



# Effective Health Care Adherence to Evidence-based Guidelines and Treatment for Serious Mental Illness Nomination Summary Document

## Results of Topic Selection Process & Next Steps

- Clinician adherence to evidence-based guidelines for treatment of serious mental illness was found to be addressed by multiple in-process and existing reviews, although no single review covered the topic in its entirety. Given that the existing and in-process reports cover this nomination, no further activity will be undertaken on this topic.
  - In-process AHRQ Effective Health Care (EHC) report. Communication and Dissemination Strategies to Facilitate the Use of Medical Evidence.
    - To view a description and status of the research review, please go to <http://www.effectivehealthcare.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/>.
    - To sign up for notification when this and other EHC Program topics are posted, please go to: <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>
  - Lobach D, Sanders GD, Bright TJ, Wong A, Dhurjati R, Bristow E, Bastian L, Coeytaux R, Samsa G, Hasselblad V, Williams JW, Wing L, Musty M, Kendrick AS. Enabling Health Care Decisionmaking Through Clinical Decision Support and Knowledge Management. Evidence Report No. 203. (Prepared by the Duke Evidence-based Practice Center under Contract No. 290-2007-10066-I.) AHRQ Publication No. 12-E001-EF. Rockville, MD: Agency for Healthcare Research and Quality. April 2012.
  - McKibbin KA, Lokker C, Handler SM, Dolovich LR, Holbrook AM, O'Reilly D, Tamblyn R, Hemens BJ, Basu R, Troyan S, Roshanov PS, Archer NP, Raina P. Enabling Medication Management Through Health Information Technology. Evidence Report/Technology Assessment No. 201. (Prepared by the McMaster University Evidence-based Practice Center under Contract HHS 290-2007-10060-I.) AHRQ Publication No. 11-E008-EF. Rockville, MD: Agency for Healthcare Research and Quality. April 2011.
  - Nasser M, Oxman AD, Paulsen E, Fedorowicz Z. Local consensus processes: effects on professional practice and health care outcomes (Protocol). *Cochrane Database of Systematic Reviews* 2007, Issue 1. Art. No.: CD003165.
  - Flodgren G, Pomey MP, Taber SA, Eccles MP. Effectiveness of external inspection of compliance with standards in improving healthcare organization behavior, healthcare professional behavior or patient outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 11. Art. No.: CD008992. PMID: 22071861.

- Jamtvedt G, Young JM, Kristoffersen DT, O'Brien MA, Oxman AD. Audit and feedback: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* 2006, Issue 2. Art. No.: CD000259. PMID: 16625533.
  - Flodgren G, Eccles MP, Shepperd S, Scott A, Parmelli E, Beyer FR. An overview of reviews evaluating the effectiveness of financial incentives in changing healthcare professional behaviours and patient outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 7. Art. No.: CD009255. PMID: 21735443.
  - Duncan E, Best C, Hagen S. Shared decision making interventions for people with mental health conditions. *Cochrane Database of Systematic Reviews* 2010, Issue 1. Art. No.: CD007297. PMID: 20091628.
  - Shojania KG, Jennings A, Mayhew A, Ramsay CR, Eccles MP, Grimshaw J. The effects of on-screen, point of care computer reminders on processes and outcomes of care. *Cochrane Database of Systematic Reviews* 2009, Issue 3. Art. No.: CD001096. PMID: 19588323.
  - Akl EA, Sackett KM, Pretorius R, Bhoopathi PSS, Mustafa R, Schunemann H, Erdley WS. Educational games for health professionals. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD006411. PMID: 18254103.
  - O'Brien MA, Rogers S, Jamtvedt G, Oxman AD, Odgaard-Jensen J, Kristoffersen DT, Forsetlund L, Bainbridge D, Freemantle N, Davis D, Haynes RB, Harvey E. Educational outreach visits: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* 2007, Issue 4. Art. No.: CD000409. PMID: 17943742.
- Patient adherence to treatment for serious mental illness was found to be addressed by multiple guidelines and reviews addressing adherence to treatment for schizophrenia, bipolar disorder, and major depression. Given that the existing and in-process reports cover this nomination, no further activity will be undertaken on this topic.
- Dixon LB, Dickerson F, Bellack AS, Bennett M, Dickinson D, Goldberg RW, Lehman A, Tenhula WN, Calmes C, Pasillas RM, Peer J, Kreyenbuhl J. The 2009 schizophrenia PORT psychosocial treatment recommendations and summary statements. *Schizophrenia Bulletin* 2010; 36(1): 48-70. PMID: 19955389.
  - Xia J, Merinder LB, Belgamwar MR. Psychoeducation for schizophrenia. *Cochrane Database of Systematic Reviews* 2011, Issue 6. Art. No.: CD002831. PMID: 21678337.
  - Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews* 2010, Issue 12. Art. No.: CD000088. PMID: 21154340.
  - Barkhof E, Meijer CJ, de Sonnevile LMJ, Linszen DH, de Haan L. Interventions to improve adherence to antipsychotic medication in patients with schizophrenia--A review of the past decade. *European Psychiatry* 2012;Vol.27(1):9-18. PMID: 21561742.
  - Leucht C, Heres S, Kane JM, Kissling W, Davis JM, Leucht S. Oral versus depot antipsychotic drugs for schizophrenia--a critical systematic review and meta-analysis of randomised long-term trials. *Schizophrenia Research* 2011 Apr;127(1-3):83-92. PMID: 21257294.

- The Management of Bipolar Disorder Working Group. Management of Bipolar Disorder in Adults (BD). Washington, DC: Department of Veterans Affairs Department of Defense; 2010.
- Crowe M, Porter R, Inder M, Lacey C, Carlyle D, Wilson L. Effectiveness of interventions to improve medication adherence in bipolar disorder. Australian & New Zealand Journal of Psychiatry 2012 Apr;46(4):317-26. PMID: 22508592.
- Szentagotai A, David D. The efficacy of cognitive-behavioral therapy in bipolar disorder: a quantitative meta-analysis. Journal of Clinical Psychiatry 2010 Jan;71(1):66-72. PMID: 19852904.
- Thota A, Sipe T, Byard G, et al. Collaborative care to improve the management of depressive disorders. A Community Guide Systematic Review and Meta-Analysis. American Journal of Preventive Medicine 2012;42(5):525-38. PMID: 22516495.
- ICSI. Health Care Guideline: Major Depression in Adults in Primary Care. Bloomington, MN: Institute for Clinical Systems Improvement; 2011.
- The Management of MDD Working Group. Management of Major Depressive Disorder (MDD). Washington, DC: Department of Veterans Affairs Department of Defense; 2009.

## Topic Description

**Nominator:** Organization

**Nomination Summary:** The nomination expresses two separate interests: 1) the comparative effectiveness of strategies to increase clinician adherence to evidence-based guidelines, and 2) patient adherence to treatment for serious mental illness.

**Staff-Generated PICO: Clinician adherence to evidence-based guidelines for serious mental illness**

**Population(s):** Psychiatrists and other providers who treat individuals with serious mental illness (SMI)

**Intervention(s):** Strategies to increase clinician adherence to evidence-based guidelines for treatment of SMI, such as electronic health records; multidisciplinary treatment; decision support capabilities; methods to disseminate and implement research findings; and methods to disseminate and implement clinical practice guidelines

**Comparator(s):** Above interventions compared to one another

**Outcome(s):** Improved continuity of care and communication; improved initiation of guideline-based treatment by clinicians; reduced symptoms of SMI in patients; reduced morbidity and mortality; reduced risk to self and others; reduced frequency and duration of hospitalizations; enhanced functioning and QOL. Possible harms include adverse effects of treatment and patient dissatisfaction with treatment regimen.

**Staff-Generated PICO: Patient adherence to treatment for serious mental illness**

**Population(s):** Individuals with serious mental illness (SMI)

**Intervention(s):** Strategies to increase patient adherence to treatment, such as pill bottles with automated reminders; therapeutic interactive voice response systems; long-

lasting injectable medication (depot medications); phone and web-based programs; and preference sensitive care.

**Comparator(s):** Above interventions compared to one another

**Outcome(s):** Improved patient adherence to guideline-based treatment regimens; reduced symptoms of SMI; reduced morbidity and mortality; reduced risk to self and others; reduced frequency and duration of hospitalizations; enhanced functioning and QOL. Possible harms include adverse effects of treatment, particularly if the symptom relief from treatment is minor while the adverse effects of the treatment are significant.

## Key Questions

from Nominator: None

## Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- This topic has two main areas:
  1. Clinician adherence to evidence-based guidelines for serious mental illness
  2. Patient adherence to treatment for serious mental illness.
- The topic of clinician adherence to evidence-based guidelines for serious mental illness was found to be addressed by 3 AHRQ reviews.
  - In-process review titled *Communication and Dissemination Strategies to Facilitate Use of Medical Evidence*:
    - KQ1a: What is the comparative effectiveness of communication techniques to promote the use of medical evidence by patients, clinicians, and policymakers?
    - KQ1b: How does the comparative effectiveness of communication techniques vary by patients, clinicians, and policymakers?
    - KQ2a: What is the comparative effectiveness of dissemination strategies to promote the use of medical evidence for patients, clinicians, and policymakers?
    - KQ2b: How does the comparative effectiveness of dissemination strategies vary by patients, clinicians, and policymakers?
    - KQ3: What is the comparative effectiveness of different ways of explaining uncertain evidence—to patients, clinicians, and policymakers?
  - 2012 review titled *Enabling Health Care Decisionmaking Through Clinical Decision Support and Knowledge Management*:
    - KQ1: What evidence-based study designs have been used to determine the clinical effectiveness of electronic knowledge management and CDSSs?
    - KQ2: What contextual factors/features influence the effectiveness or success of electronic knowledge management and CDSSs?
    - KQ3: What is the impact of introducing electronic knowledge management and CDSSs?
    - KQ3a: Changes in the organization of health care delivery

KQ3b. Changes in the workload and efficiency for the user

KQ3c. Changes in health care process measures and clinical outcomes

KQ4: What generalizable knowledge can be integrated into electronic knowledge management and CDSSs to improve health care quality?

KQ4a. Knowledge from published evidence about electronic knowledge management and CDSSs to improve health care quality based on different types of measures (health care process, relationship-centered, clinical, economic)

KQ4b. How a clinician's expertise/proficiency/informatics competency using the electronic knowledge management and CDSS affects patient outcomes (one type of measure)

- 2011 review titled *Enabling Medication Management Through Health Information Technology*:
  - KQ1: Within all phases of the medication management continuum, what evidence exists that health IT applications are effective in improving:
    - A. Health care processes,
    - B. Other intermediate outcomes (e.g., satisfaction with system, usability, knowledge, skills, and attitude),
    - C. Costs and economic outcomes,
    - D. Clinical outcomes for patients,
    - E. Population level outcomes, and
    - F. Composite outcomes.
    - G. To what extent does the impact of health IT on improving health care processes, other outcomes, costs and economics, and clinical outcomes vary depending on the type of medication (controlled or noncontrolled substance) or the form of medication (e.g., oral, injection, intravenous)?
  - KQ2. What knowledge or evidence deficits exist to support estimates of cost, benefit, impact, and net value with regard to health IT applications in all phases of medication management?
  - KQ3. What critical information regarding the impact of health IT applications implemented to support the phases of medication management is needed to give clinicians, health care facility administrators, patients, and their families a clear understanding of the value proposition particular to them?
  - KQ4. What evidence supports or refutes the impact of any of: open source, homegrown, proprietary, local configuration ability, system configuration ability, conformity with standards being Certification Commission for Healthcare Information Technology (CCHIT) certified, system architecture, or feature set on the decision to purchase, implement, or use health IT in medication management systems?
  - KQ5. What factors influence sustainability of health IT applications that support a phase of the medication management continuum?
    - A. What evidence exists to demonstrate that health care settings (ambulatory, long-term care, etc.) influence implementation, use, and effectiveness of such health IT applications? What is the impact (challenges, merits, costs, and benefits) of having electronic access to patient data on the quality and safety of care provided by health IT applications that support at least one phase of the continuum of medication management?
  - KQ6. In a two-way electronic data interchange (EDI) between the prescribers and pharmacists:
    - A. What evidence exists demonstrating the barriers and drivers of implementation of complete EDI that can support the prescription, transmittal and receipt, and perfection process of e-Prescriptions?

B. How do barriers, facilitators, and economic incentives vary across pharmacists, physicians, and other relevant stakeholders with respect to adoption and use of complete EDI (e-Prescribing/ordering with e-Transmission)?

KQ7. What evidence exists regarding the extent of integration of electronic clinical decision support in a health IT system for the prescribing, dispensing, and administering of medications, and to what extent does the use of clinical decision support systems impact the various outcomes (e.g., health care process, intermediate, cost and economics, and clinical) of interest?

- Additionally, the topic of clinician adherence to evidence-based guidelines for serious mental illness was found to be addressed by 8 reviews by the Cochrane Collaboration that address external inspection of compliance, audit and feedback, financial incentives, shared decision making, on-screen computer reminders, and educational interventions.
  
- The topic of patient adherence to treatment for serious mental illness was found to be addressed by several recent clinical practice guidelines and systematic reviews that describe the effectiveness of certain interventions to improve adherence to treatment among specific populations with serious mental illness diagnoses, including 5 focused on individuals with schizophrenia, 3 focused on individuals with bipolar disorder, and 3 focused on individuals with major depressive disorder.