**National Quality Forum—Evidence (subcriterion 1a)**

**Measure Number** (*if previously endorsed*)**:** 1934

**Measure Title**: Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

**IF the measure is a component in a composite performance measure, provide the title of the Composite Measure here:** N/A

**Date of Submission**: 4/2/2018

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| **Instructions**  *Complete 1a.1 and 1a.2 for all measures. If instrument-based measure, complete 1a.3.*  *Complete* ***EITHER 1a.2, 1a.3 or 1a.4*** *as applicable for the type of measure and evidence.*  *For composite performance measures:*  *A separate evidence form is required for each component measure unless several components were studied together.*  *If a component measure is submitted as an individual performance measure, attach the evidence form to the individual measure submission.*   * All information needed to demonstrate meeting the evidence subcriterion (1a) must be in this form. An appendix of *supplemental* materials may be submitted, but there is no guarantee it will be reviewed. * If you are unable to check a box, please highlight or shade the box for your response. * Contact NQF staff regarding questions. Check for resources at [Submitting Standards webpage](http://www.qualityforum.org/Measuring_Performance/Submitting_Standards.aspx). |

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| **Note: The information provided in this form is intended to aid the Standing Committee and other stakeholders in understanding to what degree the evidence for this measure meets NQF’s evaluation criteria.**   1a. Evidence to Support the Measure Focus The measure focus is evidence-based, demonstrated as follows:   * Outcome: [**3**](#Note3) Empirical data demonstrate a relationship between the outcome and at least one healthcare structure, process, intervention, or service. If not available, wide variation in performance can be used as evidence, assuming the data are from a robust number of providers and results are not subject to systematic bias. * Intermediate clinical outcome: a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#Note4)that the measured intermediate clinical outcome leads to a desired health outcome. * Process: [**5**](#Note5) a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#Note4) that the measured process leads to a desired health outcome. * Structure: a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence [**4**](#Note4) that the measured structure leads to a desired health outcome. * Efficiency: [**6**](#Note6) evidence not required for the resource use component. * For measures derived from patient reports, evidence should demonstrate that the target population values the measured outcome, process, or structure and finds it meaningful. * Process measures incorporating Appropriate Use Criteria: See NQF’s guidance for evidence for measures, in general; guidance for measures specifically based on clinical practice guidelines apply as well.   **Notes**  **3.** Generally, rare event outcomes do not provide adequate information for improvement or discrimination; however, serious reportable events that are compared to zero are appropriate outcomes for public reporting and quality improvement.  **4.** The preferred systems for grading the evidence are the Grading of Recommendations, Assessment, Development and Evaluation [(GRADE) guidelines](http://www.gradeworkinggroup.org) and/or modified GRADE.  **5.** Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multistep process, the step with the strongest evidence for the link to the desired outcome should be selected as the focus of measurement. Note: A measure focused only on collecting PROM data is not a PRO-PM.  **6.** Measures of efficiency combine the concepts of resource use and quality (see NQF’s [Measurement Framework: Evaluating Efficiency Across Episodes of Care](http://www.qualityforum.org/Publications/2010/01/Measurement_Framework__Evaluating_Efficiency_Across_Patient-Focused_Episodes_of_Care.aspx); [AQA Principles of Efficiency Measures](http://www.aqaalliance.org/files/PrinciplesofEfficiencyMeasurementApril2006.doc)). |

**1a.1.This is a measure of**: (*should be consistent with type of measure entered in De.1*)

Outcome

Outcome: Click here to name the health outcome

Patient-reported outcome (PRO): Click here to name the PRO

*PROs include HRQoL/functional status, symptom/symptom burden, experience with care, health-related behaviors.* (*A PRO-based performance measure is not a survey instrument. Data may be collected using a survey instrument to construct a PRO measure.)*

Intermediate clinical outcome (*e.g., lab value*): Click here to name the intermediate outcome

Process: Diabetes Monitoring for People With Diabetes and Schizophrenia

Appropriate use measure: Click here to name what is being measured

Structure: Click here to name the structure

Composite: Click here to name what is being measured

**1a.2** **LOGIC MODEL** Diagram or briefly describe the steps between the healthcare structures and processes (e.g., interventions, or services) and the patient’s health outcome(s). The relationships in the diagram should be easily understood by general, non-technical audiences. Indicate the structure, process or outcome being measured.

Patients with schizophrenia and diabetes>>higher prevalence of non-treatment rates for individuals with schizophrenia>>diabetes monitoring>>proper management of diabetes>>reduced morbidity and mortality

**1a.3** **Value and Meaningfulness:**  **IF** this measure is derived from patient report, provide evidence that the target population values the measured ***outcome, process, or structure*** and finds it meaningful. (Describe how and from whom their input was obtained.)

N/A

**\*\*RESPOND TO ONLY ONE SECTION BELOW -EITHER 1a.2, 1a.3 or 1a.4) \*\***

**1a.2** **FOR OUTCOME MEASURES including PATIENT REPORTED OUTCOMES - Provide empirical data demonstrating the relationship between the outcome (or PRO) to at least one healthcare structure, process, intervention, or service.**

N/A

**1a.3.****SYSTEMATIC REVIEW(SR) OF THE EVIDENCE (for intermediate outcome, PROCESS, or STRUCTURE PERFORMANCE measures, including those that are instrument-based) If the evidence is not based on a systematic review go to section 1a.4) If you wish to include more than one systematic review, add additional tables.**

**What is the source of the systematic review of the body of evidence that supports the performance measure? A systematic review is a scientific investigation that focuses on a specific question and uses explicit, prespecified scientific methods to identify, select, assess, and summarize the findings of similar but separate studies. It may include a quantitative synthesis (meta-analysis), depending on the available data. (IOM)**

☐ Clinical Practice Guideline recommendation (with evidence review)

☐ US Preventive Services Task Force Recommendation

☐ Other systematic review and grading of the body of evidence (*e.g., Cochrane Collaboration, AHRQ Evidence Practice Center*)

☐ Other

**Table 1. APA Guidelines**

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| **Source of Systematic Review:**   * **Title** * **Author** * **Date** * **Citation, including page number** * **URL** | American Psychiatric Association (2004). Practice Guideline for the Treatment of Patients With Schizophrenia Second Edition; 2004 Feb. 184 p. <http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/schizophrenia.pdf> and GUIDELINE WATCH: PRACTICE GUIDELINE FOR THE TREATMENT OF PATIENTS WITH SCHIZOPHRENIA; American Psychiatric Association, 2009 SEP. 10 P.  <https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/schizophrenia-watch.pdf> |
| Quote the guideline or recommendation verbatim about the process, structure or intermediate outcome being measured. If not a guideline, summarize the conclusions from the SR. | **Acute Phase Treatment [A, A-, B, C, D, E, F, G]**   * General medical health as well as medical conditions that could contribute to symptom exacerbation can be evaluated by medical history, physical and neurological examination, and appropriate laboratory, electrophysiological, and radiological assessments [I]. Measurement of body weight and vital signs (heart rate, blood pressure, temperature) is also recommended [II]. * Other laboratory tests to be considered to evaluate health status include a complete blood count (CBC); measurements of blood electrolytes, glucose, cholesterol, and triglycerides; tests of liver, renal, and thyroid function; a syphilis test; and when indicated and permissible, determination of HIV status and a test for hepatitis C [II].   **Stable Phase [A, A-, B, C, D, E, F, G]**   * Routine monitoring for obesity-related health problems (e.g., high blood pressure, lipid abnormalities, and clinical symptoms of diabetes) and consideration of appropriate interventions are recommended particularly for patients with BMI in the overweight and obese ranges [II]. Clinicians may consider regular monitoring of fasting glucose or hemoglobin A1c levels to detect emerging diabetes, since patients often have multiple risk factors for diabetes, especially patients with obesity [I] |
| Grade assigned to the **evidence** associated with the recommendation with the definition of the grade | The evidence base for practice guidelines is derived from two sources: research studies and clinical consensus. Where gaps exist in the research data, evidence is derived from clinical consensus, obtained through broad review of multiple drafts of each guideline. Both research data and clinical consensus vary in their validity and reliability for different clinical situations; guidelines state explicitly the nature of the supporting evidence for specific recommendations so that readers can make their own judgments regarding the utility of the recommendations. The following coding system is used for this purpose:  [A] Randomized, double-blind clinical trial. A study of an intervention in which subjects are prospectively followed over time; there are treatment and control groups; subjects are randomly assigned to the two groups; and both the subjects and the investigators are “blind” to the assignments.  [A–] Randomized clinical trial. Same as above but not double blind.  [B] Clinical trial. A prospective study in which an intervention is made and the results of that intervention are tracked longitudinally. Does not meet standards for a randomized clinical trial.  [C] Cohort or longitudinal study. A study in which subjects are prospectively followed over time without any specific intervention.  [D] Control study. A study in which a group of patients and a group of control subjects are identified in the present and information about them is pursued retrospectively or backward in time.  [E] Review with secondary data analysis. A structured analytic review of existing data, e.g., a meta-analysis or a decision analysis.  [F] Review. A qualitative review and discussion of previously published literature without a quantitative synthesis of the data.  [G] Other. Opinion-like essays, case reports, and other reports not categorized above |
| Provide all other grades and definitions from the evidence grading system | N/A |
| Grade assigned to the **recommendation** with definition of the grade | [I] Recommended with substantial clinical confidence. [II] Recommended with moderate clinical confidence. |
| Provide all other grades and definitions from the recommendation grading system | [III] May be recommended on the basis of individual circumstances |
| Body of evidence:   * Quantity – how many studies? * Quality – what type of studies? | “Relevant literature was identified through a computerized search of PubMed for the period from 1994 to 2002. Using the keywords schizophrenia OR schizoaffective, a total of 20,009 citations were found. After limiting these references to clinical trials and meta-analyses published in English that included abstracts, 1,272 articles were screened by using title and abstract information. The Cochrane Database of Systematic Reviews was also searched by using the keyword schizophrenia. Additional, less formal literature searches were conducted by APA staff and individual members of the work group on schizophrenia. Sources of funding were considered when the work group reviewed the literature but are not identified in this document. When reading source articles referenced in this guideline, readers are advised to consider the sources of funding for the studies” |
| Estimates of benefit and consistency across studies | “The literature review will include other guidelines addressing the same topic, when available. The work group constructs evidence tables to illustrate the data regarding risks and benefits for each treatment and to evaluate the quality of the data. These tables facilitate group discussion of the evidence and agreement on treatment recommendations before guideline text is written. Evidence tables do not appear in the guideline; however, they are retained by APA to document the development process in case queries are received and to inform revisions of the guideline” |
| What harms were identified? | “The literature review will include other guidelines addressing the same topic, when available. The work group constructs evidence tables to illustrate the data regarding risks and benefits for each treatment and to evaluate the quality of the data. |
| Identify any new studies conducted since the SR. Do the new studies change the conclusions from the SR? | To our knowledge, there have been no published studies since the clinical practice guidelines that would contradict the current body of evidence. |

**Table 2. ADA Guidelines**

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| **Source of Systematic Review:**   * **Title** * **Author** * **Date** * **Citation, including page number** * **URL** | **2018 Submission**  American Diabetes Association (2018). Standards of medical care in diabetes--2018. Diabetes Care, 41, S28–S37. <http://care.diabetesjournals.org/content/diacare/suppl/2017/12/08/41.Supplement_1.DC1/DC_41_S1_Combined.pdf>  **2012 Submission**  American Diabetes Association (2011). Standards of medical care in diabetes--2011. Diabetes Care, 34, S11-61. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3006050/> |
| Quote the guideline or recommendation verbatim about the process, structure or intermediate outcome being measured. If not a guideline, summarize the conclusions from the SR. | **2018 Submission**   * Perform the A1C test at least two times a year in patients who are meeting treatment goals (and who have stable glycemic control). E * Obtain a lipid profile at initiation of statins or other lipid-lowering therapy, 4–12 weeks after initiation or a change in dose, and annually thereafter as it may help to monitor the response to therapy and inform adherence. E   **2012 Submission**  Perform the A1c test at least two times a year in patients who are meeting treatment goals (and who have stable glycemic control). Grade E Recommendation. |
| Grade assigned to the **evidence** associated with the recommendation with the definition of the grade | **2018 Submission**  **E:** Expert consensus or clinical experience  **2012 Submission**  E: Expert consensus or clinical experience |
| Provide all other grades and definitions from the evidence grading system | **2018 Submission**  **A:** Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered, including   * Evidence from a well-conducted multicenter trial * Evidence from a meta-analysis that incorporated quality ratings in the analysis   Compelling nonexperimental evidence, i.e., “all or none” rule developed by the Centre for Evidence-Based Medicine at the University of Oxford  Supportive evidence from well-conducted randomized controlled trials that are adequately powered, including   * Evidence from a well-conducted trial at one or more institutions * Evidence from a meta-analysis that incorporated quality ratings in the analysis   B: Supportive evidence from well-conducted cohort studies   * Evidence from a well-conducted prospective cohort study or registry * Evidence from a well-conducted meta-analysis of cohort studies   Supportive evidence from a well-conducted case-control  study  **C:** Supportive evidence from poorly controlled or uncontrolled studies   * Evidence from randomized clinical trials with one or more major or three or more minor methodological flaws that could invalidate the results * Evidence from observational studies with high potential for bias (such as case series with comparison with historical controls) * Evidence from case series or case reports   Conflicting evidence with the weight of evidence supporting the recommendation  **2012 Submission**  **A:** Clear evidence from well-conducted, generalizable, randomized controlled trials that are adequately powered, including:   * Evidence from a well-conducted multicenter trial * Evidence from a meta-analysis that incorporated quality ratings in the analysis   Compelling nonexperimental evidence, i.e., “all or none” rule developed by Center for Evidence Based Medicine at Oxford  Supportive evidence from well-conducted randomized controlled trials that are adequately powered, including:   * Evidence from a well-conducted trial at one or more institutions * Evidence from a meta-analysis that incorporated quality ratings in the analysis   **B:** Supportive evidence from well-conducted cohort studies   * Evidence from a well-conducted prospective cohort study or registry * Evidence from a well-conducted meta-analysis of cohort studies   Supportive evidence from a well-conducted case-control study  **C:** Supportive evidence from poorly controlled or uncontrolled studies   * Evidence from randomized clinical trials with one or more major or three or more minor methodological flaws that could invalidate the results * Evidence from observational studies with high potential for bias (such as case series with comparison to historical controls) * Evidence from case series or case reports   Conflicting evidence with the weight of evidence supporting the recommendation |
| Grade assigned to the **recommendation** with definition of the grade | **2018 Submission**  No additional grading was provided, grades assigned to evidence is the same with grades assigned to recommendations.  **2012 Submission**  N/A |
| Provide all other grades and definitions from the recommendation grading system | **2018 Submission**  No additional grading was provided, grades assigned to evidence is the same with grades assigned to recommendations.  **2012 Submission**  N/A |
| Body of evidence:   * Quantity – how many studies? * Quality – what type of studies? | **2018 Submission**  The ADA does not provide information on the systematic review conducted to support its guideline and the recommendations mentioned above. In lieu of the ADA systematic review, we provide information on an additional systematic review that supports the ADA’s recommendations in Table 2.  **2012 Submission**  7; This measure is supported by prevalence studies that show a higher prevalence rate of diabetes for individuals with schizophrenia |
| Estimates of benefit and consistency across studies | **2018 Submission**  See Tables 3 and 4.  **2012 Submission**   * Benefit: Monitoring allows for the ability to treat appropriately, if warranted. Given the long asymptomatic period in the early natural history of diabetes, within patients with schizophrenia, proportion of people with undiagnosed diabetes is much higher. * Cost: LDL-C and HbA1c test * The studies consistently show that individuals with schizophrenia have a higher prevalence of diabetes. |
| What harms were identified? | **2018 Submission**  See Tables 3 and 4.  **2012 Submission**  N/A |
| Identify any new studies conducted since the SR. Do the new studies change the conclusions from the SR? | **2018 Submission**  To our knowledge, there have been no published studies since the clinical practice guidelines that would impact the recommendations.  **2012 Submission**  N/A |

**Table 3. Systematic Review supporting Diabetes Monitoring for People With Diabetes and Schizophrenia**

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| **Source of Systematic Review:**   * **Title** * **Author** * **Date** * **Citation, including page number** * **URL** | De Hert, M., Vancampfort, D., Correll, C.U., Mercken, V., Peuskens, J., Sweers, K., van Winkel, R., Mitchel, A.J. 2011. Guidelines for screening and monitoring  of cardiometabolic risk in schizophrenia: systematic evaluation. The British Journal of Psychiatry (2011) 199, 99–105. <https://pdfs.semanticscholar.org/bef2/d8f81c9c99c5057906a5f75fd9bb03a93b15.pdf> |
| What was the specific structure, treatment, intervention, service, or intermediate outcome addressed in the evidence review? | “The aim of this study was to perform a systematic review of the available clinical practice guidelines for the screening and monitoring of cardiometabolic risk in people with schizophrenia and related psychotic disorders. The quality of these guidelines is assessed with the Appraisal of Guidelines for Research and  Evaluation (AGREE).”  Based on this review of the guidelines, a monitoring protocol for managing cardiovascular disease risk in patients in clinical practice is proposed. Those who already present with cardiovascular risk factors should be monitored frequently. At the start of a new treatment, assessments should be repeated 6 and 12 weeks after initiation of the new antipsychotic drug treatment. |
| Grade assigned for the quality of the quoted evidence with definition of the grade | Four of the evaluated guidelines are of good quality and  should guide clinicians’ screening and monitoring practices |
| Provide all other grades and definitions of the evidence in the grading system | The evaluation and comparison of the guidelines consisted of “23 items grouped in six domains: scope and purpose; rigour of development; stakeholder involvement; clarity and presentation; applicability; and editorial independence. Each item is scored on a 4-point scale (strongly agree, agree, disagree and strongly disagree) with proposed anchor points to evaluate in which way the guideline fulfils the domain. The scores are standardised in a percentage score that enables comparison between guidelines (obtained score-minimum possible score)/ (maximum possible score-minimum possible score). The final component of the AGREE instrument involves a recommendation regarding the use of the guidelines in practice as ‘recommended’, ‘recommended (with provisos or exceptions)’, ‘would not recommend or unsure’, depending on the number of items and domains if the score was 460%, 30–60% and 530%, respectively. Three raters (D.V., K.S. and M.D.H.) independently scored the identified guidelines (M.D.H. acknowledges a potential conflict of interest because he co-authored two of the assessed guidelines). A mean score was calculated for each item from which the percentage score was derived according to the AGREE manual. In addition, each guideline was independently evaluated regarding the specific content and scope of what should be monitored by whom. Process indicators were predefined and scored on a standardised scoring sheet (online supplement 1). Intraclass correlation coefficients (ICC) with a 95% confidence interval were  calculated as an overall indicator of agreement among the raters for each of the 23 items of the AGREE instrument.” |
| What is the time period covered by the body of evidence? | 1 January 2000 until 1 April 2010 |
| Body of evidence:   * Quantity – how many studies? * Quality – what type of studies? | Quantity: 18  Quality: “A total of 18 unique guidelines were identified for AGREE evaluation either from the USA (2), Australia (2), Brazil (1), Canada (1) or Europe (12), and all were published between 2004 and 2010. All papers covered diabetes and cardiovascular disease risk in individuals treated with antipsychotic agents, whereas some had a broader scope also including other physical health domains and other side-effects. Regarding the domain rigour of development all except one guideline had a score below 50%. Although some guidelines presented data from a systematic review of the literature, the search strategy for literature selection was missing in all but one guideline. Only two guidelines presented levels/quality of the evidence and one presented meta-analytic data. More than half (61%) of the guidelines were developed with a consensus model. Within this domain the criterion about the updating of the recommendation was not fulfilled by any of the guidelines. The older UK guideline has a low score on this item, but the paper was published in a themed issue of the journal, with different papers presenting a systematic review of the literature in that same issue. Scores in the application domain were satisfactory in five guidelines. The guidelines with a low score on this domain failed to discuss the organisational aspects of introducing screening and monitoring. Health economic aspects were mentioned in some guidelines but the additional cost of screening and monitoring  was explicitly available in only one.” |
| What is the overall quality of evidence across studies in the body of evidence? | Overall, the quality of evidence supporting this measure is strong. There are 18 guidelines in the evidence review that examine the effectiveness of cardiovascular screening monitoring for individuals with schizophrenia. |
| Estimates of benefit and consistency across studies in body of evidence– what are the estimates of benefits? | “Clinical practice guidelines are considered a good option for translating research into clinical practice. They are defined as ‘systematically developed statements to assist practitioner and patient decisions about appropriate healthcare for specific clinical circumstances’. Their potential to improve patient care and outcomes depends largely on the quality and independence of the guideline. Recommendations may be biased because of non-systematic selection, inadequate interpretation or lack of scientific evidence. The content may initially be decided through consensus, whereas scientific evidence to support the consensus  is added afterwards. The influence of the context within which the guidelines are produced (for example by medical societies or with support of pharmaceutical companies) has also been mentioned in relation to the variation across guidelines. Quality evaluations have recently been performed for other diseases in relation to metabolic and cardiovascular risk monitoring. Similar to our findings, for diabetes and cardiovascular disease the rigour of development and other quality indications, such as stakeholder involvement and editorial independence, were not ideal in a number of these guidelines. This was the case, despite medical societies developing stringent methodologies for these diseases according to internal guidelines/procedures. Moreover, editorial independence was also often a problematic area, and frequently guidelines were not based on  high-quality evidence.” |
| What harms were studied and how to they affect the net benefit (benefits over harm)? | No harms associated with screening and monitoring were identified in the evidence reviewed. |

**Table 4. Systematic Review supporting Diabetes Monitoring for People With Diabetes and Schizophrenia**

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| **Source of Systematic Review:**   * **Title** * **Author** * **Date** * **Citation, including page number** * **URL** | Vancampfort D, Correll CU, Galling B, et al. Diabetes mellitus in people with schizophrenia, bipolar disorder and major depressive disorder: a systematic review and large scale meta‐analysis. World Psychiatry. 2016;15(2):166-174. <https://doi.org/10.1002/wps.20309> |
| What was the specific structure, treatment, intervention, service, or intermediate outcome addressed in the evidence review? | “This meta‐analysis aimed: a) to describe pooled frequencies of T2DM in people with SMI; b) to analyze the influence of demographic, illness and treatment variables as well as T2DM assessment methods (blood testing, self-report, charts); and c) to describe T2DM prevalence in studies directly comparing persons with each specific SMI diagnosis to general population samples… In patients with T2DM (and those with pre‐diabetes), fasting blood glucose and HBA1c should be measured more frequently (approximately every 3‐6 months). An annual examination should include measurement of CVD risk factors, glomerular filtration rate and albumin to creatinine ratio, an eye examination, ideally including fundus photography, and foot examination to diagnose early signs of complications” |
| Grade assigned for the quality of the quoted evidence with definition of the grade | This systematic review was conducted in accordance with the M eta-analysis of Observational Studies in Epidemiology (MOOSE) guidelines (<https://jamanetwork.com/journals/jama/fullarticle/192614>) and in line with the Preferred Reporting Items for  Systematic Reviews and Meta-Analyses (PRISMA) standard (http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000097) |
| Provide all other grades and definitions of the evidence in the grading system | This systematic review was conducted in accordance with the M eta-analysis of Observational Studies in Epidemiology (MOOSE) guidelines (<https://jamanetwork.com/journals/jama/fullarticle/192614>) and in line with the Preferred Reporting Items for  Systematic Reviews and Meta-Analyses (PRISMA) standard (http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000097) |
| What is the time period covered by the body of evidence? | Database inception to August 1, 2015 |
| Body of evidence:   * Quantity – how many studies? * Quality – what type of studies? | Quantity of studies: 118  Quality of studies: “observational studies (cross‐sectional, retrospective and prospective studies) and randomized controlled trials in adults with a psychiatric diagnosis of schizophrenia or related psychotic disorders, bipolar disorder or MDD according to the DSM‐IV‐TR or the ICD‐10, irrespective of clinical setting (inpatient, outpatient or mixed, community setting), that reported study‐defined T2DM prevalences.” |
| What is the overall quality of evidence across studies in the body of evidence? | Overall, the quality of evidence supporting this measure is strong. There are over 100 studies in the evidence review that examine the prevalence and effectiveness of diabetes screening and monitoring for individuals with SMI, including schizophrenia. Further, the quality of studies included in the systematic review were well-designed randomized control trials and observational studies and. |
| Estimates of benefit and consistency across studies in body of evidence– what are the estimates of benefits? | “To our knowledge, this is the first meta‐analysis of T2DM including and comparing data from the three main SMIs, namely schizophrenia and related psychotic disorders, bipolar disorder and MDD. Approximately one in 10 individuals with SMI (11.3%; 95% CI: 10.0%‐12.6%) had T2DM, and the relative risk for T2DM in multi‐episode persons with SMI was almost double (RR=1.85, 95% CI: 1.45‐2.37) that found in matched general population comparison samples.  T2DM prevalences were consistently elevated for each of the three diagnostic subgroups compared to the general population, and comparative meta‐analyses found no significant differences across schizophrenia, schizophrenia spectrum disorders, bipolar disorder and MDD. Thus, other diagnostic‐independent factors likely influence T2DM frequency, including hyperglycaemia following psychotropic medication use and long‐term exposure to unhealthy lifestyle behaviors, as well as potential genetic factors linking psychiatric and medical risk.  Knowledge of factors associated with a high T2DM risk can help identify individuals at greatest need for intensive monitoring and intervention. In contrast with general population studies, we found that women with SMI had a higher risk for developing T2DM than men. This finding warrants further investigation, but may be related to a greater propensity to obesity and central obesity in women with SMI compared to men, since central obesity is a significant risk factor for hyperglycaemia. On the other hand, only a minority of analyzed studies did provide information about the mean age in women and men, and it is possible that women with schizophrenia were older, which could have confounded the results.  There were no significant differences between the various treatment settings, and data collection before versus after the year 2000. There was also no difference in T2DM prevalence between population based and non‐population based studies. In contrast, a higher T2DM prevalence was observed in studies relying upon clinical data gleaned from file and chart reviews versus self‐report studies. A trend for higher T2DM was found in retrospective studies versus cross‐sectional (p=0.054) and versus prospective (p=0.053) studies.” |
| What harms were studied and how to they affect the net benefit (benefits over harm)? | No harms associated with testing were identified in the evidence reviewed. |

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**1a.4 OTHER SOURCE OF EVIDENCE**

*If source of evidence is NOT from a clinical practice guideline, USPSTF, or systematic review, please describe the evidence on which you are basing the performance measure.*

**1a.4.1** **Briefly SYNTHESIZE the evidence that supports the measure.** A list of references without a summary is not acceptable.

The APA 2009 Guideline Watch identified a number of controlled clinical trials examining treatments to prevent or treat weight gain and metabolic changes caused by antipsychotic use. The Guideline Watch additionally cite several randomized control trials (RCTs) related to new antipsychotics used to treat schizophrenia. This report highlights research studies published since the 2004 APA Practice Guidelines for the Treatment of Patients with Schizophrenia and furthers the known link between metabolic side effects and antipsychotics used to treat schizophrenia.

**1a.4.2 What process was used to identify the evidence?**

“This watch highlights key research studies published since that date. The studies were identified by a MEDLINE literature search for meta-analyses and randomized, controlled trials published between 2002 and 2008, using the same key words used for the literature search performed for the 2004 guideline.”

**1a.4.3.** **Provide the citation(s) for the evidence.**

GUIDELINE WATCH: PRACTICE GUIDELINE FOR THE TREATMENT OF PATIENTS WITH SCHIZOPHRENIA; American Psychiatric Association, 2009 SEP. 10 P.

<https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/schizophrenia-watch.pdf>