, A. (2017). Peer-based health interventions for people with serious mental illness: A systematic literature review. *Journal of Psychiatric Research*, 84, 80-89.

Chinman, M. J., Rosenheck, R., Lam, J. A., & Davidson, L. (2000). Comparing consumer and nonconsumer provided case management services for homeless persons with serious mental illness. *The Journal of Nervous and Mental Disease*, 188(7), 446-453.

Chinman, M., George, P., Dougherty, R. H., Daniels, A. S., Ghose, S. S., Swift, A., & Delphin-Rittmon, M. E. (2014). Peer support services for individuals with serious mental illnesses: Assessing the evidence. *Psychiatric Services*, 65(4), 429-441.

Corrigan, P. W., & Ralph, R. O. (2005). Introduction: Recovery as Consumer Vision and Research Paradigm.

Davidson, L., Chinman, M., Kloos, B., Weingarten, R., Stayner, D., & Tebes, J. K. (1999). Peer support among individuals with severe mental illness: A review of the evidence. *Clinical Psychology: Science and Practice*, 6(2), 165.

Davidson, L., Chinman, M., Sells, D., & Rowe, M. (2006). Peer support among adults with serious mental illness: A report from the field. *Schizophrenia Bulletin*, *32*(3), 443-450.

Davidson, L., Bellamy, C., Chinman, M., Farkas, M., Ostrow, L., Cook, J. A., ... & Salzer, M. (2018). Revisiting the rationale and evidence for peer support. *Psychiatric Times*, *35*(6), 1-3.

Ewens, B., Barnard-Towell, A., Mortimer-Jones, S., Kemp, V., & Cole, A. (2020). Cochrane Corner Summary of Review Titled: "Peer Support for People with Schizophrenia or Other Serious Mental Illness". *Issues in Mental Health Nursing*, 42(1), 106-108.

Fortuna, K. L., Naslund, J. A., LaCroix, J. M., Bianco, C. L., Brooks, J. M., Zisman-Ilani, Y., ... & Deegan, P. (2020). Digital peer support mental health interventions for people with a lived experience of a serious mental illness: Systematic review. *JMIR Mental Health*, 7(4), e16460.

Frese III, F. J. (2000). Mental Illness, Treatment & recovery: My experience and insight as a consumer. *George Mason University Civil Rights Law Journal*, 11, 83.

Gillard, S. (2019). Peer support in mental health services: Where is the research taking us, and do we want to go there? *Journal of Mental Health*, 28(4), 341-344.

Goldner, M. (2017). Consumption as activism: An examination of CAM as part of the consumer movement in health. In Tovey, P., Easthope, G., & Adams, J. (Eds.), *The mainstreaming of complementary and alternative medicine*, (pp. 11-24). Routledge.

Juntanamalaga, P., Scholz, B., Roper, C., & Happell, B. (2019). 'They can't empower us': The role of allies in the consumer movement. *International Journal of Mental Health Nursing*, 28(4), 857-866.

Mahlke, C. I., Priebe, S., Heumann, K., Daubmann, A., Wegscheider, K., & Bock, T. (2017). Effectiveness of one-to-one peer support for patients with severe mental illness—a randomised controlled trial. *European Psychiatry*, *42*, 103-110.

Miyamoto, Y., & Sono, T. (2012). Lessons from peer support among individuals with mental health difficulties: A review of the literature. *Clinical Practice and Epidemiology in Mental Health*, 8, 22-29.

Mueller, N. E., Panch, T., Macias, C., Cohen, B. M., Ongur, D., & Baker, J. T. (2018). Using smartphone apps to promote psychiatric rehabilitation in a peer-led community support program: Pilot study. *JMIR Mental Health*, *5*(3), e10092.

Myrick, K., & Del Vecchio, P. (2016). Peer support services in the behavioral healthcare workforce: State of the field. *Psychiatric Rehabilitation Journal*, 39(3), 197.

Pulice, R. T., & Miccio, S. (2006). Patient, client, consumer, survivor: The mental health consumer movement in the United States. In J. Rosenberg & S. Rosenberg (Eds.), *Community mental health: Challenges for the 21st century*, (pp. 7–14). Routledge.

Shalaby, R. A. H., & Agyapong, V. I. (2020). Peer support in mental health: Literature review. *JMIR Mental Health, 7*(6), e15572.

Sharfstein, S. S., & Dickerson, F. B. (2006). Psychiatry and the consumer movement. *Health Affairs*, 25(3), 734-736.

Sledge, W. H., Lawless, M., Sells, D., Wieland, M., O'Connell, M. J., & Davidson, L. (2011). Effectiveness of peer support in reducing readmissions of persons with multiple psychiatric hospitalizations. *Psychiatric Services*, 62(5), 541-544.

Storm, M., Fortuna, K. L., Brooks, J. M., & Bartels, S. J. (2020). Peer support in coordination of physical health and mental health services for people with lived experience of a serious mental illness. *Frontiers in Psychiatry*, 11, 365.

van Gestel-Timmermans, H., Brouwers, E.P., van Assen, M.A. and van Nieuwenhuizen, C., 2012. Effects of a peer-run course on recovery from serious mental illness: A randomized controlled trial. *Psychiatric Services*, 63(1), 54-60.

# II. Understanding SMI: Illness Characteristics and Course Over Time

## a. <u>Prevalence</u>

Presents information on estimates of prevalence in SMI and SED.

Simeone, J. C., Ward, A. J., Rotella, P., Collins, J., & Windisch, R. (2015). An evaluation of variation in published estimates of schizophrenia prevalence from 1990–2013: A systematic literature review. *BMC psychiatry*, 15(1), 193.

Williams, N. J., Scott, L., & Aarons, G. A. (2018). Prevalence of serious emotional disturbance among U.S. children: A meta-analysis. *Psychiatric Services*, 69(1), 32-40.

## b. Illness Characteristics

This section offers information about the characteristics associated with various stages of serious mental illness as well information about some of the less well known forms of illness.

Allswede, D.M., Addington, J., Bearden, C.E., Cadenhead, K.S., Cornblatt, B.A., Mathalon, D.H., McGlashan, T., Perkins, D.O., Seidman, L.J., Tsuang, M.T., Walker, E.F., Woods, S.W., & Cannon, T.D. (2020). Characterizing covariant trajectories of individuals at clinical high risk for psychosis across symptomatic and functional domains. *American Journal of Psychiatry*, 177(2), 164-171. doi: 10.1176/appi.ajp.2019.18111290

Arndt, S., Andreasen, N. C., Flaum, M., Miller, D., & et al. (1995). A longitudinal study of symptom dimensions in schizophrenia: Prediction and patterns of change. *Archives of General Psychiatry*, *52*(5), 352-360.

Bhati, M. T. (2013). Defining psychosis: The evolution of DSM-5 schizophrenia spectrum disorders. *Current Psychiatry Reports*, 15(11), 1-7.

Buchanan, R. W., Strauss, M. E., Kirkpatrick, B., Holstein, C., Breier, A., Carpenter, W.T. (1994). Neuropsychological impairments in deficit vs nondeficit forms of schizophrenia. *Archives of General Psychiatry*, *51*(10), 804-811.

Cicero, D. C., Jonas, K. G., Li, K., Perlman, G., & Kotov, R. (2019). Common taxonomy of traits and symptoms: Linking schizophrenia symptoms, schizotypy, and normal personality. *Schizophrenia Bulletin*, 45(6), 1336-1348.

Healy, K. M., Penn, D. L., Perkins, D., Woods, S. W., & Keefe, R. S. E. (2018). Latent profile analysis and conversion to psychosis: Characterizing subgroups to enhance risk prediction. *Schizophrenia Bulletin*, 44(2), 286-296.

Horan, W. P., & Blanchard, J. J. (2003). Neurocognitive, social, and emotional dysfunction in deficit syndrome schizophrenia. *Schizophrenia Research*, 65(2-3), 125-137.

Jarvis, G. E., Iyer, S. N., Andermann, L., & Fung, K. P. (2020). Culture and psychosis in clinical practice. In *A Clinical Introduction to Psychosis* (pp. 85-112). Academic Press.

Liddle, P., Carpenter, W. T., & Crow, T. (1994). Syndromes of schizophrenia: Classic literature. *British Journal of Psychiatry*, 165(6), 721-727.

Murri, M. B., Amore, M., Calcagno, P., Respino, M., Marozzi, V., Masotti, M., Innamorati, M., Pompili, M., Galderisi, S., & Maj, M. (2016). The "Insight Paradox" in Schizophrenia: Magnitude, Moderators and Mediators of the Association Between Insight and Depression. *Schizophrenia Bulletin*, 42(5), 1225-33.

Strauss, G.P., Nuñez, A., Ahmed, A.O., Barchard, K.A., Granholm, E., Kirkpatrick, B., Gold, J.M., & Allen, D.N. (2018). The latent structure of negative symptoms in schizophrenia. *JAMA Psychiatry*, 75(12):1271-1279. doi: 10.1001/jamapsychiatry.2018.2475

#### c. Predictors of Outcome

This section presents results from several studies and meta-analyses of characteristics that may be useful for predicting the trajectory of SMI.

Allott, K., Liu, P., Proffitt, T. M., & Killackey, E. (2011). Cognition at illness onset as a predictor of later functional outcome in early psychosis: Systematic review and methodological critique. *Schizophrenia Research*, 125, 221-235.

Bersani, G., Orlandi, V., Kotzalidis, G. D., & Pancheri, P. (2002). Cannabis and schizophrenia: Impact on onset, course, psychopathology and outcomes. *European Archives of Psychiatry and Clinical Neuroscience*, 252(2), 86-92.

Barrowclough, C., & Tarrier, N. (1990). Social functioning in schizophrenic patients. I. The effects of expressed emotion and family intervention. *Social Psychiatry and Psychiatric Epidemiology*, 25(3), 125-129.

Brown, G. W., Birley, J. L., & Wing, J. K. (1972). Influence of family life on the course of schizophrenic disorders: a replication. *British Journal of Psychiatry*, 121(562), 241-258.

Bearden, C. E., Shih, V. H., Green, M. F., Gitlin, M., Sokolski, K. N., Levander, E., Marusak, S., Hammen, C., Sugar, C.A., & Altshuler, L. L. (2011). The impact of neurocognitive impairment on occupational recovery of clinically stable patients with bipolar disorder: A prospective study. *Bipolar Disorder*, 13(4), 323-333. doi:10.1111/j.1399-5618.2011.00928.x

Bowie, C. R., Reichenberg, A., Patterson, T. L., Heaton, R. K., & Harvey, P. D. (2006). Determinants of real-world functional performance in schizophrenia subjects: Correlations with cognition, functional capacity, and symptoms. *American Journal of Psychiatry*, 163(3), 418-425. doi:10.1176/appi.ajp.163.3.418

Couture, S. M., Penn, D. L., & Roberts, D. L. (2006). The functional significance of social cognition in schizophrenia: A review. *Schizophrenia Bulletin*, *32*(1), S44-63. doi:10.1093/schbul/sbl029

Crush, E., Arseneault, L., Jaffee, S. R., Danese, A., & Fisher, H. L. (2018). Protective factors for psychotic symptoms among poly-victimized children. *Schizophrenia Bulletin*, 44(3), 691-700.

Fett, A. K. J., Viechtbauer, W., Dominguez, M.d. G., Penn, D. L., van Os, J., & Krabbendam, L. (2011). The relationship between neurocognition and social cognition with functional outcomes in schizophrenia: A meta-analysis. *Neuroscience & Biobehavioral Reviews*, 35, 573-588.

Fulford, D., Piskulic, D., Addington, J., Kane, J. M., & Mueser, K. T. (2017). Prospective relationships between motivation and functioning in the recovery after an initial episode of schizophrenia. *Schizophrenia Bulletin*, 44. doi: 10.1093/schbul/sbx096

Green, M. F., Kern, R. S., Braff, D. L., & Mintz, J. (2000). Neurocognitive deficits and functional outcome in schizophrenia: Are we measuring the "right stuff"? *Schizophrenia Bulletin, 26*, 119-136.

Hooley, J.M. (2007). Expressed emotion and relapse of psychopathology. *Annual Review of Clinical Psychology*, *3*, 329-52. doi: 10.1146/annurev.clinpsy.2.022305.095236

Hooley, J. M., & Gotlib, I. H. (2000). A diathesis-stress conceptualization of expressed emotion and clinical outcome. *Applied & Preventive Psychology*, *9*(3), 135-151.

Jordan, G., Malla, A., & Iyer, S.N. (2020). Perceived facilitators and predictors of positive change and posttraumatic growth following a first episode of psychosis: A mixed methods study using a convergent design. *BMC Psychiatry*. doi: <a href="https://doi.org/10.1186/s12888-020-02693-y">https://doi.org/10.1186/s12888-020-02693-y</a>

Jordan, G., Iyer, S.N., Malla, A., & Davidson, L. (2020). Posttraumatic growth and recovery following a first episode of psychosis: A narrative review of two concepts. *Psychosis*, 12, 285-294.

Jordan, G., Malla, A., & Iyer, SN (2019). "It's brought me closer to who I am": A mixed methods study of posttraumatic growth and positive change following a first episode of psychosis. Frontiers in Psychiatry. doi: https://doi.org/10.3389/fpsyt.2019.0048

Kelley, M.E., Wan, C.R., Broussard, B., Crisafio, A., Cristofaro, S., Johnson, S., Reed, T.A., Amar, P., Kaslow, N.J., Walker, E.F., & Compton, M.T. (2016). Marijuana use in the immediate 5-year premorbid period is associated with increased risk of onset of schizophrenia and related psychotic disorders. *Schizophrenia Research*, 171(1), 62-67.

Kraan, T. C., Velthorst, E., Themmen, M., Valmaggia, L., & Kempton, M. J. (2018). Child maltreatment and clinical outcome in individuals at ultra-high risk for psychosis in the EU-GEI high risk study. *Schizophrenia Bulletin*, 44(3), 584-592.

Newbury, J., Arseneault, L., Caspi, A., Moffitt, T. E., & Odgers, C. L. (2018). Cumulative effects of neighborhood social adversity and personal crime victimization on adolescent psychotic experiences. *Schizophrenia Bulletin*, *44*(2), 348-358.

Norman, R. M., & Malla, A. K. (1993). Stressful life events and schizophrenia: I. A review of the research. *British Journal of Psychiatry*, 162, 161-166.

Nuechterlein, K. H., & Dawson, M. E. (1984). A heuristic vulnerability/stress model of schizophrenic episodes. *Schizophrenia Bulletin*, 10(2), 300-312.

Nuechterlein, K. H., Dawson, M. E., Gitlin, M., Ventura, J., Goldstein, M. J., Snyder, K. S., Yee, C.M., & Mintz, J. (1992). Developmental Processes in Schizophrenic Disorders: Longitudinal studies of vulnerability and stress. *Schizophrenia Bulletin*, 18(3), 387-425.

Nuechterlein, K. H., Subotnik, K. L., Green, M. F., Ventura, J., Asarnow, R. F., Gitlin, M. J., Yee, C.M., Gretchen-Doorly, D., & Mintz, J. (2011). Neurocognitive predictors of work outcome in recent-onset schizophrenia. *Schizophrenia Bulletin*, *37*(2), S33-40. doi:10.1093/schbul/sbr084

Pries, L. K., Guloksuz, S., ten Have, M., de Graaf, R., & van Dorsselaer, S. (2018). Evidence that environmental and familial risks for psychosis additively impact a multidimensional subthreshold psychosis syndrome. *Schizophrenia Bulletin*, 44(4), 710-719.

Resnick, S. G., Rosenheck, R. A., & Lehman, A. F. (2004). An exploratory analysis of correlates of recovery. *Psychiatric Services*, *55*(5), 540-547.

Smith, T. E., Hull, J. W., Romanelli, S., Fertuck, E., & Weiss, K. A. (1999). Symptoms and neurocognition as rate limiters in skills training for psychotic patients. *American Journal of Psychiatry*, 156(11), 1817-1818.

Walker, E. F., & Diforio, D. (1997). Schizophrenia: A neural diathesis-stress model. *Psychological Review, 104*(4), 667-685.

Wells, R., Jacomb, I., Swaminathan, V., Sundram, S., Weinberg, D., Bruggemann, J., Cropley, V., Lenroot, R., Pereira, A.M., Zaelsky, A., Bousman,, C., Pantelis, C., Weickert, C.S., & Weickert, T.W. (2020). The impact of childhood adversity on cognitive development in schizophrenia. *Schizophrenia Bulletin*, 46(1), 140-153. doi: 10.1093/schbul/sbz033

## d. **Imaging and Genetic Studies**

Reviews information from neurologic and neuropsychological studies including those involving genetics, and those using imaging to assess risk and functioning in SMI.

Birur, B., Kraguljac, N.V., Shelton, R.C., & Lahti, A.C. (2017). Brain structure, function, and neurochemistry in schizophrenia and bipolar disorder—a systematic review of the magnetic resonance neuroimaging literature. *NPJ Schizophrenia 3*, 15. https://doi.org/10.1038/s41537-017-0013-9

Bogdan, R., Baranger, D.A.A., & Agrawal, A. (2018). Polygenic risk scores in clinical psychology: Bridging genomic risk to individual differences. *Annual Review of Clinical Psychology*, 14, 119-157. doi: 10.1146/annurev-clinpsy-050817-084847

Ellis, J. K., Walker, E. F., & Goldsmith, D. R. (2020). Selective review of neuroimaging findings in youth at clinical high risk for psychosis: On the path to biomarkers for conversion. *Frontiers of Psychiatry*, 11. https://doi.org/10.3389/fpsyt.2020.567534

Ellison-Wright, I., Glahn, D. c., Laird, A. R., Thelen, S. M., & Bullmore, E. (2008). The anatomy of first-episode and chronic schizophrenia: An anatomical likelihood estimation meta-analysis. *American Journal of Psychiatry, 165,* 1015-1023.

Giegling, I., Hosak, L., Mössner, R., Serretti, A., Bellivier, F., Claes, S., Collier, D.A., Corrales, A., DeLisi, L.E., Gallo, C., Gill, M., Kennedy, J.L., Leboyer, M., Maier, W., Marquez, M., Massat, I., Mors, O., Muglia, P., Nöthen, M.M., Ospina-Duque, J., Owen, M.J., Propping, P., Shi, Y., St Clair, D., Thibaut, F., Cichon, S., Mendlewicz, J., O'Donovan, M.C., & Rujescu, D. (2017). Genetics of schizophrenia: A consensus paper of the WFSBP Task Force on Genetics. *World Journal of Biological Psychiatry*, 18(7), 492-505. doi: 10.1080/15622975.2016.1268715

Glahn, D.C., Ragland, J.D., Abramoff, A., Barrett, J., Laird, A.R., Bearden, C.E., & Velligan, D.I. (2005). Beyond hypofrontality: A quantitative meta-analysis of functional neuroimaging studies of working memory in schizophrenia. *Human Brain Mapping*, 25(1):60-9.

Gur, R. E., Calkins, M. E., Gur, R. C., Horan, W. P., Nuechterlein, K. H., & Seidman, L. J. (2006). The consortium on the genetics of schizophrenia: Neurocognitive endophenotypes. *Schizophrenia Bulletin*, *33*(1), 49-68.

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Legge, S.E., Santoro, M.L., Periyasamy, S., Okewole, A., Arsalan, A., & Kowalec, K. (2021). Genetic architecture of schizophrenia: A review of major advancements. *Psychological Medicine*, *51*(13), 2168-2177. doi: 10.1017/S0033291720005334

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Minzenberg, M.J., Laird, A.R., Thelen, S., Carter, C.S., & Glahn, D.C. (2009). Meta-analysis of 41 functional neuroimaging studies of executive function in schizophrenia. *Archives of General Psychiatry*, 66(8), 811-22. doi: 10.1001/archgenpsychiatry.2009.91

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### e. Longitudinal Studies

This section presents the results of several longitudinal studies of outcomes for persons with SMI.

Chan, R. C. H., Mak, W. W. S., Chio, F. H. N., & Tong, A. C. Y. (2018). Flourishing with psychosis: A prospective examination on the interactions between clinical, functional, and personal recovery processes on well-being among individuals with schizophrenia spectrum disorders. Schizophrenia Bulletin, 44(4), 778-786.

Chan, S.K.W., Chan, H.Y.V., Pang, H.H., Hui, C.L.M., Suen, Y.N., Chang, W.C., Lee, E.H.M., & Chen, E.Y.H. (2020). Ten-year trajectory and outcomes of negative symptoms of patients with first-episode schizophrenia spectrum disorders. *Schizophrenia Research*, 220, 85-91. doi: 10.1016/j.schres.2020.03.061

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Hopper, K., & Wanderling, J. (2006). Revisiting the developed versus developing country distinction in course and outcome in schizophrenia: Results from ISoS, the WHO collaborative follow-up project. International Study of Schizophrenia. *Schizophrenia Bulletin*, *26*(4), 835-46. doi: 10.1093/oxfordjournals.schbul.a033498

Milev, P., Ho, B. C., Arndt, S., & Andreasen, N. C. (2005). Predictive values of neurocognition and negative symptoms on functional outcome in schizophrenia: A longitudinal first-episode study with 7-year follow-up. *American Journal of Psychiatry*, 162(3), 495-506. doi:10.1176/appi.ajp.162.3.495

Robinson, D. G., Woerner, M. G., McMeniman, M., Mendelowitz, A., & Bilder, R. M. (2004). Symptomatic and Functional Recovery From a First Episode of Schizophrenia or Schizoaffective Disorder. *American Journal of Psychiatry*, 161(3), 473-479.

Salzer, M. S., Brusilovskiy, E., & Townley, G. (2018). National estimates of recovery-remission from serious mental illness. *Psychiatric Services*, *69*(*5*), 523-528.

Strauss, G. P., Harrow, M., Grossman, L. S., & Rosen, C. (2010). Periods of Recovery in Deficit Syndrome Schizophrenia: A 20-Year Multi-follow-up Longitudinal Study. *Schizophrenia Bulletin*, *36*(4), 788-799. doi:10.1093/schbul/sbn167

Thomas, E. C., Despeauz, K. E., Drapalski, A. L., & Bennett, M. (2018). Person-oriented recovery of individuals with serious mental illnesses: A review and meta-analysis of longitudinal findings. *Psychiatric Services*, 69(3), 259-267.

# III. Understanding the Impact of SMI

#### a. Cognition

This section contains articles describing the impact of psychotic disorders on cognitive functioning. Articles describe changes associated with stage of illness and age. Comparisons are made between schizophrenia, bipolar disorder, and depression with psychosis. Cognitive changes observed in first-degree family members are also described. Associations between cognitive functioning, symptom severity, and psychosocial functioning are reviewed as well as approaches to treating this aspect of the illness.

Fett, A. J., Reichenberg, A., & Velthorst, E. (2022). Lifespan evolution of neurocognitive impairment in schizophrenia - A narrative review. *Schizophrenia Research: Cognition*, 28,100237. doi: 10.1016/j.scog.2022.100237. PMID: 35242606; PMCID: PMC8861413.

• This article reviews research describing the severity of cognitive impairments present across multiple stages of schizophrenia, focusing on the prodromal phase through the first 10 years after illness onset.

Green, M. F., Horan, W. P., & Lee, J. (2019). Nonsocial and social cognition in schizophrenia: Current evidence and future directions. *World Psychiatry*, 18(2), 146-161. doi: 10.1002/wps.20624. PMID: 31059632; PMCID: PMC6502429.

• This review describes the non-social cognitive, social-cognitive, and perceptual impairments associated with schizophrenia. Approaches to treating this aspect of the illness are described and future directions for research are proposed.

Jonas, K., Lian, W., Callahan, J., Ruggero, C. J., Clouston, S., Reichenberg, A., Carlson, G. A., Bromet, E. J., & Kotov, R. (2022). The course of general cognitive ability in individuals with psychotic disorders. *JAMA Psychiatry*, 79(7), 659-666. doi: 10.1001/jamapsychiatry. PMID: 35583896; PMCID: PMC9118026.

 This is a cohort study of 428 participants with psychosis that examines the trajectory of cognitive change with age, data collection spans the premorbid phase to 25-years post illness onset.

Luck, S. J., Hahn, B., Leonard, C. J., & Gold, J. M. (2019). The hyperfocusing hypothesis: A new account of cognitive dysfunction in schizophrenia. *Schizophrenica Bulletin, 45*(5), 991-1000. doi: 10.1093/schbul/sbz063. PMID: 31317191; PMCID: PMC6737469.

• This article summarizes experimental studies describing attention and working memory impairments in schizophrenia and proposes a unifying theory.

Lynham, A. J., Cleaver, S. L., Jones, I. R., & Walters, J. T. R. (2020). A meta-analysis comparing cognitive function across the mood/psychosis diagnostic spectrum. *Psychological Medicine*, *52*, 323-331. doi: 10.1017/S0033291720002020. PMID: 32624022.

• Meta-analysis of 31 studies that describes the severity of cognitive impairments in schizophrenia, schizoaffective disorder, and bipolar disorder.

Miniawi, S. E., Orgeta, V., & Stafford, J. (2022). Non-affective psychotic disorders and risk of dementia: A systematic review and meta-analysis. *Psychological Medicine*, *6*, 1-13. doi: 10.1017/S0033291722002781. PMID: 36200264.

 Meta-analysis of 11 studies to assess risk of dementia in individuals with psychotic disorders.

Seabury, R. D. & Cannon, T. D. (2020). Memory impairments and psychosis prediction: A scoping review and theoretical overview. *Neuropsychological Review*, *30*(4), 521-545. doi: 10.1007/s11065-020-09464-2. PMID: 33226539.

 This article reviews 34 papers describing verbal memory impairments in clinical high-risk individuals. The review describes evidence that verbal memory impairments are predictive of conversion to psychosis and describes neural correlates of memory impairment.

Seidman, L. J. & Mirsky, A. F. (2017). Evolving notions of schizophrenia as a developmental neurocognitive disorder. *Journal of the International Neuropsychological Society, 23*(9-10), 881-892. doi: 10.1017/S1355617717001114. PMID: 29198285.

 This article provides a comprehensive review of how cognition has been studied in schizophrenia in the last 50 years. Cognitive impairments present at each phase of illness are described and implications for treatment discussed.

Sheffield, J. M., Karcher, N. R., & Barch, D. M. (2018). Cognitive deficits in psychotic disorders: A lifespan perspective. *Neuropsychological Review, 28*(4), 509-533. doi: 10.1007/s11065-018-9388-2. PMID: 30343458; PMCID: PMC6475621.

 Research is reviewed to describe cognitive impairments present across the lifespan in schizophrenia, bipolar disorder, and psychotic depression. Relationships between cognition and psychosocial functioning and clinical symptom severity is also summarized.

Velthorst, E., Mollon, J., Murray, R. M., de Haan, L., Germeys, I. M., Glahn, D. C., ... (2021). EU-GEI High Risk Study, Reichenberg A. Cognitive functioning throughout adulthood and illness stages in individuals with psychotic disorders and their unaffected siblings. *Molecular Psychiatry*, 26(8), 4529-4543. doi: 10.1038/s41380-020-00969-z. PMID: 33414498.

• This article examines cognitive functioning cross-sectionally in adult patients with psychotic disorder (n = 2,883), their unaffected siblings (n = 2,271) and comparison participants (n = 3,301).

### b. Social Cognition

This section summarizes the empirical literature describing social cognitive performance in individuals with schizophrenia or bipolar disorder as well as individuals in high-risk groups. Severity of difficulties in this domain, neural correlates, relationships to clinical symptoms and social functioning, longitudinal course, and cross-cultural consistency are addressed.

Bora, E., Bartholomeusz, C., & Pantelis, C. (2016). Meta-analysis of theory of mind (ToM) impairment in bipolar disorder. *Psychological Medicine*, 46(2), 253-264.

 Meta-analysis of 34 studies examining theory of mind in bipolar disorder as completed to a control group.

Bora, E., & Pantelis, C. (2016). Social cognition in schizophrenia in comparison to bipolar disorder: A meta-analysis. *Schizophrenia Research*, 175(1-3), 72-78.

 Meta-analysis of 26 studies comparing social cognition in bipolar disorder and schizophrenia.

Bora, E., Yucel, M., & Pantelis, C. (2009). Theory of mind impairment in schizophrenia: Meta-analysis. *Schizophrenia Research*, 109(1-3), 1-9.

• Meta-analysis of 36 studies examining theory of mind in individuals with schizophrenia as compared to community samples.

Couture, S. M., Penn, D. L., & Roberts, D. L. (2006). The functional significance of social cognition in schizophrenia: A review. *Schizophrenia Bulletin*, 32(1), S44-63.

• Literature review that focuses on the impact of social cognition on functional outcome.

Kohler, C. G., Walker, J. B., Martin, E. A., Healey, K. M., & Moberg, P. J. (2010). Facial emotion perception in schizophrenia: A meta-analytic review. *Schizophrenia Bulletin*, *36*(5), 1009-19.

Meta-analysis of studies focused on emotion perception in schizophrenia.

Green, M. F., Horan, W. P., & Lee, J. (2015). Social cognition in schizophrenia. *Natural Reviews Neuroscience*, 16(10), 620-31.

• Literature review on social cognition in schizophrenia. Provides definitions of each social cognitive domain, overview of research in that area, including neural correlates.

Horan, W. P., Green, M. F., DeGroot, M., Fiske, A., Hellemann, G., Kee, K. S., Kern, R.S., Lee, J., Sergi, M.J., Subotnik, K.L., Sugar, C.A., Ventura, J., & Nuechterlein, K. H. (2011). Social cognition in schizophrenia, part 2: 12-month stability and prediction of functional outcome in first-episode patients. *Schizophrenia Bulletin*, *38*(4), 865-872.

 This a longitudinal study of individuals with a first episode of schizophrenia who completed baseline and 12-month assessments of emotion processing, theory of mind, and social perception.

McCleery, A., Lee, J., Fiske, A. P., Ghermezi, L., Hayata, J. N., Hellemann, G. S., Horan, W.P., Kee, K. S., Kern, R. S., Knowlton, B. J., Subotnik, K. L., Ventura, J., Sugar, C. A., Nuechterlein, K. H., & Green, M. F. (2016). Longitudinal stability of social cognition in schizophrenia: A 5-year follow-up of social perception and emotion processing. *Schizophrenia Research*, 176(2-3), 467-472.

• This is a 5-year longitudinal study of social perception in individuals with schizophrenia.

Rotenberg, L., Beraldi, G., Belizario, G., & Lafer, B. (2020). Impaired social cognition in bipolar disorder: A meta-analysis of theory of mind in euthymic patients. *Australian New Zealand Journal of Psychiatry*, *54*(8), 783-796.

• This is a meta-analysis of 30 studies focused on social cognition in bipolar disorder.

Woolverton, C., Bell., E. K., Ceaser, A., Poppe, A., Waters, A., & Breitborde, N. J. K. (2018). Social cognition and the course of social functioning in first-episode psychosis. *Early Intervention in Psychiatry*, 12, 1151-1156.

• This study examines cross-sectional and longitudinal relationships between social cognition and social functioning in individuals with a first episode of psychosis.

Abplanalp, S. J., Lee, J., Horan, W. P., Kern, R. S., Penn, D. L., & Green, M. F. (2023). A bayesian network approach to social and nonsocial cognition in schizophrenia: Are some domains more fundamental than others? *Schizophrenia Bulletin*, 49(4), 997–1006.

 This study examined bayesian networks and found that social processing variables depended on facial affect identification.

Barlati, S., Minelli, A., Ceraso, A., Nibbio, G., Carvalho Silva, R., Deste, G., Turrina, C., & Vita, A. (2020). Social cognition in a research domain criteria perspective: A bridge between schizophrenia and autism spectra disorders. *Frontiers in Psychiatry*, 11, 806.

 This literature review focuses on the overlap of social cognitive impairments in autism spectrum disorder and schizophrenia. The review examines clinical and neural overlap and provides information through a research domain criteria lens.

Bora, E., & Pantelis, C. (2013). Theory of mind impairments in first-episode psychosis, individuals at ultra-high risk for psychosis and in first-degree relatives of schizophrenia: Systematic review and meta-analysis. *Schizophrenia Research*, 144(1–3), 31–36.

• This is a meta-analysis of theory of mind in early psychosis and in individuals at high risk for psychosis.

Fernandes, J. M., Cajão, R., Lopes, R., Jerónimo, R., & Barahona-Corrêa, J. B. (2018). Social cognition in schizophrenia and autism spectrum disorders: A systematic review and meta-analysis of direct comparisons. *Frontiers in Psychiatry*, 9, 504.

• This is a meta-analysis of 19 studies comparing social cognition in autism spectrum disorder and schizophrenia.

Fett, A.-K. J., Viechtbauer, W., Dominguez, M.-G., Penn, D. L., Van Os, J., & Krabbendam, L. (2011). The relationship between neurocognition and social cognition with functional outcomes in schizophrenia: A meta-analysis. *Neuroscience & Biobehavioral Reviews*, 35(3), 573–588.

• This is a meta-analysis of 52 studies examining relationship between neurocognition and social cognition and functional outcome.

Green, M. F., Horan, W. P., & Lee, J. (2019). Nonsocial and social cognition in schizophrenia: Current evidence and future directions. *World psychiatry*, 18(2), 146-161.

• This literature review focuses on social cognition and neurocognition. It provides definitions of each, real world examples, and reviews the empirical literature.

Green, M. F., Penn, D. L., Bentall, R., Carpenter, W. T., Gaebel, W., Gur, R. C., Kring, A. M., Park, S., Silverstein, S. M., & Heinssen, R. (2008). Social cognition in schizophrenia: An NIMH workshop on definitions, assessment, and research opportunities. *Schizophrenia Bulletin*, 34(6), 1211–1220.

NIMH workshop paper defining social cognitive domains.

Hajdúk, M., Penn, D. L., Harvey, P. D., & Pinkham, A. E. (2021). Social cognition, neurocognition, symptomatology, functional competences and outcomes in people with schizophrenia – A network analysis perspective. *Journal of Psychiatric Research*, 144, 8–13.

• This study examines relationships between social cognition, neurocognition, and functional outcomes in individuals with schizophrenia.

Hajdúk, M., Pinkham, A. E., Penn, D. L., Harvey, P. D., & Sasson, N. J. (2022). Heterogeneity of social cognitive performance in autism and schizophrenia. *Autism Research*, *15*(8), 1522–1534.

• This study compares social cognitive performance in individuals with schizophrenia to that of individuals with autism.

Halverson, T. F., Orleans-Pobee, M., Merritt, C., Sheeran, P., Fett, A.-K., & Penn, D. L. (2019). Pathways to functional outcomes in schizophrenia spectrum disorders: Meta-analysis of social cognitive and neurocognitive predictors. *Neuroscience & Biobehavioral Reviews*, 105, 212–219.

• This is a meta-analysis of relationship between functional outcome and social cognition, and neurocognition in individuals with schizophrenia spectrum disorders.

Jáni, M., & Kašpárek, T. (2018). Emotion recognition and theory of mind in schizophrenia: A meta-analysis of neuroimaging studies. *The World Journal of Biological Psychiatry*, 19(sup3), S86–S96.

This is a meta-analysis of neuroimaging studies focused on social cognitive constructs.
 The article outlines neural circuitry related to theory of mind and emotion processing.

Lavoie, M.-A., Plana, I., Bédard Lacroix, J., Godmaire-Duhaime, F., Jackson, P. L., & Achim, A. M. (2013). Social cognition in first-degree relatives of people with schizophrenia: A meta-analysis. *Psychiatry Research*, 209(2), 129–135.

• This is a meta-analysis of studies focused on social cognitive performance in the first degree relatives of individuals with schizophrenia.

Riedel, P., Horan, W. P., Lee, J., Hellemann, G. S., & Green, M. F. (2021). The factor structure of social cognition in schizophrenia: A focus on replication with confirmatory factor analysis and machine learning. *Clinical Psychological Science*, 9(1), 38–52.

 This study conducted a confirmatory factor analysis to examine the factor structure of social cognition in individuals with schizophrenia.

Savla, G. N., Vella, L., Armstrong, C. C., Penn, D. L., & Twamley, E. W. (2013). Deficits in domains of social cognition in schizophrenia: A meta-analysis of the empirical evidence. *Schizophrenia Bulletin*, *39*(5), 979–992.

 This is a meta-analysis of 112 studies comparing social cognitive performance in individuals with schizophrenia to control samples. Multiple facets of social cognition are included in the review.

Thibaudeau, É., Cellard, C., Turcotte, M., & Achim, A. M. (2021). Functional impairments and theory of mind deficits in schizophrenia: A meta-analysis of the associations. *Schizophrenia Bulletin*, *47*(3), 695–711.

• This is a meta-analysis of 59 studies examining the relationship between theory of mind and functional outcome in individuals with schizophrenia.

Thibaudeau, E., Rae, J., Raucher-Chéné, D., Bougeard, A., & Lepage, M. (2023). Disentangling the relationships between the clinical symptoms of schizophrenia spectrum disorders and theory of mind: A meta-analysis. *Schizophrenia Bulletin*, 49(2), 255–274.

• This is a meta-analysis examining relationships between theory of mind and symptom dimensions in individuals with schizophrenia.

Weinreb, S., Li, F., & Kurtz, M. M. (2022). A meta-analysis of social cognitive deficits in schizophrenia: Does world region matter? *Schizophrenia Research*, 243, 206–213.

• This meta-analysis examined social cognitive difficulties in individuals with schizophrenia as compared to control samples in multiple world regions.

Weng, Y., Lin, J., Ahorsu, D. K., & Tsang, H. W. H. (2022). Neuropathways of theory of mind in schizophrenia: A systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews*, 137, 104625.

- This is a meta-analysis of studies focused on the neural pathways related to theory of mind in individuals with schizophrenia.
  - c. Health Impact (Physical Health Co-Morbidities)

Presents information concerning the physical co-morbidities affecting persons with SMI.

Allison, D. B., Newcomer, J. W., Dunn, A. L., Blumenthal, J. A., Fabricatore, A. N., Daumit, G. L., Cope, M.B., Riley, W.T., Vreeland, B., Hibbein, J.R., & Alpert, J. E. (2009). Obesity among those with mental disorders: A National Institute of Mental Health meeting report. *American Journal of Preventive Medicine*, 36(4), 341-350.

Cohrs, S. (2008). Sleep disturbances in patients with schizophrenia: Impact and effect of antipsychotics. *CNS Drugs*, 22(11), 939-62. doi: 10.2165/00023210-200822110-00004.

Collins, E., Tranter, S., & Irvine, F. (2012). The physical health of the seriously mental ill: An overview of the literature. *Journal of Psychiatric and Mental Health Nursing*, 19, 638-646.

Cook, J.A., Burke-Miller, J.K., Razzano, L.A., Steigman, P.J., Jonikas, J.A., & Santos, A. (2021). Serious mental illness, other mental health disorders, and outpatient health care as predictors of 30-day readmissions following medical hospitalization. *General Hospital Psychiatry*, 70, 10-17.

Hauenstein, E. J., Clark, R. S., & Merwin, E. I. (2019). Modeling health disparities and outcomes in disenfranchised populations. *Community Mental Health Journal*, *55*, 9-23.

Iturralde, E., Slama, N., Kline-Simon, A. H., Young-Wolff, D. M., & Sterling, S. A., (2021). Premature mortality associated with severe mental illness or substance use disorder in an integrated health care system. *General Hospital Psychiatry*, 68, 1-6.

Mittal, D., Corrigan, P., Sherman, M. D., Chekuri, L., Han, X., Reaves, C., Mukherjee, S., Morris, S., & Sullivan, G. (2014). Healthcare providers' attitudes toward persons with schizophrenia. *Psychiatric Rehabilitation Journal*, *37*(4), 297–303.

Olfson M, Gerhard T, Huang C, Crystal S, Stroup TS. Premature Mortality Among Adults with Schizophrenia in the United States. *JAMA Psychiatry*. 2015;72(12):1172–1181.

Saha, S., Whiteford, H., & McGrath, J. (2014). Modelling the incidence and mortality of psychotic disorders: Data from the second Australian national survey of psychosis. *Australian and New Zealand Journal of Psychiatry*, 48(4), 352-359.

Wulff, K., Dijk, D.J., Middleton, B., Foster, R.G., & Joyce, E.M. (2012). Sleep and circadian rhythm disruption in schizophrenia. *British Journal of Psychiatry, 200*(4), 308-16. doi: 10.1192/bjp.bp.111.096321.

## d. Self-Stigma/Demoralization

This section presents information on the devastating effects of stigmatization and self-stigmatization.

Gerlinger, G., Hauser, M., Hert, M., Lacluyse, K., Wampers, M., & Correll, C. U. (2013). Personal stigma in schizophrenia spectrum disorders: A systematic review of prevalence rates, correlates, impact and interventions. *World Psychiatry*, 12(2), 155-164.

Green, M. F., Horan, W. P., Lee, J., McCleery, A., & Reddy, L. F. (2018). Social disconnection in schizophrenia and the general community. *Schizophrenia Bulletin*, 44(2), 242-249.

Gonzales, L., Yanos, P. T., Stefancic, A., Alexander, M J., & Delehanty, B. H. (2018). The role of neighborhood factors and community stigma in predicting community participation among persons with psychiatric disabilities. *Psychiatric Services*, 69(1), 76-83.

Michalska de Rocha, B., Rhodes, S., Vasilopoulou, E., & Hutton, P. (2018). Loneliness in psychosis: A meta-analytical review. *Schizophrenia Bulletin*, 44(1), 114-125.

Mittal, D., Sullivan, G., Chekuri, L., Allee, E., & Corrigan, P.W. (2012). Empirical studies of self-stigma reduction strategies: A critical review of the literature. *Psychiatric Services*, *63*(10), 974-981.

Oexle, N., & Corrigan, P. W. (2018). Understanding mental illness stigma toward persons with multiple stigmatized conditions: Implications of intersectionality theory. *Psychiatric Services*, 69(5), 587-589.

Oh, H., Jacob, L., Anglin, D. M., & Koyanagi, A. (2021). Perceived skin tone discrimination and psychotic experiences among Black Americans: Findings from the National Survey of American Life. *Schizophrenia Research*, 228, 541-546.

### e. <u>Violence</u>

This section offers some information about violence and SMI.

Labrum, T., Zingman, M.,A., Nossel, I., & Dixon, L. (2021). Violence by persons with serious mental illness toward family caregivers and other relatives: A review. *Harvard Review of Psychiatry*, 29(1), 10-19.

McGinty, E.E., & Webster, D.W., (2016). Gun violence and serious mental illness. In L.H. Gold & R. I. Simon (Eds.), *Gun violence and mental illness* (pp. 3-30). American Psychiatric Association.

Stuart, H. (2003). Violence and mental illness: an overview. World Psychiatry, 2(2), 121-124.

Volavka, J., & Swanson, J. (2010). Violent behavior in mental illness: The role of substance abuse. *Journal of the American Medical Association*, 304(5), 563-564.

# f. Suicide

This section focuses on the literature examining the relationship between psychosis and risk of suicide completion, suicide attempts, and self-injurious behavior. Cross-sectional and longitudinal associations are described. Some articles focus on individuals at a specific stage of illness. A review of suicide-focused psychosocial interventions for this population is also included.

Barbeito, S., Vega, P., Sánchez-Gutiérrez, T., Becerra, J. A., Gonzalez-Pinto, A., & Calvo, A. (2021). A systematic review of suicide and suicide attempts in adolescents with psychotic disorders. *Schizophrenia Research*, 235, 80-90.

• Meta-analysis of 10 studies with a specific focus on adolescents (10-19yrs). Suicide and suicide attempt rates provided for this population.

Bornheimer, L. A., Zhang, A., Li, J., Hiller, M., & Tarrier, N. (2020). Effectiveness of suicide-focused psychosocial interventions in psychosis: A systematic review and meta-analysis. *Psychiatric Services*, 71(8), 829-838.

• Meta analysis with 4,829 participants ages 21-51. Provides overview of suicide rates in this population. Provides an overview on suicide interventions for psychosis.

Cassidy, R. M., Yang, F., Kapczinski, F., & Cavalcante Passos, I. (2018). Risk factors for suicidality in patients with schizophrenia: A systematic review, meta-analysis, and meta-regression of 96 studies. *Schizophrenia Bulletin*, 44(4), 787-797.

Meta-analysis of 96 studies (n=80,488) examining suicide risk in schizophrenia.
 Identified risk factors for suicidal ideation, suicide attempts, and suicide (cross sectional)

Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X., ... & Nock, M. K. (2017). Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychological Bulletin*, 143(2), 187.

• Meta-analysis of risk factors for suicide. This review is not specific to individuals with psychotic disorders.

Hielscher, E., DeVylder, J. E., Saha, S., Connell, M., & Scott, J. G. (2018). Why are psychotic experiences associated with self-injurious thoughts and behaviours? A systematic review and critical appraisal of potential confounding and mediating factors. *Psychological Medicine*, 48(9), 1410-1426.

 Review focused on identifying mechanisms for the relationship between psychotic experiences and self-injurious thoughts and behaviors.

Huang, X., Fox, K. R., Ribeiro, J. D., & Franklin, J. C. (2018). Psychosis as a risk factor for suicidal thoughts and behaviors: A meta-analysis of longitudinal studies. *Psychological Medicine*, 48(5), 765-776.

 Looked at relationship between positive and negative symptoms and suicidal ideation, suicide attempts, and suicide. Only included longitudinal studies. Sicotte, R., Iyer, S. N., Kiepura, B., & Abdel-Baki, A. (2021). A systematic review of longitudinal studies of suicidal thoughts and behaviors in first-episode psychosis: Course and associated factors. *Social Psychiatry and Psychiatric Epidemiology*, *56*(12), 2117-2154.

• Focused specifically on first episode psychosis and discussed importance or early stages of illness regarding suicide risk.

Taylor, P. J., Hutton, P., & Wood, L. (2015). Are people at risk of psychosis also at risk of suicide and self-harm? A systematic review and meta-analysis. *Psychological Medicine*, 45(5), 911-926.

Suicide risk in chronic high-risk individuals

## g. Substance Abuse

This section presents some information on prevalence, consequences, epidemiology of substance use disorders in serious mental illnesses.

Buckley, P.F. (2006). Prevalence and consequences of the dual diagnosis of substance abuse and severe mental illness. *Journal of Clinical Psychiatry*, 67(7), 5-9.

Epstein, J. (2004). Serious mental illness and its co-occurrence with substance use disorders, 2002. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Hunt, G.E., Large, M.M., Cleary, M., Lai, H.M.X., & Saunders, J.B. (2018). Prevalence of comorbid substance use in schizophrenia spectrum disorders in community and clinical settings, 1990-2017: Systematic review and meta-analysis. *Drug and Alcohol Dependence*, 191, 234-258. doi: 10.1016/j.drugalcdep.2018.07.011

Mueser, K. T., Bennett, M., & Kushner, M. G. (1995). Epidemiology of substance use disorders among persons with chronic mental illnesses. In A. F. Lehman & L. B. Dixon (Eds.), *Double jeopardy: Chronic mental illness and substance use disorders* (pp. 9–25). Harwood Academic Publishers/Gordon.

# h. <u>Homelessness</u>

Reviews some information about homelessness and SMI.

Draine, J., Salzer, M. S., Culhane, D. P., & Hadley, T. R. (2002). Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. *Psychiatric Services*, *53*(5), 565-573.

Folsom, D. P., Hawthorne, W., Lindamer, L., Gilmer, T., Bailey, A., Golshan, S., Garcia, P., Unutzer, J., Hough, R., & Jeste, D. V. (2005). Prevalence and risk factors for homelessness and utilization of mental health services among 10,340 patients with serious mental illness in a large public mental health system. *American Journal of Psychiatry*, 162(2), 370-376.

#### i. <u>Trauma</u>

Reviews of the effects of trauma for persons with SMI.

Bailey, T., Alvarez-Jimenez, M., Garcia-Sanchez, A. M., Hulbert, C., & Barlow, E. (2018). Childhood trauma is associated with severity of hallucinations and delusions in psychotic disorders: A systematic review and meta-analysis. *Schizophrenia Bulletin*, 44(5), 1111-1122.

de Vries, B., van Busschbach, J. T., van der Stouwe, E. C. D., Aleman, A., van Dijk, J. J. M., Lysaker, P. H., Arends, J., Nijman, S.A., & Pijnenborg, G. H. M. (2018). Prevalence rate and risk factors of victimization in adult patients with a psychotic disorder: A systematic review and meta-analysis. *Schizophrenia Bulletin*, 45(1), 114-126.

Higgs, R. N. (2020). Reconceptualizing psychosis: The hearing voices movement and social approaches to health. Health and Human Rights, 22(1), 133.

Mueser, K. T., Goodman, L. B., Trumbetta, S. L., Rosenberg, S. D., Osher, F. C., Vidaver, R., Auciello, P., & & Foy, D. W. (1998). Trauma and posttraumatic stress disorder in severe mental illness. *Journal of Consulting and Clinical Psychology*, 66(3), 493.

### j. Sexual Issues

These articles present some of the sexual issues facing persons with SMI.

Bianco, C.L., Pratt, S.I., & Ferron, J.C. (2019). Deficits in sexual interest among adults with schizophrenia: Another look at an old problem. *Psychiatric Services*, 70(11), 1000-1005.

Kelly, D.L., & Conley, R.R. (2004). Sexuality and schizophrenia: A review. *Schizophrenia Bulletin*, 30(4), 767-779. https://doi.org/10.1093/oxfordjournals.schbul.a007130

La Torre, A., Conca, A., Duffy, D., Giupponi, G., Pompili, M., & Grozinger, M. (2013). Sexual dysfunction related to psychotropic drugs: A critical review part II. *Antipsychotics, Pharmacopsychiatry*, 46(6), 201-208.

### IV. Partnership and Engagement

### a. Treatment Engagement

This section provides reviews of factors found to be associated with treatment engagement, disengagement, and reengagement. Reviews include identification of treatment approaches, process and individual factors, and health disparities that relate to engagement.

Bourke, E., Barker, C., & Fornells-Ambrojo, M. (2021). Systematic review and meta-analysis of therapeutic alliance, engagement, and outcome in psychological therapies for psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, *94*(3), 822-853.

• Literature review and meta-analysis on therapeutic alliance and treatment engagement in psychological therapies for psychosis.

Dixon, L. B., Holoshitz, Y., & Nossel, I. (2016). Treatment engagement of individuals experiencing mental illness: Review and update. *World Psychiatry*, 15(1), 13-20.

 Broad literature review on treatment engagement. The article includes sections on special populations that are difficult to engage (e.g., FEP and SMI) and discusses strategies for increasing engagement.

Green, C. A., Wisdom, J. P., Wolfe, L., & Firemark, A. (2012). Engaging youths with serious mental illnesses in treatment: STARS study consumer recommendations. *Psychiatric Rehabilitation Journal*, 35(5), 360.

 Large study that used qualitative methods to identify participant recommendations for increasing engagement.

Kim, D. J., Brown, E., Reynolds, S., Geros, H., Sizer, H., Tindall, R., ... & O'Donoghue, B. (2019). The rates and determinants of disengagement and subsequent re-engagement in young people with first-episode psychosis. *Social Psychiatry and Psychiatric Epidemiology*, *54*(8), 945-953.

• Only study to date that has examined re-engagement after disengagement. Study had a sample of 700 individuals with first episode psychosis.

Kreyenbuhl, J., Nossel, I. R., & Dixon, L. B. (2009). Disengagement from mental health treatment among individuals with schizophrenia and strategies for facilitating connections to care: A review of the literature. *Schizophrenia Bulletin*, 35(4), 696–703.

• Literature review focused on engagement of SMI population in treatment. Also discusses potential treatment approaches for increasing engagement.

Mascayano, F., van der Ven, E., Martinez-Ales, G., Henao, A. R., Zambrano, J., Jones, N., ... & Dixon, L. B. (2021). Disengagement from early intervention services for psychosis: A systematic review. *Psychiatric Services*, 72(1), 49-60.

 Meta analysis of factors associated with treatment disengagement. Differentiated between predisposing (demographic), enabling (personal, family, and neighborhood), and need (perceived need) factors.

Maura, J., & Weisman de Mamani, A. (2017). Mental health disparities, treatment engagement, and attrition among racial/ethnic minorities with severe mental illness: A review. *Journal of Clinical Psychology in Medical Settings*, 24(3), 187-210.

• Literature review on racial disparities, access to care, outcomes, and treatment engagement among individuals with SMI.

Osborn, L. A., & Stein, C. H. (2019). Recovery-oriented services in an inpatient setting: The role of consumers' views of therapeutic alliance and practitioner directiveness on recovery and well-being. *American Journal of Orthopsychiatry*, 89(1), 115-123.

 Focused on inpatient services and looked at relationship between working alliance, provider directiveness, and consumer view of recovery-oriented service delivery and well-being.

## b. Family Engagement

Articles in this section examine factors that influence family engagement as well as associations between family engagement and patient engagement.

Cohen, A. N., Pedersen, E. R., Glynn, S. M., Hamilton, A. B., McNagny, K. P., Reist, C., Chemerinski, E., & Young, A. S. (2019). Preferences for family involvement among veterans in treatment for schizophrenia. *Psychiatric Rehabilitation Journal*, 42(3), 210–219.

 801 Veterans were surveyed to learn about their preferences for family involvement in treatment. Preferred methods of involvement are identified as well as barriers to involving family in care.

Haselden, M., Corbeil, T., Tang, F., Olfson, M., Dixon, L. B., Essock, S. M., Wall, M. M., Radigan, M., Frimpong, E., Wang, R., Lamberti, S., Schneider, M., & Smith, T. E. (2019). Family Involvement in Psychiatric Hospitalizations: Associations with Discharge Planning and Prompt Follow-Up Care. *Psychiatric Services (Washington, D.C.)*, 70(10), 860–866. https://doiorg.ezp2.lib.umn.edu/10.1176/appi.ps.201900028

• In a study of 179 individuals receiving inpatient care, follow-up with outpatient appointments after discharge was found to be improved when staff had contact with a family member during discharge planning.

Iyer, S. N., Malla, A., Taksal, A., Maraj, A., Mohan, G., Ramachandran, P., Margolese, H. C., Schmitz, N., Joober, R., & Rangaswamy, T. (2022). Context and contact: A comparison of

patient and family engagement with early intervention services for psychosis in India and Canada. *Psychological Medicine*, *52*(8), 1538–1547.

 This study compares patient and family engagement over a 2-year period in first episode programs located in Canada and India. Family engagement rates differed in the two countries and family engagement was predictive of patient participation. Therapist perception of need for family contact was also found to differ between sites.

Lal, S., Malla, A., Marandola, G., Thériault, J., Tibbo, P., Manchanda, R., Williams, R., Joober, R., & Banks, N. (2019). "Worried about relapse": Family members' experiences and perspectives of relapse in first-episode psychosis. *Early Intervention in Psychiatry*, 13(1), 24–29. https://doi-org.ezp2.lib.umn.edu/10.1111/eip.12440

 A qualitative study focused on family members of individuals in a first episode psychosis treatment programs found that they expressed a need for more communication from providers and more education about how to care for their relative.

Oluwoye, O., Kriegel, L., Alcover, K. C., Compton, M. T., Cabassa, L. J., & McDonell, M. G. (2020). The impact of early family contact on quality of life among non-Hispanic Blacks and Whites in the RAISE-ETP trial. *Schizophrenia Research*, *216*, 523–525. https://doi-org.ezp2.lib.umn.edu/10.1016/j.schres.2019.12.004

• This study examined the association between quality of life for patients in a first episode psychosis treatment program and provider contact with family members prior to treatment for psychosis. Findings suggest a way to reduce disparities in accessing care.

#### V. Assessment & Measurement

## a. Diagnostic Evaluations

Information on some aspects associated with evaluation of psychosis.

Fusar-Poli, P., DeMicheli, A., Cappucciati, M., Rutigliano, G., & Davies, C. (2018). Diagnostic and prognostic significance of DSM-5 Attenuated Psychosis Syndrome in services for individuals at ultra-high risk for psychosis. *Schizophrenia Bulletin, 44*(2), 264-275.

Londono Tobon, A., Flores, J. M., Taylor, J. H., Johnson, I., Landeros-Weisenberger, A., Aboiralor, O., V. J, Avila-Quintero, & Bloch, M. H. (2021). Racial implicit associations in psychiatric diagnosis, treatment, and compliance expectations. *Academic Psychiatry*, 45(1), 23-33.

# b. Assessment of Outcomes (Research/Institutional/Individual)

Reviews results of patient reported outcomes and quality of life for those with SMI.

McCabe, R., Saidi, M., & Priebe, S. (2007). Patient-reported outcomes in schizophrenia. *British Journal of Psychiatry*, 191(S50), S21-S28. doi:10.1192/bjp.191.50.s21

Narvaez, J. M., Twamley, E. W., McKibbin, C. L., Heaton, R. K., & Patterson, T. L. (2008). Subjective and objective quality of life in schizophrenia. *Schizophrenia research*, *98*(1-3), 201-208.

Priebe, S. (2007). Social outcomes in schizophrenia. *British Journal of Psychiatry, 191*(S50, S15-S20. doi:10.1192/bjp.191.50.s15

## c. <u>Neuropsychological/Cognitive Testing Measures</u>

Presents results of several studies and reviews related to Neuropsychological, Cognitive and psychometric evaluation.

Buchanan, R. W., Keefe, R. S., Umbricht, D., Green, M. F., Laughren, T., & Marder, S. R. (2011). The FDA-NIMH-MATRICS guidelines for clinical trial design of cognitive-enhancing drugs: What do we know 5 years later? *Schizophrenia Bulletin, 37*(6), 1209-1217. doi:10.1093/schbul/sbq038

Buck, B. E., Pinkham, A. E., Harvey, P. D., & Penn, D. L. (2016). Revisiting the validity of measures of social cognitive bias in schizophrenia: Additional results from the Social Cognition Psychometric Evaluation (SCOPE) study. *British Journal of Clinical Psychology*, 55(4), 441–454.

Carter CS, Barch DM, Bullmore E, Breiling J, Buchanan RW, Butler P, Cohen JD, Geyer M, Gollub R, Green MF, Jaeger J, Krystal JH, Moore H, Nuechterlein K, Robbins T, Silverstein S, Smith EE, Strauss M, Green, M. F., & Nuechterlein, K. H. (2004). The MATRICS initiative: Developing a consensus cognitive battery for clinical trials. *Schizophrenia Research*, 72(1), 1-3. doi:10.1016/j.schres.2004.09.006

Green, M. F., Nuechterlein, K. H., Gold, J. M., Barch, D. M., Cohen, J., Essock, S., Fenton, W.S., Frese, F., Goldbert, T.E., Heaton, R.K., Keefe, R.S., Kern, R.S., Kraemer, H., Stover, E., Weinberger, D.R., Zalcman, S., & Marder, S. R. (2004). Approaching a consensus cognitive battery for clinical trials in schizophrenia: The NIMH-MATRICS conference to select cognitive domains and test criteria. *Biological Psychiatry*, *56*(5), 301-307. doi:10.1016/j.biopsych.2004.06.023

Green, M. F., Olivier, B., Crawley, J. N., Penn, D. L., & Silverstein, S. (2005). Social cognition in schizophrenia: Recommendations from the measurement and treatment research to improve cognition in schizophrenia new approaches conference. *Schizophrenia Bulletin*, *31*(4), 882-887. doi:10.1093/schbul/sbi049

- Green, M.F., Nuechterlein, K.H., Kern, R.S., Baade, L.E., Fenton, W.S., Gold, J.M., Keefe, R.S., Mesholam-Gately, R., Seidman, L.J., Stover, E., & Marder, S.R. (2008). Functional co-primary measures for clinical trials in schizophrenia: Results from the MATRICS Psychometric and Standardization Study. *American Journal of Psychiatry*, 165(2):221-8. doi: 10.1176/appi.ajp.2007.07010089
- Green, M. F., Penn, D. L., Bentall, R., Carpenter, W. T., Gaebel, W., Gur, R. C., Kring, A.M., Park, S., Silverstein, S.M., & Heinssen, R. (2008). Social cognition in schizophrenia: An NIMH workshop on definitions, assessment, and research opportunities. *Schizophrenia Bulletin*, 34(6), 1211-1220. doi:10.1093/schbul/sbm145
- Halverson, T. F., Pinkham, A. E., Harvey, P. D., & Penn, D. L. (2022). Brief battery of the Social Cognition Psychometric Evaluation study (BB-SCOPE): Development and validation in schizophrenia spectrum disorders. *Journal of Psychiatric Research*, 150, 307–316.
- Harvey, P. D., Green, M. F., Keefe, R. S., & Velligan, D. I. (2004). Cognitive functioning in schizophrenia: A consensus statement on its role in the definition and evaluation of effective treatments for the illness. *Journal of Clinical Psychiatry*, 65(3), 361-372.
- Keefe, R. S., Haig, G. M., Marder, S. R., Harvey, P. D., Dunayevich, E., Medalia, A., Davidson, M., Lombardo, I., Bowie, C.R., Buchanan, R.W., Bugarski-Kirola, D., Carpenter, W.T., Csernansky, J.T., Dago, P.L., Durand, D.M., Frese, F.J., Goff, D.C., Gold, J.M., Hooker, C.I., Kopelwicz, A., Loebel, A., McGurk, S.R., Opler, L.A., Pinkam, A.E., & Stern, R. G. (2016). Report on ISCTM consensus meeting on clinical assessment of response to treatment of cognitive impairment in schizophrenia. *Schizophrenia Bulletin*, 42(1), 19-33. doi:10.1093/schbul/sbv111
- Keefe, R. S., Vinogradov, S., Medalia, A., Silverstein, S. M., Bell, M. D., Dickinson, D., Ventura, J., Marder, S.R., & Stroup, T. S. (2011). Report from the working group conference on multisite trial design for cognitive remediation in schizophrenia. *Schizophrenia Bulletin*, *37*(5), 1057-1065. doi:10.1093/schbul/sbq010
- Ludwig, K. A., Pinkham, A. E., Harvey, P. D., Kelsven, S., & Penn, D. L. (2017). Social cognition psychometric evaluation (SCOPE) in people with early psychosis: A preliminary study. *Schizophrenia Research*, 190, 136–143
- Pinkham, A. E., Harvey, P. D., & Penn, D. L. (2018). Social cognition psychometric evaluation: Results of the final validation study. *Schizophrenia Bulletin*, 44(4), 737–748.
- Pinkham, A. E., Penn, D. L., Green, M. F., Buck, B., Healey, K., & Harvey, P. D. (2014). The social cognition psychometric evaluation study: Results of the expert survey and RAND panel. *Schizophrenia Bulletin*, 40(4), 813-823. doi:10.1093/schbul/sbt081

Pinkham, A. E., Penn, D. L., Green, M. F., & Harvey, P. D. (2016). Social cognition psychometric evaluation: Results of the initial psychometric study. *Schizophrenia Bulletin*, *42*(2), 494-504. doi:10.1093/schbul/sbv056

Wykes, T. (2011). Cognitive neuroscience treatment research to improve cognition in schizophrenia II: Developing imaging biomarkers to enhance treatment development for schizophrenia and related disorders. *Biological Psychiatry*, 70(1):7-12. doi: 10.1016/j.biopsych.2011.01.041.

## d. Functioning Measures

The articles in this section present information on assessment of functional capacity and includes information about measurement scales for this purpose.

Bellack, A. S., Green, M. F., Cook, J. A., Fenton, W., Harvey, P. D., Heaton, R. K., Laughren, T., Leon, A.C., Mayo, D.J., Patrick, D.L., Patterson, T.L., Rose, A., Stover, E., & Wykes, T. (2007). Assessment of community functioning in people with schizophrenia and other severe mental illnesses: A white paper based on an NIMH-sponsored workshop. *Schizophrenia Bulletin*, 33(3), 805-822. doi:10.1093/schbul/sbl035

Birchwood, M., Smith, J., Cochrane, R., Wetton, S., & et al. (1990). The social functioning scale: The development and validation of a new scale of social adjustment for use in family intervention programmes with schizophrenic patients. *British Journal of Psychiatry*, 157, 853-859.

Harvey, P. D., Davidson, M., Mueser, K. T., Parrella, M., White, L., & Powchik, P. (1997). Social-adaptive functioning evaluation (SAFE): A rating scale for geriatric psychiatric patients. *Schizophrenia Bulletin*, 23(1), 131-145.

Harvey, P. D., Velligan, D. I., & Bellack, A. S. (2007). Performance-based measures of functional skills: Usefulness in clinical treatment studies. *Schizophrenia Bulletin*, *33*(5), 1138-1148. doi:10.1093/schbul/sbm040

Heinrichs, R. W., Statucka, M., Goldberg, J., & McDermid Vaz, S. (2006). The University of California Performance Skills Assessment (UPSA) in schizophrenia. *Schizophrenia Research*, 88(1-3), 135-141. doi:10.1016/j.schres.2006.07.026

Lecomte, T., Corbiere, M., Ehmann, T., Addington, J., Abdel-Baki, A., & Macewan, B. (2014). Development and preliminary validation of the First Episode Social Functioning Scale for early psychosis. *Psychiatry Research*, 216(3), 412-417. doi:10.1016/j.psychres.2014.01.044

Patterson, T. L., Goldman, S., McKibbin, C. L., Hughs, T., & Jeste, D. V. (2001). UCSD Performance-Based Skills Assessment: Development of a new measure of everyday functioning for severely mentally ill adults. *Schizophrenia Bulletin*, 27(2), 235-245.

Patterson, T. L., Lacro, J., McKibbin, C. L., Moscona, S., Hughs, T., & Jeste, D. V. (2002). Medication management ability assessment: Results from a performance-based measure in older outpatients with schizophrenia. *Journal of Clinical Psychopharmacology*, 22(1), 11-19.

Patterson, T.L. & Mausbach, B.T. (2010) Measurement of functional capacity: A new approach to understanding functional differences and real-world behavioral adaptation in those with mental illness. *Annual Review of Clinical Psychology*, *6*, 139-154.

Patterson, T. L., Moscona, S., McKibbin, C. L., Davidson, K., & Jeste, D. V. (2001). Social skills performance assessment among older patients with schizophrenia. *Schizophrenia Research*, 48(2-3), 351-360. doi:10.1016/s0920-9964(00)00109-2

## e. Symptom Measures

Various measures of symptoms, insight, and bias in measurement.

Amador, X. F., Flaum, M., Andreasen, N. C., Strauss, D. H., Yale, S. A., Clark, S. C., & Gorman, J. M. (1994). Awareness of illness in schizophrenia and schizoaffective and mood disorders. *Archives of General Psychiatry*, *51*(10), 826-836.

Amador, X. F., Strauss, D. H., Yale, S. A., Flaum, M. M., Endicott, J., & Gorman, J. M. (1993). Assessment of insight in psychosis. *American Journal of Psychiatry*, 150(6), 873-879.

Beck, A. T., Baruch, E., Balter, J. M., Steer, R. A., & Warman, D. M. (2004). A new instrument for measuring insight: The Beck Cognitive Insight Scale. *Schizophrenia Research*, 68(2-3), 319-29.

Carpenter, W.T., Blanchard, J.J., & Kirkpatrick, B. (2016). New standards for negative symptom assessment. *Schizophrenia Bulletin*, 42(1), 1-3. doi: 10.1093/schbul/sbv160

Chadwick, P., Lees, S., & Birchwood, M. A. X. (2000). The revised beliefs about voices questionnaire (BAVQ-R). *The British Journal of Psychiatry*, 177(3), 229-232.

Kirkpatrick, B., Strauss, G.P., Nguyen, L., Fischer, B.A., Daniel, D.G., Cienfuegos, A., & Marder, S.R. (2011). The Brief Negative Symptom Scale: Psychometric properties. *Schizophrenia Bulletin*, *37*(2), 300-5. doi: 10.1093/schbul/sbq059

Kring, A.M., Gur, R.E., Blanchard, J.J., Horan, W.P., & Reise, S.P. (2013). The Clinical Assessment Interview for Negative Symptoms (CAINS): Final development and validation. *American Journal of Psychiatry*, 170(2), 165-72. doi: 10.1176/appi.ajp.2012.12010109

Lukoff, D., Liberman, R. P., & Nuechterlein, K. H. (1986). Symptom monitoring in the rehabilitation of schizophrenic patients. *Schizophrenia Bulletin*, *12*(4), 578-603. doi:https://doi.org/10.1093/schbul/12.4.578

Olbert, C. M., Nagendra, A., & Buck, B. (2018). Meta-analysis of Black vs. White racial disparity in schizophrenia diagnosis in the United States: Do structured assessments attenuate racial disparities? *Journal of Abnormal Psychology*, 127(1), 104.

Peters, E. R., Joseph, S. A., & Garety, P. A. (1999). Measurement of delusional ideation in the normal population: Introducing the PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 25(3), 553-576.

Schwartz, E. K., Docherty, N. M., Najolia, G. M., & Cohen, A. S. (2019). Exploring the racial diagnostic bias of schizophrenia using behavioral and clinical-based measures. *Journal of Abnormal Psychology*, 128(3), 263.

Strauss, G.P., & Gold, J.M. (2016). A psychometric comparison of the Clinical Assessment Interview for Negative Symptoms and the Brief Negative Symptom Scale. *Schizophrenia Bulletin*, 42(6),1384-1394. doi: 10.1093/schbul/sbw046

# f. Recovery Measures

This section presents information some measures of recovery.

Andreasen, N.C., Carpenter, W.T. Jr, Kane, J.M., Lasser, R.A., Marder, S.R., & Weinberger, D.R. (2005). Remission in schizophrenia: Proposed criteria and rationale for consensus. *American Journal of Psychiatry*, 162(3), 441-9. doi: 10.1176/appi.ajp.162.3.441

Choi, J., Mogami, T., & Medalia, A. (2009). Intrinsic Motivation Inventory: An adapted measure for schizophrenia research. *Schizophrenia Bulletin*, *36*(5), 966-976.

Drapalski, A.L., Medoff, D., Unick, G.J., Velligan, D.I., Dixon, L.B., & Bellack, A.S. (2012). Assessing recovery of people with serious mental illness: Development of a new scale. *Psychiatric Services*, 63(1), 48-53. doi: 10.1176/appi.ps.201100109

Smith, T. E., Rio, J., Hull, J. W., Hedayat-Harris, A., Goodman, M., & Anthony, D. T. (1998). The Rehabilitation Readiness Determination Profile: A needs assessment for adults with severe mental illness. *Psychiatric Rehabilitation Journal*, 21(4), 380-387.

van Weeghel, J., van Zelst, C., Boertien, D., & Hasson-Ohayon, I. (2019). Conceptualizations, assessments, and implications of personal recovery in mental illness: A scoping review of systematic reviews and meta-analyses. *Psychiatric Rehabilitation Journal*, 42, 169-181.

Wiedl, K. H. (1999). Cognitive modifiability as a measure of readiness for rehabilitation. *Psychiatric Services*, *50*(11), 1411-1413.

### g. System Measures

Information on a fidelity measure to promote use of evidence-based PSR interventions.

Sanches, S. A., Swildens, W. E., van Busschbach, J. T., Farkas, M. D., van Weeghel, J., & van Wel, T. (2018). FiRe: Evaluation of a fidelity measure to promote implementation of evidence-based rehabilitation. *Psychiatric Rehabilitation Journal*, 41(1), 46-54.

# VI. Interventions I: Early Interventions/First Episode & Family Interventions

# a. Early Interventions/First Episode

This section presents information on first episode psychosis, coordinated specialty care, importance of early intervention, and ultra-high risk for psychosis

Addington, D., McKenzie, E., Norman, R., Wang, J., & Bond, G. R. (2013). Essential evidence-based components of first episode psychosis services. *Psychiatric Services*, *64*, 452-57.

Breitborde, N.J.K. & Meier, M.H. (2016). Cognition in first-episode psychosis: From phenomenology to intervention. *Current Psychiatry Reviews, 12,* 306-318.

Breitborde, N. J. K., Moe, A. M., Woolverton, C., Harrison-Monroe, P., & Bell, E. K. (2018). An uncontrolled trial of multi-component care for first-episode psychosis: Effects on social cognition. *Early Intervention in Psychiatry*, 12(3), 464-468.

Breitborde, N. J. K., Woolverton, C., Dawson, S., Bismark, A., Bell, E. K., Bathgate, C. J., & Norman, K. (2017). Metacognitive skills training enhances computerized cognitive remediation outcomes among individuals with first-episode psychosis. *Early Intervention in Psychiatry*, 11, 244-249.

Birchwood, M., Todd, P., & Jackson, C. (1998). Early intervention in psychosis: The critical period hypothesis. *British Journal of Psychiatry*, 172 (33), 53-59.

Bird, V., Premkumar, P., Kendall, T., Whittington, C., Mitchell, J., & Kuipers, E. (2010). Early intervention services, cognitive-behavioural therapy and family intervention in early psychosis: Systematic review. *The British Journal of Psychiatry*, 197, 350-356.

Browne, J., Penn, D. L., Bauer, D. J., Meyer-Kalos, P. S., Mueser, K. T., Robinson, D. G., Addington, J., Schooler, N. R., & Kane, J. M. (2017). Perceived autonomy support in the NIMH RAISE Early Treatment Program. *Psychiatric Services*, *68*, 916-22.

Browne, J., Penn, D.L., Meyer-Kalos, P.S., Mueser, K.T., Estroff, S.E., Brunette, M.F., Correll, C.U., Robinson, J., Rosenheck, R.A., Schooler, N., Robinson, D.G., Addington, J., Marcy, P., Kane, J.M. (2017). Psychological well-being and mental health recovery in the NIMH RAISE Early Treatment Program. *Schizophrenia Research*, 185, 167-172.

Cabassa, L. J., Piscitelli, S., Haselden, M. Lee, R. J., Essock, S. M., & Dixon, L. B. (2018). Understanding pathways to care of individuals entering a specialized early intervention service for first episode-psychosis. *Psychiatric Services*, *69*(6), 648-656.

Dixon, L.B., Goldman, H.H., Srihari, V.H., & Kane, J.K. (2018). Transforming the treatment of schizophrenia in the U.S.: The RAISE initiative. *Annual Review of Clinical Psychology*, 14, 237-258. doi: 10.1146/annurev-clinpsy-050817-084934

Goldstein, A. B, Heinssen, R. K, Azrin, S. T. (2015). Accelerating science-to-practice for early psychosis. *Psychiatric Services*, 66(7), 665.

Ising, H.K., Kraan, T.C., Riedijk, J., Dragt, S., Klaassen, R.M.C., Boonstra, N., Nieman, D.H., Willebrands-Mendrik, M., van den Berg, D.P.G., Linszen, D.H., Wunderink, L., Veling, W., Smit, F., & van der Gaag, M. (2016). Four-year follow-up of cognitive behavioral therapy in persons at ultra-high risk for developing psychosis: The Dutch early detection intervention evaluation (EDIE-NL) trial. *Schizophrenia Bulletin*, 42(5), 1243-1252.

Jeppesen, P. I. A., Petersen, L., Thorup, A., Abel, M. B., Oehlenschlaeger, J., Christensen, T. O., Krarup,m G., Hemmingsen, R., Jorgensen, P., & Nordentoft, M. (2005). Integrated treatment of first-episode psychosis: Effect of treatment on family burden. *The British Journal of Psychiatry*, 187, s85-s90.

Kane, J. M., Robinson, D. E., Schooler, N. R., Mueser, K. T., Penn, D. L., Rosenheck, R. A., Addington, J., Brunette, M. F., Correll, C. U., Estroff, S. E., Marcy, P., Robinson, J., Lynde, D. W., Meyer-Kalos, P. S., Gottlieb, J. D., Glynn, S. M., Pipes, R., Kurian, B. T., Miller, A. L., Azrin, S. T., Goldstein, A. B., Severe, J. B., Lin, H., Majnu, J., & Heinssen, R. K. (2016). Comprehensive versus usual care for first episode psychosis: Two-year outcomes from the NIMH RAISE Early Treatment Program. *American Journal of Psychiatry*, *173*, 362-72.

Ma, C. F., Chien, W. T., & Bressington, D. T. (2018) Family intervention for caregivers of people with recent-onset psychosis: A systematic review and meta-analysis. *Early Intervention in Psychiatry*, 12(4), 535-560.

Meyer, P. S., Gottlieb, J. D., Penn, D., Mueser, K. T., & Gingerich, S. (2015). Individual Resiliency Training (IRT): An early intervention approach to enhance well-being in persons with first episode psychosis. *Psychiatric Annals*, 45(11), 554-560.

Miklowitz, D. J., Schneck, C. D., Walshaw, P. D., Garrett, A. S., Singh, M. K., Sugar, C. A., & Chang, K. D. (2019). Early intervention for youth at high risk for bipolar disorder: A multisite randomized trial of family-focused treatment. *Early Intervention in Psychiatry*, 13(2), 208-216.

Mueser, K.T., Penn, D.L., Addington, J., Brunette, M.F., Gingerich, S., Glynn, S.M., Lynde, D.W., Gottlieb, J.D., Meyer-Kalos, P.S., McGurk, S.R., Cather, C., Saade, S., Robinson, D. G., Schooler, N.R., Rosenheck, R.A., & Kane, J.M. (2015). The NAVIGATE program for first episode psychosis: Rationale, overview, and description of psychosocial components. *Psychiatric Services*, 66(7), 680-690.

Nilsen, L., Frich, J. C., Friis, S., Norheim, I., & Rossberg, J. I. (2016). Participants' perceived benefits of family intervention following a first episode of psychosis: A qualitative study. *Early Intervention in Psychiatry*, 10(2), 152-159.

Nossel, I., Wall, M. M., Scodes, J., Marino, L. a., Zilkha, S., Bello, I., ... Radigan, M. (2018). Results of a coordinated specialty care program for early psychosis and predictors of outcomes. *Psychiatric Services*, *69*(8), 863-870.

Mueser, K.T., Penn, D.L., Addington, J., Brunette, M.F., Gingerich, S., Glynn, S.M., Lynde, D.W., Gottlieb, J.D., Meyer-Kalos, P.S., McGurk, S.R., Cather, C., Saade, S., Robinson, D. G., Schooler, N.R., Rosenheck, R.A., & Kane, J.M. (2015). The NAVIGATE program for first episode psychosis: Rationale, overview, and description of psychosocial components. *Psychiatric Services*, 66(7), 680-690.

Okuzawa, N., Kline, E., Fuertes, J., Negi, S., Reeves, G., Himelhoch, S., & Schiffman, J. (2014). Psychotherapy for adolescents and young adults at high risk for psychosis: Systematic review. *Early Intervention in Psychiatry*, 8(4), 307-22. doi: 10.1111/eip.12129

Oluwoye, O., Stiles, B., Monroe-DeVita, M., Chwastiak, L., McClellan, J. M., Dyck, D., Cabassa, L.J., & McDonell, M. G. (2018). Racial-ethnic disparities in first-episode psychosis treatment outcomes from the RAISE-ETP study. *Psychiatric Services*, *69*(11), 1138-1145.

Penn, D. L., Uzenoff, S. R., Perkins, D., Mueser, K. T., Hamer, R. M., Waldheter, E. J., Saade, S., & Cook, L. (2011). A pilot investigation of the Graduated Recovery Intervention Program (GRIP) for first episode psychosis. *Schizophrenia Research*, 125, 247-56.

Rosenheck, R., Leslie, D., Sint, K., Lin, H., Robinson, D.G., Schooler, N.R., Mueser, K.T., Penn, D.L., Addington, J., Brunette, M.F., Correll, C.U., Estroff, S.E., Marcy, P., Robinson, J., Severe, J., Rupp, A., Schoenbaum, M., Kane, J.M. (2016). Cost-effectiveness of comprehensive, integrated care for first episode psychosis in the NIMH RAISE Early Treatment Program, *Schizophrenia Bulletin*, 42(4), 896-906.

Rosenheck, R. A., Mueser, K. T., Sint, K., Lin, H., Lynde, D. W., Glynn, S. M., Robinson, D. E., Schooler, N. R., Marcy, P., Mohamed, S., & Kane, J. M. (2017). Supported employment and

education in comprehensive, integrated care for first episode psychosis: Effects on work, school, and disability income. *Schizophrenia Research*, 182, 120-128.

Rowland, L. M., & Wickwire, E. M. (2018). A wake-up call: Assess and treat sleep disorders in early psychosis. *Schizophrenia Bulletin*, 45(2), 265-266.

Wright, A., Browne, J., Mueser, K. T., & Cather, C. (2019). Evidence-based psychosocial treatment for individuals with early psychosis. *Child and Adolescent Psychiatric Clinics*, 29(1), 211-223.

# b. Family Interventions

This section focuses on articles examining the efficacy of family interventions in addressing symptoms, functional impairments, caregiver burden, and family functioning in individuals with schizophrenia and individuals at high risk for psychosis or bipolar disorder.

Ma, C. F., Chien, W. T., & Bressington, D. T. (2018). Family intervention for caregivers of people with recent-onset psychosis: A systematic review and meta-analysis. *Early Intervention in Psychiatry*, 12(4), 535–560. https://doi-org.ezp2.lib.umn.edu/10.1111/eip.12494

• This review of 12 studies examined the impact of multiple types of family intervention for first-episode psychosis on caregiver outcomes at 6, 12, and 24-months.

McFarlane W. R. (2016). Family interventions for schizophrenia and the psychoses: A review. *Family Process*, *55*(3), 460–482. https://doi-org.ezp2.lib.umn.edu/10.1111/famp.12235

This article describes family psychoeducation, including components, theoretical
assumptions, and historical context. Comprehensive review of family psychoeducation
for psychosis, focusing primarily on the multiple family group therapy approach to
family psychoeducation.

Rodolico, A., Bighelli, I., Avanzato, C., Concerto, C., Cutrufelli, P., Mineo, L., Schneider-Thoma, J., Siafis, S., Signorelli, M. S., Wu, H., Wang, D., Furukawa, T. A., Pitschel-Walz, G., Aguglia, E., & Leucht, S. (2022). Family interventions for relapse prevention in schizophrenia: A systematic review and network meta-analysis. *The Lancet. Psychiatry*, *9*(3), 211–221. https://doi-org.ezp2.lib.umn.edu/10.1016/S2215-0366(21)00437-5

 A review of 90 randomized clinical trials of family interventions for individuals with schizophrenia. Multiple family models are included in the analysis. Symptom and functioning outcomes at 12 months are reported. Weintraub, M. J., Schneck, C. D., Posta, F., Merranko, J. A., Singh, M. K., Chang, K. D., & Miklowitz, D. J. (2022). Effects of family intervention on psychosocial functioning and mood symptoms of youth at high risk for bipolar disorder. *Journal of Consulting and Clinical Psychology*, 90(2), 161–171. https://doi-org.ezp2.lib.umn.edu/10.1037/ccp0000708

 A randomized clinical trial of Family Focused Therapy for individuals at high risk for bipolar disorder is presented. Outcomes for family psychoeducation versus enhanced usual care are provided for symptom severity, functioning, and family functioning.

O'Brien Cannon, A. C., Caporino, N. E., O'Brien, M. P., Miklowitz, D. J., Addington, J. M., & Cannon, T. D. (2023). Family communication and the efficacy of family focused therapy in individuals at clinical high risk for psychosis with comorbid anxiety. *Early Intervention in Psychiatry*, 17(3), 281–289. https://doi-org.ezp2.lib.umn.edu/10.1111/eip.13326

 A randomized clinical trial of Family Focused Therapy for individuals at high risk for psychosis is presented. Outcomes for family psychoeducation versus enhanced usual care are provided for measures of family communication and anxiety at 6- and 12months.

Mueser, K. T., Achtyes, E. D., Gogate, J., Mancevski, B., Kim, E., & Starr, H. L. (2022). Telehealth-based psychoeducation for caregivers: The family intervention in recent-onset schizophrenia treatment study. *Journal of Medical Internet Research: Mental Health*, *9*(4), e32492. https://doi-org.ezp2.lib.umn.edu/10.2196/32492

 A randomized clinical trial of a tele-health, caregiver-focused, family psychoeducation intervention for recent-onset psychosis is presented. Outcomes for the family intervention in comparison to usual care are examined for caregiver burden as well as symptom exacerbation at 12 months.

Ince, P., Haddock, G., & Tai, S. (2016). A systematic review of the implementation of recommended psychological interventions for schizophrenia: Rates, barriers, and improvement strategies. *Psychology and Psychotherapy*, 89(3), 324–350. https://doiorg.ezp2.lib.umn.edu/10.1111/papt.12084

 This article reviews the literature to examine rates of implementation of family interventions and cognitive behavioral therapy for individuals with psychosis. Barriers to implementation are identified.

Oluwoye, O., Stiles, B., Monroe-DeVita, M., Chwastiak, L., McClellan, J. M., Dyck, D., Cabassa, L. J., & McDonell, M. G. (2018). Racial-ethnic disparities in first-episode psychosis treatment outcomes from the RAISE-ETP study. *Psychiatric Services*, 69(11), 1138–1145. https://doi-org.ezp2.lib.umn.edu/10.1176/appi.ps.201800067

• This study examines racial and ethnic disparities in the provision of services in a first episode psychosis treatment program. Hispanic and Black participants were found to be less likely to receive family psychoeducation.

Claxton, M., Onwumere, J., & Fornells-Ambrojo, M. (2017). Do family interventions improve outcomes in early psychosis? A systematic review and meta-analysis. *Frontiers in Psychology*, 8, 371. https://doi-org.ezp2.lib.umn.edu/10.3389/fpsyg.2017.00371

This is a meta-analysis informed by 14 studies that examines the impact of family
interventions for individuals with a recent onset of psychosis. A variety of symptom,
functioning, family functioning, and caregiver burden outcomes are examined.

Camacho-Gomez, M., & Castellvi, P. (2020). Effectiveness of family intervention for preventing relapse in first-episode psychosis until 24 months of follow-up: A systematic review with meta-analysis of randomized controlled trials. *Schizophrenia Bulletin*, 46(1), 98–109. https://doi-org.ezp2.lib.umn.edu/10.1093/schbul/sbz038

 This is a meta-analysis of 11 clinical trials examining the impact of family interventions on relapse prevention in first-episode psychosis. Outcomes are presented at a 24month follow-up.

# VII. Interventions II: Empirically Supported Psychological and Social Treatments/Interventions

This section presents information on the most well-known empirically supported interventions for SMI. The headings above each grouping indicate the categorization of the articles in the group.

## a. Assertive Community Treatment

Bond, G.R., & Drake, R.E. (2015). The critical ingredients of assertive community treatment. *World Psychiatry*, 14(2), 240-242.

Monroe-DeVita, M., Morse, G., Mueser, K. T., McHugo, G. J., Xie, H., Hallgren, K. A., ... Akiba, C. (2018). Implementing illness management and recovery within assertive community treatment: A pilot trial of feasibility and effectiveness. *Psychiatric Services*, *69*(5), 562-571.

Thorning, H. & Dixon, L. (2020). Forty-five years later: the challenge of optimizing assertive community treatment. *Current Opinion in Psychiatry*, 33, 397-406.

#### b. <u>Illness, Management, & Recovery</u>

Canacott, L., Moghaddam, N., & Tickle, A. (2019). Is the Wellness Recovery Action Plan (WRAP) efficacious for improving personal and clinical recovery outcomes? A systematic review and meta-analysis. *Psychiatric Rehabilitation Journal*, 42(4), 372.

Cook, J. A., Copeland, M. E., Jonikas, J. A., Hamilton, M. M., Razzano, L. A., Grey, D. D., ... & Boyd, S. (2012). Results of a randomized controlled trial of mental illness self-management using Wellness Recovery Action Planning. *Schizophrenia Bulletin*, 38(4), 881-891.

Monroe-DeVita, M., Morse, G., Mueser, K. T., McHugo, G. J., Xie, H., Hallgren, K. A., Peterson, R., Miller, J., Akiba, C., York, M., Gingerich, S., & Akiba, C. (2018). Implementing illness management and recovery within assertive community treatment: A pilot trial of feasibility and effectiveness. *Psychiatric Services*, 69(5), 562-571.

# c. Cognitive Behavioral Therapy (CBT) for Psychosis

This section provides references describing the development and efficacy of CBT for psychosis. Studies sampled examine its impact on individuals at different stages of illness, using different formats, and with cultural adaptations.

Brabban, A., Byrne, R., Longden, E., & Morrison, A. P. (2016). The importance of human relationships, ethics, and recovery-oriented values in the delivery of CBT for people with psychosis. Psychosis.

• Discusses implementation of CBTp and identifies practices that are consistent with ethical, competent, and recovery-oriented delivery.

Guaiana, G., Abbatecola, M., Aali, G., Tarantino, F., Ebuenyi, I.D., Lucarini, V., Li, W., Zhang, C., Pinto, A. (2022). Cognitive Behavioural Therapy (group) for schizophrenia. Cochrane Database Syst Rev, 7(7):CD009608. doi: 10.1002/14651858.CD009608.

Meta-analysis of group CBTp.

Kumari, V., & Terca, T. (2017). Cognitive Behaviour Therapy for psychosis: Insights from neuroimaging. *Journal of Neuroimaging in Psychiatry*, 2(1), 11-19.

Provides a review of studies examining the neural effects and/or predictors of CBTp.

Mander, H. & Kingdon, D. (2015). The evolution of CBT for psychosis. *Psychology Research and Behavior Management*, *8*, 63-69.

Provides a history of the development of CBTp.

Morrison, A.P., & Barratt, S. (2009). What are the components of CBT for psychosis? A Delphi study. *Schizophrenia Bulletin*, *36*(1), 136-142.

• This study uses the Delphi method to try to establish what a group of experts view as important components of CBTp.

Naeem, F., Saeed, S., Irfan, M., Kiran, T., Mehmood, N., Gul, M., Munshi, T., Ahmad, S., Kazmi, A., Husain, N., Farooq, S., Ayub, M., & Kingdon, D. (2015). Brief culturally adapted CBT for psychosis (CaCBTp): A randomized controlled trial from a low-income country. *Schizophrenia Research*, 164(1-3), 143-148.

• This is the first trial of CBT for psychosis from outside the western world.

Rathod S, Phiri P, Harris S, et al. (2013). Cognitive Behaviour Therapy for psychosis can be adapted for minority ethnic groups: A randomised controlled trial. *Schizophrenia Research*, 143(2–3), 319–326.

• This study assessed the effectiveness of a culturally adapted CBT for psychosis (CaCBTp) in Black British, African Caribbean/Black African and South Asian Muslim participants.

Sitko, K., Bewick, B.M., Owens, D., & Masterson, C. (2020). Meta-analysis and meta-regression of Cognitive Behavioral Therapy for psychosis (CBTp) across time: The effectiveness of CBTp has improved for delusions. *Schizophrenia Bulletin*, 1(1), sgaa023.

 Recent meta-analysis that looks at changes over time in effectiveness of CBTp across various domains.

White, D., & Luther, L. (2017). Efficacy of Cognitive Behavior Therapy in early psychosis. *Schizophrenia Bulletin*, 43(1), S209.

 Assesses the overall efficacy of CBT for the reduction of psychotic symptoms in the early psychosis population.

Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive Behaviour Therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin*, 34, 523–537.

Meta-analysis of CBTp that includes analysis of methodological rigor.

Zheng, Y., Xu, T., Zhu, Y., Li, C., Wang, J., Livingstone, S., & Zhang, T. (2021). Cognitive behavioral therapy for prodromal stage of psychosis—outcomes for transition, functioning, distress, and quality of life: A systematic review and meta-analysis. *Schizophrenia Bulletin*, 48(1), 8-19.

Meta-analysis of CBTp for those in the prodromal stage of psychosis.

# d. Cognitive Interventions/Cognitive Remediation

Allott, K., van-der-El, K., Bryce, S., Parrish, E.M., McGurk, S.R., Hetrick, S., Bowie, C.R., Kidd, S., Hamilton, M., Killackey, E., & Velligan D. (2020). Compensatory interventions for cognitive impairments in psychosis: A systematic review and meta-analysis. *Schizophrenia Bulletin,* 46(4), 869-883. doi: 10.1093/schbul/sbz134

Bowie, C. R., Bell, M. D., Fiszdon, J. M., Johannesen, J. K., Lindenmayer, J. P., McGurk, S. R., Medalia, A.A., Penades, R., Saperstein, A.M., & Twamley, E.W., Ueland, T., & Wykes, T. (2019). Cognitive remediation for schizophrenia: An expert working group white paper on core techniques. *Schizophrenia Research*, 215, 49-53. doi: 10.1016/j.schres.2019.10.047

Bowie, C.R., Grossman, M., Gupta, M., Holshausen, K., & Best, M.W. (2016). Action-based cognitive remediation for individuals with serious mental illnesses: Effects of real-world simulations and goal setting on functional and vocational outcomes. *Psychiatric Rehabilitation Journal*, 40(1), 53-60.

Breitborde, N. J. K., Woolverton, C., Dawson, S., Bismark, A., Bell, E. K., Bathgate, C. J., & Norman, K. (2017). Metacognitive skills training enhances computerized cognitive remediation outcomes among individuals with first-episode psychosis. *Early Intervention in Psychiatry*, 11, 244-249.

Cella, M., Reeder, C., & Wykes, T. (2015). Lessons learnt? The importance of metacognition and its implications for Cognitive Remediation in schizophrenia. *Frontiers in Psychology, 6,* 1259-68.

Horan, W. P., & Green, M. F. (2019). Treatment of social cognition in schizophrenia: Current status and future directions. *Schizophrenia Research*, 203, 3-11.

Keshavan, M. S., Vinogradov, S., Rumsey, J., Sherrill, J., & Wagner, A. (2014). Cognitive training in mental disorders: Update and future directions. *The American journal of psychiatry*, 171(5), 510-522.

Leman, C. S., Medalia, A., & Erlich, M. D. (2018). Acceptability and perceived effectiveness of cognitive remediation in clinical practice. *Psychiatric Services*, 69(4), 493-494.

Penadés, R., Pujol, N., Catalán, R., Massana, G., Rametti, G., García-Rizo, C., Bargallo, N., Gasto, C., Bernardo, M., & Junqué, C. (2013). Brain effects of cognitive remediation therapy in schizophrenia: A structural and functional neuroimaging study. *Biological Psychiatry*, 73(10), 1015-1023.

Ramsay, I. S., & MacDonald, A. W. (2015). Brain correlates of cognitive remediation in schizophrenia: Activation likelihood analysis shows preliminary evidence of neural target engagement. *Schizophrenia Bulletin, 41*, 6, 1276-1284.

Revell, E. R., Neill, J. C., Harte, M., Khan, Z., & Drake, R. J. (2015). A systematic review and meta-analysis of cognitive remediation in early schizophrenia. *Schizophrenia Research*, *168*, 213-222.

Velligan, D. I., Bow-Thomas, C. C., Huntzinger, C., Ritch, J., Ledbetter, N., Prihoda, T. J., & Miller, A. L. (2000). Randomized controlled trial of the use of compensatory strategies to enhance adaptive functioning in outpatients with schizophrenia. *American Journal of Psychiatry*, 157(8), 1317-1323.

Velligan, D. I., Kern, R. S., & Gold, J. M. (2006). Cognitive rehabilitation for schizophrenia and the putative role of motivation and expectancies. *Schizophrenia Bulletin, 32*(3), 474-485. doi:10.1093/schbul/sbj071

Wykes, T., Huddy, V., Cellard, C., McGurk, S. R., & Czobor, P. (2011). A meta-analysis of cognitive remediation for schizophrenia: Methodology and effect sizes. *American Journal of Psychiatry*, 168, 472-485.

## e. Social/Community Interventions – Supported Employment

Anthony, W. A. (2008). Supported employment in the context of psychiatric rehabilitation. *Psychiatric Rehabilitation Journal*, *31*(4), 271-272.

Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal*, 31(4), 280-290. doi:10.2975/31.4.2008.280.290

Bond, G. R., & Drake, R. E. (2014). Making the case for IPS supported employment. *Administration and Policy in Mental Health*, 41(1), 69-73. doi:10.1007/s10488-012-0444-6

Bond, G. R., Salyers, M. P., Dincin, J., Drake, R. E., Becker, D. R., Fraser, V. V., & Haines, M. (2007). A randomized controlled trial comparing two vocational models for persons with severe mental illness. *Journal of Consulting and Clinical Psychology*, 75(6), 968–982. https://doi.org/10.1037/0022-006X.75.6.968

Corrigan, P. W., & McCracken, S. G. (2005). Place first, then train: An alternative to the medical model of psychiatric rehabilitation. *Social Work, 50*(1), 31-39.

Corrigan, P. W., Sheehan, L., Walley, G., Qin, S., Nieweglowski, K., & Maurer, K. (2020). Strengths and challenges of peer coaches for supported education in colleges and universities. *Psychiatric Rehabilitation Journal*, *43(3)*, 175–178.

Frederick DE, VanderWeele TJ (2019). Supported employment: Meta-analysis and review of randomized controlled trials of individual placement and support. *PLOS ONE 14*(2): e0212208. https://doi.org/10.1371/journal.pone.0212208

Kern, R. S., Zarate, R., Glynn, S. M., Turner, L. R., & Smith, K. M. (2018). Improving work outcome in supported employment for serious mental illness: Results from 2 independent studies of errorless learning. *Schizophrenia Bulletin*, 44(1), 38-45.

Luciano, A., Bond, G.R., & Drake, R.E. (2014). Does employment alter the course and outcome of schizophrenia and other severe mental illnesses? A systematic review of longitudinal research. *Schizophrenia Research*, 159(2-3), 312-21.

Luciano, A,. Drake, R.E., Bond, G.R., Becker, D.R., Carpenter-Song, E., Lord, S., Swarbrick, M., & Swanson, S.J. (2014). Evidence-based supported employment for people with severe mental illness: Past, current, and future research. *Journal of Vocational Rehabilitation*, 40(1), 1-13.

Mahmood, Z., Keller, A.V., Burton, C.Z., Vella, L., Matt, G.E., McGurk, S.R., & Twamley, E.W. (2019). Modifiable predictors of supported employment outcomes among people with severe mental illness. *Psychiatric Services*, 70(9), 782-792.

McGurk, S. R., Drake, R. E., Xie, H., Riley, J., & Milfort, R. (2018). Cognitive predictors of work among social security disability insurance beneficiaries with psychiatric disorders enrolled in IPS supported employment. *Schizophrenia Bulletin*, 44(1), 32-37.

Mueser, K. T., Drake, R. E., & Bond, G. R. (2016). Recent advances in supported employment for people with serious mental illness. *Current Opinion in Psychiatry*, 29(3), 196-201.

Rosenheck, R. A., Mueser, K. T., Sint, K., Lin, H., Lynde, D. W., Glynn, S. M., Robinson, D. E., Schooler, N. R., Marcy, P., Mohamed, S., & Kane, J. M. (2017). Supported employment and education in comprehensive, integrated care for first episode psychosis: Effects on work, school, and disability income. *Schizophrenia Research*, 182, 120-128.

Russinova, Z., Gidugu, V., Bloch, P., Restrepo-Toro, M., & Rogers, E. S. (2018). Empowering individuals with psychiatric disabilities to work: Results of a randomized trial. *Psychiatric Rehabilitation Journal*, 41(3), 196-207.

Soydan, A. S. (2004). Supported education: A portrait of a psychiatric rehabilitation intervention. *American Journal of Psychiatric Rehabilitation*, 7(3), 227-248.

Teixeira, C., Mueser, K., T., Rogers, E. S., & McGurk, S. R. (2018). Job endings and work trajectories of persons receiving supported employment and cognitive remediation. *Psychiatric Services*, 69(7), 812-818.

Williams, A.E., Fossey, E., Corbiere, M., Paluch, T., & Harvey, C. (2016). Work participation for people with severe mental illnesses: An integrative review of factors impacting job tenure. *Australian Occupational Therapy Journal*, 63(2), 65-85.

## f. Social Learning Programs

Dickerson, F. B., Tenhula, W. N., & Green-Paden, L. D. (2005). The token economy for schizophrenia: Review of the literature and recommendations for future research. *Schizophrenia research*, *75*(2-3), 405-416.

Paul, G. L., & Lentz, R. J. (1977). Psychosocial treatment of chronic mental patients: Milieu versus social-learning programs. *Cambridge: Harvard University Press*.

# g. Social Skills Training

This section summarizes clinical trials describing the efficacy of social skills training. Several articles provide background detailing the rationale for this approach to treatment, methods used as a part of social skills training, and future directions. Several examples of the feasibility and effectiveness of providing social skills training in real-world inpatient and outpatient settings are also provided.

Addington, J., Liu, L., Braun, A., Brummitt, K., Cadenhead, K. S., Cornblatt, B. A., Holden, J. L., & Granholm, E. (2023). Cognitive-behavioral social skills training: Outcome of a randomized controlled trial for youth at risk of psychosis. *Schizophrenia Bulletin Open, 4*.

 This article describes a randomized controlled trial of cognitive behavioral social skills as compared to a supportive therapy delivered to youth a clinical high risk for psychosis.
 Post-intervention and follow-up assessments examine functional and symptom outcomes.

Almerie, M.Q., Okba, A.I., Marhi, M., Jawoosh, M., Alsabbagh, M., Matar, H. E., Maayan, N., & Bergman, H. (2015). Social skills programmes for schizophrenia. Cochrane Database of Systematic Reviews, 6, Art. No.: CD009006.

 A meta-analysis of 13 randomized clinical trials comparing social skills training to comparators on symptom and functional outcomes.

Aruldass, P., Selvi Sekar, T., Saravanan, S., Samuel, R., & Jacob, K. S. (2022). Effectiveness of social skils training groups in persons with severe mental illness: A pre-post intervention study. *Indian Journal of Psychological Medicine*, 44, 114-119.

• This article reports on the effectiveness of delivering a 6-session social skills training program to inpatients (n = 101) with serious mental illness (schizophrenia and bipolar disorder) in India. Social and symptom outcomes are examined. Results support feasibility of intervention delivery in this setting and effectiveness.

# Bellack, A. S. (2004). Skills training for people with severe mental illness. *Psychiatric Rehabilitation Journal*, 27, 372-391.

 This overview provides a rationale for social skills training and describes critical components of the intervention. It describes new directions in the development of social skills training programs and provides a critique of reviews of the empirical literature of the 1980s and 1990s.

Buchanan, R. W., Kelly, D. L., Strauss, G. P., Gold, J. M., Weiner, E., Zaranski, J., Chen, S., Blatt, F., Holden, J., & Granholm, E. (2021). Combined oxytocin and CBSST for social function in people with schizophrenia. *Journal of Clinical Psychopharmacology*, 41, 236-243.

This article is an example of social skills training being combined with another
intervention. It describes a randomized clinical trial of Cognitive Behavioral Social Skills
Training (CBSST) combined with intranasal oxytocin as compared to CBSST alone in a
sample of participants with schizophrenia or schizoaffective disorder. No group
differences were found on measures of symptom severity, social functioning, defeatist
beliefs, or asocial beliefs.

Kopelowicz, A., Liberman, R. P., Zarate, R. (2006). Recent advances in social skill training for schizophrenia. *Schizophrenia Bulletin*, *32*, S12-S23.

 This overview provides a rationale for social skills training and describes critical components of the intervention. It describes new directions in the development of social skills training programs focusing on integration of social skills training with other approaches to intervention with the aim of improving role functioning.

Oliveira, C., Simoes de Almeida, R., & Marques, A. (2021). Virtual reality in social skills training programs for people with schizophrenia: A systemic review and focus group. *British Journal of Occupational Therapy, 84*, 571-581.

 This study proposes guidelines for the development of virtual reality delivery of social skills training. Five articles are reviewed to identify critical components of the intervention, and a focus group is conducted with potential providers to identify facilitators and barriers to this approach to intervention delivery. Rajji, T., K., Mamo, D., C., Holden, J., Granholm, E., & Mulsant, B., H. (2022). Cognitive-Behavioral Social Skills Training for patients with late-life schizophrenia and the moderating effect of executive dysfunction. *Schizophrenia Research*, 239, 16-167.

 This is a randomized controlled trial to examine the efficacy of Cognitive Behavioral Social Skills Training (CBSST) as compared to treatment as usual in a sample of older participants with schizophrenia. Impact on social functioning was examined at postintervention and a 3-month follow up. Baseline cognitive functioning was examined as a moderator of treatment effects.

Turner, D. T., McGlanaghy, E., Cuijpers, P., van der Gaag, M., Karyotaki, E., MacBeth, A. (2018). A meta-analyis of social skills training and related interventions for psychosis. *Schizophrenia Bulletin*, 44, 475-491.

 This meta-analysis of 27 randomized clinical trials examines impact of social skills training on social outcomes, negative symptoms, and positive symptoms. Social skills training is evaluated against several types of comparison groups. Variants of social skills training are also compared to each other.

Wauchope, B., Terlich, A., Lee, S. (2016). Rel8: Demonstrating the feasibility of delivering an 8-week social skills program in a public mental health setting. *Australasian Psychiatry*, 24, 285-288.

 This article describes a study examining the feasibility of offering an 8-week social skills training program to individuals with psychotic disorders in a community mental health setting. Results support feasibility and acceptability.

## VIII. Interventions III: Promising or Emerging Practices and Supporting Services

This section presents information on the interventions that are promising and also on services that persons with SMI indicate are valuable to them. The headings above each grouping indicate the categorization of the articles in the group.

## a. Mobile & Telehealth Interventions

Alvarez-Jimenez, M., Alcazar-Corcoles, M.A., Gonzalez-Blanch, C., Bendall, S., McGorry, P.D., & Gleeson, J.F. (2015). Online social media: New data, new horizons in psychosis treatment. *Schizophrenia Research*, *166*(1-3), 345-6. doi: 10.1016/j.schres.2015.05.006

Ben-Zeev, D., Brian, R. M., Jonathan, G., Razzano, L., Pashka, N., Carpenter-Song, E., Drake, R. E., & Scherer, E. A. (2018). Mobile-Health (mHealth) versus clinic-based group intervention for people with serious mental illness: A randomized controlled trial. *Psychiatric Services*, *69*(9), 978-985.

Firth, J., Torous, J., Nicholas, J., Carney, R., Pratap, A., Rosenbaum, S., & Sarris, J. (2017). The efficacy of smartphone-based mental health interventions for depressive symptoms: A meta-analysis of randomized controlled trials. *World Psychiatry*, 16(3), 287-298. doi: 10.1002/wps.20472

Goldberg, S.B., Buck, B., Raphaely, S., & Fortney, J.C. (2018). Measuring psychiatric symptoms remotely: A systematic review of remote measurement-based care. *Current Psychiatry Reports*, 20(10), 81. doi: 10.1007/s11920-018-0958-z.

Granholm, E., Ben-Zeev, D., Fulford, D., & Swendsen, J. (2013). Ecological Momentary Assessment of social functioning in schizophrenia: Impact of performance appraisals and affect on social interactions. Schizophrenia Research, 145(1-3), 120-124. doi:10.1016/j.schres.2013.01.005

Schulze, L.N., Stentzel, U., Leipert, J., Schulte, J., Langosch, J., Freyberger, H., ... & van den Berg, N. (2019). Improving medication adherence with telemedicine for adults with severe mental illness. *Psychiatric Services*, 70(3), 225-228.

## b. Peer Support/Hearing Voices Network

Adams, W. E., & Lincoln, A. K. (2020). Forensic peer specialists: Training, employment, and lived experience. *Psychiatric Rehabilitation Journal*, 43(3), 189–196.

Aschbrenner, K. A., & Brunette, M. F. (2018). The role of peers in health interventions for serious mental illness. *Psychiatric Services*, 69(5), 497-497.

Bouchery, E. E., Barna, M., Babalola, E., Friend, D., Brown, J. D., Blyler, C., & Ireys, H. T. (2018). The effectiveness of a peer-staffed crisis respite program as an alternative to hospitalization. *Psychiatric Services*, *69*(10), 1069-1074.

Corrigan, P., Sheehan, L., Morris, S., Larson, J. E. Torres, A., Lara, J. L., Paniagua, D., Mayes, J.I., & Doing, S. (2018). The impact of a peer navigator program in addressing the health needs of Latinos with serious mental illness. *Psychiatric Services*, 69(4), 456-461.

Davidson, L., & Guy, K. (2012). Peer support among persons with severe mental illnesses: A review of evidence and experience. *World psychiatry*, 11(2), 123-128.

Druss, B. G., Singh, M., von Esenwein, S. A., Glick, G. E., Tapscott, S., Jenkins Tucker, S., ... Sterling, E. W. (2018). Peer-led self-management of general medical conditions for patients with serious mental illnesses: A randomized trial. *Psychiatric Services*, 69(5), 529-535.

O'Connell, M. J., Sledge, W. H., Staeheli, M., Sells, D., Costa, M., Wieland, M., & Davidson, L. (2018). Outcomes of a peer mentor intervention for persons with recurrent psychiatric hospitalization. *Psychiatric Services*, 69(7), 760-767.

Muralidharan, A., Niv, N., Brown, C. H., Olmos-Ochoa, T. T., Juan-Fang, L., Cohen, A. N., Kreyenbuhi, J., Oberman, R., G., Foldberg, R.W., & Young, A.S. (2018). Impact of online weight management with peer coaching on physical activity levels of adults with serious mental illness. *Psychiatric Services*, 69(10), 1062-1068.

#### c. Physical Health Interventions

Álvarez-Jiménez, M., Hetrick, S. E., Gonzalez-Branch, C., Gleeson, J. F., & McGorry, P. D. (2008). Non-pharmacological management of antipsychotic-induced weight gain: Systematic review and meta-analysis of randomised controlled trials. *British Journal of Psychiatry*, 193(2), 101–107.

Álvarez-Jiménez, M., Martínez-García, O., Pérez-Iglesias, R., Ramírez, M. L., Vázquez-Barquero, J. L., Crespo-Facorro, B. (2010). Prevention of antipsychotic-induced weight gain with early behavioural intervention in first-episode psychosis: 2-year results of a randomized controlled trial. *Schizophrenia Research*, 116(1), 16–19.

Aschbrenner, K. A., & Brunette, M. F. (2018). The role of peers in health interventions for serious mental illness. *Psychiatric Services*, 69(5), 497-497.

Druss, B. G., Singh, M., von Esenwein, S. A., Glick, G. E., Tapscott, S., Jenkins Tucker, S., Lally, C.A., & Sterling, E. W. (2018). Peer-led self-management of general medical conditions for patients with serious mental illnesses: A randomized trial. *Psychiatric Services*, *69*(5), 529-535.

Muralidharan, A., Brown, C.H., Peer, J.E., Klingaman, E.A., Hack, S.M., Lan, L., Walsh, M.B., & Goldberg, R.W. (2019). Living well: An intervention to improve medical illness self-management among individuals with serious mental illness. *Psychiatric Services*, 70(1), 19-25.

Muralidharan, A., Niv, N., Brown, C. H., Olmos-Ochoa, T. T., Juan-Fang, L., Cohen, A. N., ... Kreyenbuhl, J. (2018). Impact of online weight management with peer coaching on physical activity levels of adults with serious mental illness. *Psychiatric Services*, *69*(10), 1062-1068.

Nankivell, J., Platania-Phung, C., Happell, B., & Scott, D. (2013). Access to physical health care for people with serious mental illness: A nursing perspective and a human rights perspective – common ground? *Issues in Mental Health Nursing*, 34, 442-450.

Osnat, M.C., Wong, E.N., LaChance, L.R., Kanji, S., & Taylor, V.H. (2019). Interventions to improve metabolic risk screening among adult patients taking antipsychotic medication: A systematic review. *Psychiatric Services*, 70(12), 1138-1156.

Weinstein, L. C., Chilton, M., Turchi, R., Klassen, A. C., LaNoue, M., Silvero, A., & Cabassa, L. J. (2021). 'It's common sense that an individual must eat': Advocating for food justice with

people with psychiatric disabilities through photovoice. *Health Expectations*, 24(Suppl. 1), 161-173.

## d. Sleep Interventions

Rowland, L. M., & Wickwire, E. M. (2018). A wake-up call: Assess and treat sleep disorders in early psychosis. *Schizophrenia Bulletin*, 45(2), 265-266.

Sheaves, B., Isham, L., Bradley, J., Espie, C., Barrera, A., Waite, F., Harvey, A.G., Attard, C., & Freeman, D. (2018). Adapted CBT to stabilize sleep on psychiatric wards: A transdiagnostic treatment approach. *Behavioral Cognitive Psychotherapy*, 46(6), 661-675.

Waite, F., Myers, E., Harvey, A. G., Espie, C. A., Startup, H., Sheaves, B., & Freeman, D. (2016). Treating sleep problems in patients with schizophrenia. *Behavioral Cognitive Psychotherapy*, 44(3), 273-287.

## e. Psychodynamic Therapy

This section provides articles that introduce readers to psychodynamic constructs and that describe treatment efficacy.

Bröcker, A. L., Bayer, S., Stuke, F., Just, S., Bertram, G., Funcke, J., Grimm, I., Lempa, G., von Haebler, D., & Montag, C. (2020). Levels of structural integration mediate the impact of metacognition on functioning in non-affective psychosis: Adding a psychodynamic perspective to the metacognitive approach. *Frontiers in Psychology.* 11, 269. Doi: 10.3389/fpsyg.2020.00269. PMID: 32153475.

• This article examines the impact of key psychodynamic concepts (i.e., metacognition, level psychological integrative) on psychosocial functioning in a sample diagnosed with schizophrenia (n = 100).

Rosenbaum, B., Harder, S., Knudsen, P., Koester, A., Lindhardt, A., Valbak, K., & Winther, G. (2012). Supportive psychodynamic psychotherapy versus treatment as usual for first episode psychosis: Two-year outcome. *Psychiatry: Interpersonal and Biological Processes, 75*(4): 331 – 341.

 This is a 2-year longitudinal study of psychodynamic therapy plus TAU as compared to TAU for first episode psychosis (n = 296). The study assesses outcomes at a two-year follow up with measures of symptom severity and functioning.

# f. Compassion Focused Therapy / Open Dialogue / ACT

Bergström, T., Seikkula, J., Alakare, B., Mäki, P., Köngäs-Saviaro, P., Taskila, J. J., Tolvanen, A., & Aaltonen, J. (2018). The family-oriented open dialogue approach in the treatment of first-episode psychosis: Nineteen—year outcomes. *Psychiatry Research*, 270, 168-175.

Braehler, C., Gumley, A., Harper, J., Wallace, S., Norrie, J., & Gilbert, P. (2013). Exploring change processes in compassion focused therapy in psychosis: Results of a feasibility randomized controlled trial. *British Journal of Clinical Psychology*, *52*(2), 199-214.

Brown, E., Shrestha, M., & Gray, R. (2021). The safety and efficacy of acceptance and commitment therapy against psychotic symptomatology: A systematic review and meta-analysis. *Brazilian Journal of Psychiatry*, 43(3), 324-336. doi: 10.1590/1516-4446-2020-0948

Li, Y., Coster, S., Norman, I., Chien, W.T., Qin, J., Ling Tse, M., & Bressington, D. (2021). Feasibility, acceptability, and preliminary effectiveness of mindfulness-based interventions for people with recent-onset psychosis: A systematic review. *Early Intervention Psychiatry*, 15(1), 3-15. doi: 10.1111/eip.12929

Louise, S., Fitzpatrick, M., Strauss, C, Rossell, S.L., & Thomas, N. (2017). Mindfulness- and acceptance-based interventions for psychosis: Our current understanding and a meta-analysis. *Schizophrenia Research*, 192, 57-63. doi: 10.1016/j.schres.2017.05.023

Wakefield, S., Roebuck, S., & Boyden, P. (2018). The evidence base of acceptance and commitment therapy (ACT) in psychosis: A systematic review. *Journal of Contextual Behavioral Science*, 10, 1-13.

#### g. Social Cognitive Interventions

Fiszdon, J. M., & Reddy, L. F. (2012). Review of social cognitive treatments for psychosis. Clinical Psychology Review, 32(8), 724-740. doi:10.1016/j.cpr.2012.09.003

Horan, W. P., Dolinsky, M., Lee, J., Kern, R. S., & Hellemann, G. (2018). Social cognitive skills training for psychosis with community-based training exercises: A randomized controlled trial. *Schizophrenia Bulletin*, 44(6), 1254-1266.

Horan, W. P., & Green, M. F. (2019). Treatment of social cognition in schizophrenia: Current status and future directions. Schizophrenia Research, 203, 3-11. doi:10.1016/j.schres.2017.07.013

Kern, R. S., Glynn, S. M., Horan, W. P., & Marder, S. R. (2009). Psychosocial treatments to promote functional recovery in schizophrenia. Schizophrenia Bulletin, 35(2), 347-361. doi:10.1093/schbul/sbn177

Kurtz, M. M., & Richardson, C. L. (2012). Social cognitive training for schizophrenia: a metaanalytic investigation of controlled research. Schizophrenia Bulletin, 38(5), 1092-1104. doi:10.1093/schbul/sbr036

Pinkham, A. E., & Harvey, P. D. (2013). Future directions for social cognitive interventions in schizophrenia. *Schizophrenia Bulletin*, *39*(3), 499-500. doi:10.1093/schbul/sbs142

# h. Crisis Interventions/Alternatives to Hospitalization

Lakeman, R. (2014). The Finnish open dialogue approach to crisis intervention in psychosis: A review. *Psychotherapy in Australia*, 20(3), 28-35.

## i. <u>Cigarette Cessation</u>

Bennett, M.E., Wilson, A.L., Genderson, M., & Saperstein, A.M., (2013). Smoking cessation in people with schizophrenia. *Current Drug Abuse Review*, 6(3), 180-90. doi: 10.2174/18744737112059990011

Brunette, M. F., Pratt, S. I., Bartels, S. J., Scherer, E. A., Sigmon, S. C., Ferron, J. C., Santos, M., Williams, G., Kosydar, S., Wolfe, R.S., Lots, D., & Capuchino, K. (2018). Randomized trial of interventions for smoking cessation among Medicaid beneficiaries with mental illness. *Psychiatric Services*, 69(3), 274-280.

Das-Munshi, J., Semrau, M., Barbui, C., Chowdhary, N., Gronholm, P.C., Kolappa, K., Krupchanka, D., Dua, T., & Thornicroft, G., (2020). Gaps and challenges: WHO treatment recommendations for tobacco cessation and management of substance use disorders in people with severe mental illness. *BMC Psychiatry*, 20(1), 237. doi: 10.1186/s12888-020-02623-y

Gifford, E.V., Tavakoli, S., Wang, R., Hagedorn, H.J., & Hamlett-Berry, K.W., (2013). Tobacco dependence diagnosis and treatment in Veterans Health Administration residential substance use disorder treatment programs. *Addiction*, 108(6), 1127-35. doi: 10.1111/add.12105

Hawes, M.R., Roth, K.B., & Cabassa, L. J. (2021) Systematic review of psychosocial smoking cessation interventions for people with serious mental illness. *Journal of Dual Diagnosis*, 17(3), 216-235. doi: 10.1080/15504263.2021.1944712

Kertes, J., Stein Reisner, O., Grunhaus, L., Nezry, R., Alcalay, T., Azuri, J., & Neumark, Y. (2021). Comparison of smoking cessation program registration, participation, smoking cessation medication utilization and abstinence rates between smokers with and without schizophrenia, schizo-affective disorder or bipolar disorder. *Nicotine Tobacco Research*. doi: 10.1093/ntr/ntab202

Tidey, J.W., Davis, D.R., Miller, M.E., Pericot-Valverde, I., Denlinger-Apte, R.L., & Gaalema, D.E. (2018). Modeling nicotine regulation: A review of studies in smokers with mental health conditions. *Preventive Medicine.*, 117, 30-37. doi: 10.1016/j.ypmed.2018.07.003

Travaglini, L.E., Li, L., Brown, C.H., & Bennett, M.E. (2017). Predictors of smoking cessation group treatment engagement among veterans with serious mental illness. *Addictive Behavior*, 75, 103-107. doi: 10.1016/j.addbeh.2017.07.005

# j. <u>Dual-Diagnosis Interventions</u>

Bellack, A.S., Bennett, M.E., Gearon, J.S., Brown, C.H., & Yang, Y. (2006). A randomized clinical trial of a new behavioral treatment for drug abuse in people with severe and persistent mental illness. *Archives of General Psychiatry*, 63(4), 426-32. doi: 10.1001/archpsyc.63.4.426

Bennett, M.E., Bradshaw, K.R., & Catalano, L.T. (2017). Treatment of substance use disorders in schizophrenia. *American Journal of Drug and Alcohol Abuse, 43*(4), 377-390. doi: 10.1080/00952990.2016.1200592

Destoop, M., Docx, L., Morrens, M., & Dom, G. (2021). Meta-analysis on the effect of contingency management for patients with both psychotic disorders and substance use disorders. *Journal of Clinical Medicine*, 10(4), 616. doi: 10.3390/jcm10040616

Hagedorn, H.J., Noorbaloochi, S., Simon, A.B., Bangerter, A., Stitzer, M.L., Stetler, C.B., & Kivlahan, D., (2013). Rewarding early abstinence in Veterans Health Administration addiction clinics. *Journal of Substance Abuse Treatment*, 45(1), 109-17. doi: 10.1016/j.jsat.2013.01.006

## IX. Special Topics/Populations

## a. <u>Issues /Interventions in Forensic Settings</u>

Articles in this section describes forensic mental health services, interventions, and assessment practices, provided to individuals with serious mental illness.

Abram, K. & Teplin, L. (1991). Co-occurring disorders among mentally ill jail detainees: Implications for public policy. *American Psychologist*, 46, 1036–1045.

• This is a highly cited study demonstrating that most individuals in urban jails with serious mental illness also meet criteria for a substance abuse or antisocial personality disorder. Public policy implications are discussed.

Barnao, M., & Ward, T. (2015). Sailing uncharted seas without a compass: A review of interventions in forensic mental health. *Aggression and Violent Behavior*, 22, 77-86. https://doi.org/10.1016/j.avb.2015.04.009

 Overview of published literature on interventions used in inpatient forensic mental health services over the preceding 15 years; focuses on the "Good Lives Model" as a promising approach.

Coid, J., Kahtan, N., Gault, S., & Jarman, B. (2018). Ethnic differences in admissions to secure forensic psychiatry services. *The British Journal of Psychiatry*, 177(3), 241-247. doi:10.1192/bjp.177.3.241

 Study demonstrating ethnic differences in rates of first admissions, from 1988 to 1994, from half of England and Wales to secure forensic psychiatry services. Patterns of offending and diagnoses differed between ethnic groups.

Hicks, J.W. (2004). Ethnicity, race, and forensic psychiatry: are we color-blind? *Journal of the American Academy of Psychiatry and the Law, 32*(1), 21-33.

 Reviews the literature on the impact of race and ethnicity on diagnosis, dangerousness assessment, involuntary commitment, competency, criminal matters, evaluation of children and matters related to them, and tort issues.

Jansman-Hart, E.M., Seto, M.C., Crocker, A.G., Nicholls, T.L., & Cote, G. (2011). International trends in demand for forensic mental health services. International Journal of Forensic Mental Health, 10(4), 326-336.

• This article highlights the increase in forensic psychiatric beds across the world relatively recently.

Lamb, H.R., & Weinberger, L.E. (2017). Understanding and treating offenders with serious mental illness in public sector mental health. *Behavioral Sciences & the Law, 35*(4), 303-318.

 Provides a general overview of important considerations when releasing incarcerated persons with SMI into the community.

Lowder, E. M., Rade, C. B., & Desmarais, S. L. (2018). Effectiveness of mental health courts in reducing recidivism: A meta-analysis. *Psychiatric Services*, 69(1), 15-22.

 Meta-analysis of studies on mental health court participation demonstrating a small effect size on recidivism.

Mezey, G.C., Kavuma, M., Turton, P., Demetrious, A., & Wright, C. (2010). Perceptions, experiences and meanings of recovery in forensic psychiatric patients. The Journal of Forensic Psychiatry & Psychology, 21(5), 683-696.

• Study highlighting the limitations of the recovery model for justice-involved individuals with SMI and the need to modify the recovery approach for this population.

Morrissey, J., Meyer, P., & Cuddeback, G. (2007). Extending assertive community treatment to criminal justice settings: Origins, current evidence, and future directions. *Community Mental Health Journal*, 43, 527-544.

• Overview of FACT (ACT for forensic populations) and FICM (intensive case management for forensic populations), including review of limited research base.

Munetz, M.R. (2006). Use of a sequential intercept model as an approach to decriminalization of people with serious mental illness. *Psychiatric Services*, *57*(4), 447-592.

 Presents the Sequential Intercept Model—designed to be used to develop initiatives to reduce the criminalization of people with serious mental illness.

Prins, S. J. (2011). Does transinstitutionalization explain the overrepresentation of people with serious mental illnesses in the criminal justice system? *Community Mental Health Journal*, 47, 716-722.

• Provides explanations for why people with SMI become involved in the criminal justice system, including but not limited to transinstitutionalization.

#### b. Homelessness

Articles in this section present research results and information about the interplay of homelessness, risk of becoming homeless and SMI.

Adair, C. E., Streiner, D. L., Barnhart, R., Kopp, B., Veldhuizen, S., Patterson, M., Aubry, T., Lavoie, J., Sareen, J., LeBlanc, S.R., & Goering, P. (2016). Outcome trajectories among homeless individuals with mental disorders in a multisite randomised controlled trial of housing first. *The Canadian Journal of Psychiatry*, 61(1), 30-39.

Culhane, D. P., Metraux, S., & Hadley, T. (2002). Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. *Housing Policy Debate*, 13(1), 107-163. doi: 10.1080/10511482.2002.9521437

Gabrielian, S., Hamilton, A.B., Gelberg, L., Koosis, E.R., Johnson, A., & Young, A.S. (2019). Identifying social skills that support housing attainment and retention among homeless persons with serious mental illness. *Psychiatric Services*, 70(5), 374-380.

Henwood, B. F., Cabassa, L. J., & Craig, C. M. (2013). Permanent supportive housing: Addressing homelessness and health disparities. *American Journal of Public Health*, 103 (Suppl. 2), S188-S192.

#### c. Veterans

This section presents information specific to veterans and SMI.

Cohen, A. N., Pedersen, E. R., Glynn, S. M., Hamilton, A. B., McNagny, K. P., Reist, C., Chemerinski, E., & Young, A. S. (2019). Preferences for family involvement among veterans in treatment for schizophrenia. *Psychiatric Rehabilitation Journal*, 42(3), 210.

Davis, L. L., Kyriakides, T. C., Suris, A., Ottomanelli, L., Drake, R. E., Parker, P. E., Mueller, L, Resnick, S.G., Toscano, R., Blansett, C.M., McCall, K.P., & Huang, G. D. (2018). Veterans individual placement and support towards advancing recovery: Methods and baseline clinical characteristics of a multisite study. *Psychiatric Rehabilitation Journal*, 41(1), 55-66.

Hunter, G., Yoon, J., Blonigen, D. M., Asch, S. M., & Zulman, D. M. (2015). Health care utilization patterns among high-cost VA patients with mental health conditions. *Psychiatric Services*, *66*(9), 952–958.

Resnick, S. G., & Goldberg, R. W. (2019). Psychiatric rehabilitation for veterans and the evolution of the field. *Psychiatric Rehabilitation Journal*, 42(3), 207.

Travaglini, L.E., Cosgrave, J., Klingaman, E.A. (2019). Pain and sleep problems predict quality of life for veterans with serious mental illness. *Psychiatric Rehabilitation Journal*, 42(3), 229-237. doi: 10.1037/prj0000358

Zivin, K., Bohnert, A. S. B., Mezuk, B., Ilgen, M. A., Welsh, D., Ratliff, S., Miller, E.M., Valenstein, M., & Kilbourne, A. M. (2011). Employment status of patients in the VA health system. *Psychiatric Services*, *62*, 35-38.

#### d. Children

Maijer, K., Hayward, M., Fernyhough, C., Calkins, M. E., Debbane, M., Jardri, R., Kelleher, I., Raballo, A., Rammou, A., Scott, J.G., Shinn, A.K., Steenhuis, L.A., Wolf, D.H., & Bartels-Velthuis, A. A. (2019). Hallucinations in children and adolescents: An updated review and practical recommendations for clinicians. *Schizophrenia Bulletin*, *45*(1), S5-S23.

## e. <u>Elderly</u>

Dell, N. A., Pelham, M., & Murphy, A. M. (2019). Loneliness and depressive symptoms in middle aged and older adults experiencing serious mental illness. *Psychiatric Rehabilitation Journal*, 42(2), 113-120.

## f. Bipolar Disorder

Articles in this section present information specific to Bipolar disorder

Novick, D. M., & Swartz, H. A. (2019). Psychosocial interventions for bipolar II disorder. *American Journal of Psychotherapy*, 72(2), 47-57.

Miklowitz, D. J. (2006). A review of evidence-based psychosocial interventions for bipolar disorder. Journal of Clinical Psychiatry, 67(11), 28-33.

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### g. Non-Medicated Individuals

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Morrison, A. P., Turkington, D., Pyle, M., Spencer, H., Brabban, A., Dunn, G., Chrstodoulides, T., Dudley, R., Chapman, N., Callcott, P., Grace, T., Lumley, V., Drage, L., Tully, S., Irving, K., Cummings, A., Byrne, R., Davies, L.M., & Hutton P.. (2014). Cognitive therapy for people with schizophrenia spectrum disorders not taking antipsychotic drugs: A single-blind randomised controlled trial. *The Lancet*, *383*(9926), 1395-1403.

Velligan, D.I., Sajatovic, M., Hatch, A., Kramata, P., & Docherty, J.P. (2017). Why do psychiatric patients stop antipsychotic medication? A systematic review of reasons for nonadherence to medication in patients with serious mental illness. *Patient Preference Adherence*, 11, 449-468. doi: 10.2147/PPA.S124658

# X. Roles for Psychologists in SMI

Articles in the following sections offer information about existing and potential roles for psychologists in work with persons with SMI. Other diverse topics of interest are also included in this section.

## a. Health Care Reform

Scott, J. T., Larson, J. C., Buckingham, S. L., Maton, K. I., & Crowley, D. M. (2019). Bridging the research-policy divide: Pathways to engagement and skill development. *American Journal of Orthopsychiatry*, 89(4), 434-441.

Segre, L. S., Trusty, S., Gullickson, R., Chuffo Davila, R., & O'Hara, M. W. (2018). Brokering the evidence-practice gap: A strategy for moving evidence into clinical practice. *Psychiatric Services*, 69(8), 852-854.

**b.** <u>Diverse Locations/ Treatment Settings</u> (outpatient, inpatient, private practice, forensics, state hospitals)

Henwood, B. F., Siantz, E., Hrouda, D. R., Innes-Gomberg, D., & Gilmer, T. P. (2018). Integrated primary care in assertive community treatment. *Psychiatric Services*, 69(2), 133-135.

Menditto, A., Spaulding, W. & Hunter, R. (2016) Psychiatric hospitals. In J. Norcross et al (ed.) Handbook of Clinical Psychology Volume I: Roots and Branches. Washington D.C.: American Psychological Association.

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#### c. Treatment Teams/Collateral Partners/Training Staff

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Geczy Jr, B., & Sultenfuss, J. F. (1994). Contributions of psychologists to inpatient care of persons with chronic mental illness. *Psychiatric Services*, *45*(1), 54-57.

Wood, L., Williams, C., Billings, J., & Johnson, S. (2019). The role of psychology in a multidisciplinary psychiatric inpatient setting: Perspective from the multidisciplinary team. *Psychology and Psychotherapy: Theory, Research and Practice*, *92*(4), 554-564.

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Rogers, S. (2010). Consumer and consumer-supporter national technical assistance centers: Helping the consumer movement grow and transform systems. In Mental Health Self-Help (pp. 265-286). Springer, New York, NY.

Swanson, J. W., McGinty, E. E., Fazel, S., & Mays, V. M. (2015). Mental illness and reduction of gun violence and suicide: Bringing epidemiologic research to policy. *Annals of epidemiology*, 25(5), 366-376.

## e. Implementation of interventions, including issues faced in some settings

Azrin, S. T., Goldstein, A. B., Heinssen, R. K. (2016). Expansion of coordinated specialty care for first episode psychosis in the US, focal point: Youth, young adults, & mental health. *Early Psychosis Intervention*, 30, 9-11.

Garety, P. A., Craig, T., K., J., Iredale, C. H., Basit, N., Fornells-Ambrojo, M., Halkoree, R., ... Waller, H. (2018). Training the frontline workforce to deliver evidence-based therapy to people with psychosis: Challenges in the GOALS study. *Psychiatric Services*, 69(1), 9-11.

Goldstein, A. B, Heinssen, R. K, Azrin, S. T. (2015). Accelerating science-to-practice for early psychosis. *Psychiatric Services*, 66(7), 665.

Lecomte, T., Samson, C., Naeem, F., Schachte, L., & Farhall, J. (2018). Implementing cognitive behavioral therapy for psychosis: An international survey of clinicians' attitudes and obstacles. *Psychiatric Rehabilitation Journal*, 41(2), 141-148.

Nordentoft, M., Melau, M., Iversen, T., Petersen, L., Jeppesen, P., Thorup, A., Bertelsen, M., Hjorthoj, C. R., Hastrup, L. H., & Jorgensen, P. (2015). From research to practice: How OPUS

treatment was accepted and implemented throughout Denmark. *Early Intervention in Psychiatry*, *9*, 156-62.

#### f. Supervision

Lysaker, P.H., Buck, K.D., & Lintner, J.I. (2009). Addressing recovery from severe mental illness in clinical supervision of advanced students. *Journal of Psychosocial Nursing*, *47*(4). https://doi.org/10.3928/02793695-20090401-08

## XI. Diversity & Multicultural Issues

The articles in this section present information on racial, cultural, and gender disparities, stigma, and the importance of family interventions to combat these issues.

Atdjian, S. & Vega, W. A. (2005). Disparities in mental health treatment in U.S. racial and ethnic minority groups: Implications for psychiatrists. *Psychiatric Services*, *56*(12), 1600–1602.

Brown, C. A., & Weisman de Mamani, A. (2018). The mediating effect of family cohesion in reducing patient symptoms and family distress in a culturally informed family therapy for schizophrenia: A parallel-process latent-growth model. *Journal of Consulting and Clinical Psychology*, 86(1), 1–14.

Corrigan, P., Sheehan, L., Morris, S., Larson, J. E. Torres, A., Lara, J. L., ... Doing, S. (2018). The impact of a peer navigator program in addressing the health needs of Latinos with serious mental illness. *Psychiatric Services*, 69(4), 456-461.

Fearon, P., & Morgan, C. (2006). Environmental factors in schizophrenia: The role of migrant studies. *Schizophrenia Bulletin*, *32*(3), 405-408.

Gurak, K. K., Weisman de Mamani, A., & Ironson, G. (2017). Does religiosity predict attrition from a culturally-informed family treatment for schizophrenia that targets religious coping? *Journal of Consulting and Clinical Psychology*, 85(10), 937–949.

Lin, K. M., & Kleinman, A. M. (1988). Psychopathology and clinical course of schizophrenia: a cross-cultural perspective. *Schizophrenia Bulletin*, 14(4), 555-567.

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Maura, J., Weisman de Mamani, A. (2017). Mental health disparities, treatment engagement, and attrition among racial/ethnic minorities with severe mental illness: A review. *Journal of Clinical Psychology in Medical Settings*. 24(3-4):187-210.

Maura, J., & de Mamani, A. W. (2017). Culturally adapted psychosocial interventions for schizophrenia: A review. *Cognitive and Behavioral Practice*, 24(4), 445–458.

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Oluwoye, O., Stiles, B., Monroe-DeVita, M., Chwastiak, L., McClellan, J. M., Dyck, D., ... McDonell, M. G. (2018). Racial-ethnic disparities in first-episode psychosis treatment outcomes from the RAISE-ETP study. *Psychiatric Services*, 69(11), 1138-1145.

Smith, W. B., Goldhammer, H., & Keuroghlian, A. S. (2019). Affirming gender identity of patients with serious mental illness. *Psychiatric Services*, 65-67.

Tauler, S. Y. L, Eun, J., Corbett, D., & Collins, P. Y. (2018) A systematic review of interventions to improve initiation of mental health care among racial-ethnic groups. *Psychiatric Services*, 69(6), 628-647.

Thomas, E. C., Bilger, A., Wilson, A. B., & Draine, J. (2019). Conceptualizing restorative justice for people with mental illnesses leaving prison or jail. *American Journal of Orthopsychiatry*, 89(6), 693-703.

Treichler, E. B. H., & Evans, E. A. (2021). Ideal and real treatment planning processes for people with serious mental illness in public mental health care. *Psychological Services*, 18(1), 93-103.

Weisman de Mamani, A., McLaughline, M., Altamirano, O., Lopez, D., & Ahmad, S.S. (2021). Culturally informed therapy for schizophrenia: A family-focused cognitive behavioral approach, clinician guide. Oxford University Press.

Weissman, J., Russell, D., Jay, M., & Malaspina, D. (2018). Racial, ethnic, and gender disparities in health care access and use among U.S. adults with serious psychological distress. *Psychiatric Services*, 69(5), 517-522.

## XII. Ethics & Advocacy

The articles in the sections that follow present information about a wide range of ethical issues and dilemmas faced by those working with persons with SMI. Suggestions are offered for ethical practice.

## a. Best Practices Regarding Consent

Harris, J.I., Hanson, D., Leskela, J., Billig, J., Padilla-Martinez, V., Boyd, J., & Nienow, T. (2021). Reconsidering research exclusion for serious mental illness: Ethical principles, current status,

and recommendations. *Journal of Psychiatric Research, 143,* 138-143. doi: 10.1016/j.jpsychires.2021.09.016

Hindmarch, T., Hotopf, M., & Owen, G.S. (2013). Depression and decision-making capacity for treatment or research: A systematic review. *BMC Medical Ethics*, *14*, 54. doi: 10.1186/1472-6939-14-54

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Silverman, H. (2011). Protecting vulnerable research subjects in critical care trials: Enhancing the informed consent process and recommendations for safeguards. *Annals of Intensive Care,* 1(1),8. doi: 10.1186/2110-5820-1-8

Spencer, B.W.J., Shields, G., Gergel, T., Hotopf, M., & Owen, G.S. (2017). Diversity or disarray? A systematic review of decision-making capacity for treatment and research in schizophrenia and other non-affective psychoses. *Psychological Medicine*, *47*(11), 1906-1922. doi: 10.1017/S0033291717000502

Stroup, T.S., Appelbaum, P.S., Gu, H., Hays, S., Swartz, M.S., Keefe, R.S., Kim, S.Y., Manschreck, T.C., Boshes, R.A., McEvoy, J.O., & Lieberman J.A. (2011). Longitudinal consent-related abilities among research participants with schizophrenia: Results from the CATIE study. *Schizophrenia Research*, 130(1-3), 47-52. doi: 10.1016/j.schres.2011.04.012

## b. Ethical Considerations Regarding Medications/Hospitalization

Johansson, I. M., & Lundman, B. (2002). Patients' experience of involuntary psychiatric care: Good opportunities and great losses. *Journal of Psychiatric and Mental Health Nursing*, 9(6), 639-647.

Scripcaru, C., Damian, S. I., Sandu, Ş. A., & Ioan, B. (2014). Ethical considerations in the medico-legal expert approach of a severe untreated psychiatric disease. *Procedia-Social and Behavioral Sciences*, 149, 863-867.

# c. Reducing Restraints and Isolation

Breitborde, N. J. K. & Moe, A. M. (2017). Early intervention in psychosis in the United States: From science to policy reform. *Policy Insights from the Behavioral and Brain Sciences, 4,* 79-87.

Webster, D. W., & Wintemute, G. J. (2015). Effects of policies designed to keep firearms from high-risk individuals. *Annual Review of Public Health*, *36*, 21-37.

#### d. Research-Related Issues

K. Humphreys, J.C. Blodgett, L.W. Roberts (2015). The exclusion of people with psychiatric disorders from medical research. Journal of Psychiatric Research, 70 (2015), 28-32

## XIII. Psychopharmacology for Practitioners

This section presents information about issues related to psychotropic medication use for persons with SMI.

Samara, M. T., Nikolakopoulou, A., Salanti, G., & Leucht, S. (2018). How many patients with schizophrenia do not respond to antipsychotic drugs in the short term? An analysis based on individual patient data from randomized controlled trials. *Schizophrenia Bulletin, 45*(3), 639-646.

Stroup, T. S., Gerhard, T., Crystal, S., Huang, C., Zhiqiang, T., Wall, M. M., Mathai, C.M., & Olfson, M. (2018). Psychotropic medication use among adults with schizophrenia and schizoaffective disorder in the United States. *Psychiatric Services*, 69(5), 605-608.

Wilson, P., Humpston, C., & Nathan, R. (2021). Innovations in the psychopathology of schizophrenia: a primer for busy clinicians. Published online by Cambridge University Press.

Wu, B., Bruns, E. J., Hui Tai, M., Lee, B. R., Raghavan, R., & dosReis, S. (2018). Psychotropic polypharmacy among youth with serious emotional and behavioral disorders receiving coordinated care services. *Psychiatric Services*, 69(6), 716-722.

## XIV. Impact of Covid-19

Presents emerging information on COVID-19 and impacts of the pandemic on services and on individuals with SMI.

Cook, J. A., & Jonikas, J. A. (2020). The Importance of psychiatric rehabilitation services during and after the COVID-19 pandemic. *Psychiatric Services*, 71(9), 883-884.

Druss, B.G. (2020). Addressing the covid-19 pandemic in populations with serious mental illness. *JAMA Psychiatry*, 77(9), 891-892.

Hamada, K., & Fan, X. (2020). The impact of covid-19 on individuals living with serious mental illness. *Schizophrenia Research*, 222, 3-5.

Mazereel, V., Van Assche, K. Detraux, J., Hert, M.D. (2021). Covid-19 vaccination for people with severe mental illness: Why, what, and how? *The Lancet Psychiatry*, 8(5), 444-450.

Shinn, A.K., & Viron, M. (2020). Perspectives on the covid-19 pandemic and individuals with serious mental illness. *The Journal of Clinical Psychiatry*, 81(3), 0-0.

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