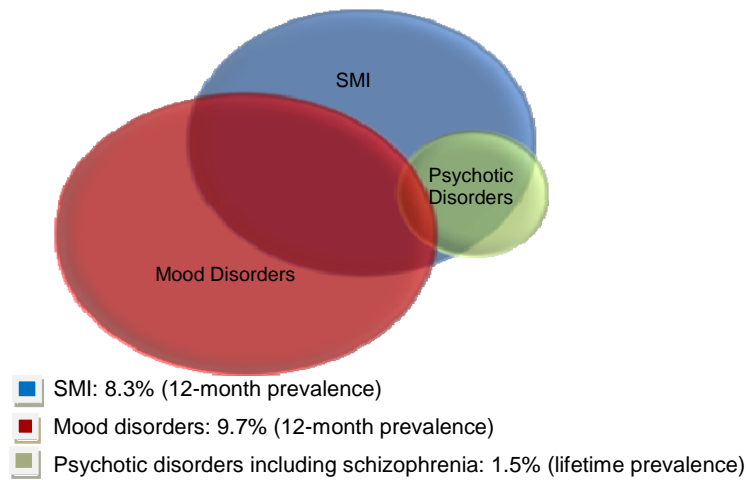


Online Appendix Figure 1 illustrates the focus of the IEF and the relationship among SMI, mood disorders, and psychotic disorders.

Online Appendix Figure 1. The relationship between SMI, mood disorders, and psychotic disorders (this IEF focused on adults with SMI who have psychotic or mood disorders)



Source:

National Comorbidity Survey. 12-month prevalence of DSM-IV/WMH-CIDI disorders by sex and cohort. Boston, MA: Harvard School of Medicine; 2007(33).

Epstein J, et al. Serious mental illness and its co-occurrence with substance use disorders, 2002. DHHS Publication No. SMA 04-3905, Analytic Series A-24.

Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2004(34).

Online Appendix Box 1. Prioritized list of themes[†]

1. Measurement and outcomes need consensus definitions.* Develop measurements and outcome assessment tools for mental health research that are based on a chronic care model and are appropriate metrics for mental health, rather than the inadequate metrics that exist today that are based on an acute-care model. This process includes identifying priority outcomes for consumers, defining more appropriate outcomes criteria, and improving the standardization and consistency of documentation. (49) [R]
2. Development of infrastructure for research: longitudinal studies, new investigators, and datasets.* Infrastructure is needed that supports longitudinal studies including developing new investigators/investigator teams, providing additional training, and facilitating development of comparable datasets (detailed registries). (47) [R, PC]
3. Service delivery, treatment settings, and structuring the delivery of care.
This thread includes topics related to making treatment settings and service delivery systems into experiments for studies such as: (a) comparing the effectiveness of different systems for structuring the delivery of care, such as psychiatric medical homes vs. usual care; (b) comparing how variation across settings, systems, and states impacts disparities for specific groups (e.g., rural residents or racial and ethnic minorities); (c) state-to-state or

smaller area comparisons; (d) public systems vs. various models of private insurance; (e) systems that deliver care in teams vs. those settings that deliver care in solo-health-practitioner or split-care arrangements; (f) delivery tools, such as prior authorization, and their impact; and (g) ethnic-specific provider supports. (44) [R]

4. Development of PCOR methodology. This thread includes topics related to the need to develop methodology for PCOR for mental health, including the need for: (a) methods to adjust for confounding during followup; (b) more work using performance-based measures for increased validity and reliability; (c) exploring and expanding the use of new and different study designs and data analysis strategies (e.g., illness trajectories, propensity scores, time series); (d) longer-term studies and research conduct and design strategies aiming to optimize long-term followup, while avoiding attrition bias and avoiding confounding; (e) consumer and patient involvement; (f) a taxonomy to define and describe psychosocial and psychotherapeutic interventions; and (g) integration of biological and psychosocial research. (40) [R]

5. Identify disparities and reasons for disparities and reevaluate the framework for researching disparities.* This thread includes topics related to the need to clearly document disparities (in both public and private

settings) and identify the reasons for disparities. Considerations for further research include (but are not limited to) barriers and access issues, clinical reasons, systems issues, institutional racism, and lack of services to people with limited English-language skills. In addition, this thread includes topics related to the need to reevaluate the framework for researching disparities. For example, needs were identified for more research focused on specific racial and ethnic communities, outcomes of greatest interest to specific populations or communities, and addressing the overall lack of inclusion as participants in research. (40) [PC]

6. Role of the therapeutic relationship.* This thread includes topics related to the relationship between client and provider as central to effectiveness research. The therapeutic alliance accounts for a large degree of variance in psychotherapy treatment outcome(s). Measurement of this factor should be part of the evaluation of treatment outcomes. This could include comparing the effectiveness of treatment strategies, including a continuous therapeutic relationship (e.g., with a coach, therapist, or other clinician), to usual care on long-term functional outcomes in patients with SMI. In addition, this thread includes research assessing the features of health professionals who support the development of a continuous healing relationship and factors associated with better patient outcomes (related to
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the person or the organization providing care). (40) [PC]

7. Strategies to personalize/individualize treatment. This thread includes comparisons of strategies to personalize/individualize psychotropic medication treatment for people with SMI. This includes identifying variations in patient response and predictors of response/tolerance that could inform the selection of treatments for specific groups of patients (e.g., by age, race, ethnicity, culture, and common comorbidities). This may include using biomarkers / pharmacogenomics, studying the relationship of race and ethnicity with intervention and outcome, using large databases to assess individualized treatments, targeting specific interventions to individuals' goals and wishes, or integrating decision analysis into a comparative effectiveness trial to develop approaches to improving outcomes through individualizing care. (39) [PC]

 8. Treatment approaches to avoid early mortality and morbidity.* This thread includes topics related to comparisons of different interventions and treatment approaches in avoiding early mortality, including suicide, and comorbidity for people with SMI, including racial, ethnic, and cultural minority groups, and pregnant women, with SMI. For example, this could include integrating mental health care and primary care, improving consumer self-care, or combining integration and self-care. This could also
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include comparing various types of integrated care, such as co-locating mental health providers in primary care versus co-locating primary care providers in mental health treatment settings, various approaches to improving communication between primary care and mental health providers, the use of medications alone vs. medications plus psychosocial treatments, various versions of assertive community treatment (ACT), older (and less expensive) versus newer psychotropic medications, combinations of psychotropic medications, bundled programs of antipsychotic medications with various bundled psychosocial interventions, and pharmaceutical company interventions to educate patients and their families about potential harms of medications. (34) [PC]

9. Role of the psychiatric hospital, lengths of stay, and transition support services after discharge.* This thread includes topics focused on comparing the effectiveness of different lengths of inpatient hospital stay (e.g., ultra-short stays of 1-4 days vs. longer stays of 7-10 days), different approaches to support transitions after hospital discharge, or alternatives to inpatient hospitalization (e.g., comparing inpatient psychiatric hospitalization, crisis residential services, extended observation, partial hospitalization, and intensive outpatient care). (29) [PC]

10. Retooling universities and education. This thread includes topics focused

on addressing the discrepancy between university-based education and approaches/methods purported to work better. This includes the potential need for innovative incentives to address the discrepancy. (27) [R]

11. Strategies to increase adherence to evidence-based guidelines and treatment regimens.* This thread includes topics related to comparing alternative redesign strategies—such as using electronic medical records (EMRs), multidisciplinary treatment, decision support capabilities, and personal health records—for increasing health professionals’ compliance with evidence-based guidelines, increasing patients’ adherence to guideline-based regimens, and improving continuity of care and communication. This includes comparisons of technological interventions with standard care as well as exploring the role and future role of EMRs and how the relationship among structure, process, and outcomes in EMRs might contribute to new mental health research. This thread also includes comparing the effectiveness of strategies for enhancing adherence to medication regimens for people with SMI or comparing preference-sensitive care to other approaches. (27) [PC]

12. Correctional programs and interventions for people involved with the criminal justice system.* This thread includes comparisons of the effectiveness of the following: (a) various correctional programs and
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evidence-based correctional practices with psychiatric treatment alone on outcomes such as community re-entry among criminal offenders with SMI; (b) supported employment and traditional job counseling on job placement, job retention, and criminal recidivism; (c) various approaches to training the law enforcement workforce to identify and appropriately disposition people with SMI; (d) suspending Medicaid benefits at the time of admission with terminating Medicaid benefits followed by expedited restoration prior to release on time; and (e) organized interventions (e.g., crisis intervention teams, mental health courts, and mental health probation or parole; forensically adapted intensive case management with forensically adapted assertive community treatment [FACT]; or FACT with FACT plus cognitive behavioral therapy for criminogenic thinking) that can prevent re-arrest or re-incarceration, and/or the effects on community adjustment, reductions in criminal recidivism, and costs. (26) [D]

13. Interventions for people with comorbid medical illness or substance abuse.

This includes topics related to comparing the effectiveness of pharmacologic and nonpharmacologic interventions for mental and physical health outcomes for people with SMI and comorbid medical illnesses (e.g., diabetes, HIV, cardiovascular disease, sleep apnea) or people with SMI and comorbid substance abuse. (26) [D]

14. Prevention, early identification, trajectories, and developmental perspective.* This includes topics related to the need for frameworks that address prevention strategies or strategies to delay the onset of SMI, mental health research that also includes a developmental perspective/trajectory (e.g., catch at first episode), and the effectiveness of strategies to identify and treat SMI early in the course of illness. This could include studying psychosocial stressors that precipitate mood disorders.

(25) [R]

15. Dissemination and implementation.* This thread covers the need for more work on implementation science and comparing the effectiveness of strategies to disseminate and implement research findings and new discoveries into community practice to foster evidence-based treatment. This includes exploring how we approach communities and whether this affects outcomes. This also includes comparing strategies to advance evidence-based practices using dissemination and demonstration projects.

(23) [R]

16. Reducing barriers and improving access. This thread includes topics related to comparing sustainable interventions to reduce barriers to access for mental health services, general medical services, or regular dental care for people with SMI, including transportation, financial, and insurance coverage

barriers. For example, this could include interventions providing streamlined access to Medicaid benefits or using health technology (e.g., telehealth).

(13) [D]

17. Mental health policy. This thread includes comparisons of the impact of various policy practices in mental health on outcomes including (but not limited to) cost-effectiveness and reach. This thread also includes policies to establish legal panels or agencies to ensure dissemination of information and legislation or policies related to the availability of medical information for family members of people with SMI. (11) [D]

18. Modifiable factors: tobacco, exercise, and nutrition. This includes comparisons of the effectiveness of interventions targeting modifiable factors such as tobacco abuse, physical exercise, mental exercise, and nutrition on health outcomes for people with SMI. This includes comparing various tobacco cessation strategies for individuals with SMI and tobacco addiction. (10) [PC, D]

19. Alternatives to force or involuntary approaches. This thread is focused on comparing the effectiveness of alternatives to interventions using force or involuntary approaches (e.g., seclusion and restraint) in people with SMI. (9) [PC]

20. Providing housing or social support. This thread is focused on comparisons

of the effectiveness of different strategies, such as providing stable housing or social support, for people with SMI on mental health outcomes, readmission rates, or normative success (e.g., success in education, relationships, employment). (9) [PC]

21. Strategies to reduce stigma, prejudice, and discrimination.* This includes comparisons of strategies to reduce stigma, prejudice, and discrimination against people with SMI and to encourage their social inclusion. (3) [PC]

†A detailed list of all topics related to the 21 themes is provided in Appendix B of the full report(18).

Number in bold in parentheses after each item indicates the number of times a stakeholder expressed a preference for that topic.

* This topic was determined by the stakeholder to be appropriate for evidence synthesis.

R – Topics for this theme came from the conceptual framework for research workgroup.

PC – Topics for this theme came from the patient-centered care workgroup.

D – Topics for this theme came from the reducing disparities workgroup.