Use of a Structured Clinical Interview to Eliminate Unspecified Psychiatric Diagnoses

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Abstract

Background: A definitive psychiatric diagnosis can provide significant direction to patient treatment strategies and will facilitate the identification of potential risks and qualification for supportive resources. Psychiatric research programs that were initiated in the 1950s led to the classification framework known as the Diagnostic and Statistical Manual (DSM) of Mental Disorders. These guidelines provide physicians with the information that they need for the appropriate diagnosis of major psychiatric conditions. While the DSM has had a large impact on the practice of psychiatry, there are still no biological markers of these diseases. This has led to the development of diverse assessment methods that can lead to inconsistent diagnoses.

Methods: A ten-day reflective assessment was completed prior to the selection of the Quality Improvement (QI) topic. Three PICOT (patient, intervention, comparison, outcome, and time) questions were developed following this assessment to identify gaps in current practice methods. A literature review was then conducted. Current research guidelines that support the implementation of a structured clinical interview as part of the diagnostic process were identified. The Plan-Do-Study-Act method was used to establish a plan for implementation and achieving goals. Initial evaluations and documented diagnoses provided to patients who were evaluated during an earlier six-week period were reviewed for comparison purposes.

Intervention: The Structured Clinical Interview for DSM-5, Clinician Version (SCID-5-CV) is the standard method used to diagnose psychiatric disorders. Patients between the ages of 18 and 65 years who were seeking an initial evaluation during the six-week study period were assessed using the SCID-5-CV.
Results: Nine patients met the initial eligibility criteria; two patients were ultimately excluded. Ages ranged from 18 to 60 years old and included five females, two males. Data collected from the seven evaluations using the SCID-5-CV were reviewed, analyzed, and documented.

Conclusion: Implementation of the SCID-5-CV into clinical practice improved diagnostic accuracy and reduced the frequency of unspecified psychiatric diagnoses. Despite the time barriers associated with its administration, the use of the SCID-5-CV provides clinicians with the assurance that all DSM-5 criteria for each diagnosis are met. Benefits to the patients, including more effective treatment responses and qualification for supportive resources were also recognized.

Keywords: Diagnosis, Psychiatry, Structured clinical interview, Assessment tools, Depression, Schizophrenia, Bipolar Disorder, Guidelines, DSM-5
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Problem Description

A thorough assessment is required as a primary step when formulating a diagnosis for empirically supported healthcare treatments. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) is a crucial resource used by healthcare providers to diagnose and determine the severity of both physical and psychological symptoms associated with psychiatric disease (Newson et al., 2020). While various assessment tools have been developed to assist Psychiatric Mental Health Nurse Practitioners (PMHNPs) with patient evaluations, the Structured Clinical Interview for DSM-V, (SCID-V) is currently recommended by evidence-based guidelines (Brodey et al., 2018). The wide variety of assessment tools available for use by mental health clinicians can lead to inconsistent care and may jeopardize future research efforts (Davis et al., 2016).

Available Knowledge

SCID-V has been identified as the “gold standard” for assessing psychiatric illness (Osório et al., 2019). This interviewing tool has strong clinical validity and inter-rater reliability when performed by trained and knowledgeable mental health providers (Osório et al., 2019). However, despite its proven efficacy, its implementation has been hindered in routine clinical practice due because of the training requirements and the length of time needed for its appropriate administration (Brodey et al., 2018). These barriers have led to the development of diverse assessment tools to be used by mental health providers as part of the interview process (Newson et al., 2020).

At this time, there are more than one hundred different questionnaires and interview methods available to assess depression, anxiety, bipolar disorder, addiction, and other psychiatric
disorders (Newson et al., 2020). A review of the 126 most commonly used psychiatric disease-specific and trans-diagnostic tools currently in use revealed significant disparities in recommended assessment methods (Newson et al., 2020). The lack of a consistent and standardized diagnostic method had a substantial impact on the quality and quantity of data collected (Duncan et al., 2019). In addition to the many diagnostic tools available, clinician bias, knowledge, and preference for specific assessment tools resulted in inconsistent assessments with respect to formal diagnosis, the severity of impairment, and level of functioning (Zimmerman et al., 2018).

Rationale

The SCID-5-Clinician Version (CV) presents a semi-structured interview method that guides the PMHNP through the diagnostic process (First et al., 2016). The structured interview process provides the clinician with the information needed to identify and distinguish between psychiatric disorders that are frequently presented in an outpatient setting (First et al., 2016). The guided flow of the interview allows the clinician to address the diagnostic criteria necessary for major DSM-5 diagnoses in a systematic fashion (First et al., 2016). The SCID-5-CV is accompanied by a User’s Manual that can be used by a PMHNP to perform an effective and efficient assessment (First et al., 2016). Supplementary interview questions, rationale, and study cases are provided in the manual to ensure its proper use (First et al., 2016).

Specific Aims

The aim of this quality improvement (QI) project was to implement the use of the SCID-5-CV in an outpatient mental health setting. The goal was to explore the impact of consistent use of the SCID-5-CV during initial patient evaluations and specifically to determine whether
implementation of this method results in the elimination or at least a decrease in documented diagnoses listed as unspecified psychiatric disorders.

Methods

Context

The initial evaluation of participants aged 18 to 65 years was carried out at El Paso Mental Health. El Paso Mental Health is a privately-owned outpatient mental health clinic with more than 60 employees and three offices located within the United States at the Mexico border (El Paso Mental Health – Restoring Balance for a Better Life, n.d.). This facility has served the El Paso and San Antonio, Texas communities for over two years. Eight board-certified PMHNPs are available to perform evaluations and medication management via in-person and telemedicine appointments. Medications and/or case management have been provided to more than 2000 child, adolescent, adult, and geriatric patients. Therapy services are also provided based largely on diagnosis and the severity of their psychiatric disorder (El Paso Mental Health, n.d.).

El Paso is located in southwest Texas at the border between the United States and Mexico (Escobar et al., 2021). Depression and anxiety are highly prevalent in this population that experiences significant disparities with respect to both medical and mental health care (Escobar et al., 2021). The Texas border region has a high poverty rate and a shortage of mental health providers; many patients lack insurance coverage (Escobar et al., 2021). As of May 2021, only 97 mental health providers were available in El Paso for every 100,000 residents (Mental Health Provider Rate, 2022). Collectively, these factors lead to increased delays in obtaining appropriate mental health treatment and services which can have a significant impact on an individual’s health and safety.
**Intervention**

The SCID-5-CV and User’s Manual were purchased and secured after project approval. At the beginning of the intervention, an informative session was provided to the Office Supervisor and the front staff. Additional SCID-5-CV and User’s Manuals were purchased for the Office Supervisor and all PMHNPs interested in the interview process. Information was provided on the purpose of this intervention and the process of performing the SCID-5-CV during an initial evaluation. Continued engagement with the Office supervisor and front staff was provided throughout the QI project.

The paper version of the SCID-5-CV was scanned and made available in an electronic format. The SCID-5-CV form was duplicated for each patient that met the eligibility criteria. The evaluation was performed, and the findings were saved and an individual .pdf was created for each participant. Using this method, information for all eligible participants was documented, reviewed, and placed in their electronic health records (EHRs).

**Study of Intervention**

The Plan-Do-Study-Act (PDSA) model was used to assess, analyze, and evaluate the impact of the SCID-5-CV within a six-week study period. This tool may be most effective when used to promote clinical improvements as it is highly adaptable to diverse clinical settings and research-based interventions (Coury et al., 2017). The four stages of the PDSA approach are included in a continuous process that permits changes in the implementation of an intervention to reach the desired result (Coury et al., 2017). The PDSA model was applied to this QI project as described in the paragraphs to follow.

*Plan:* A ten-day reflective practice was performed during working clinic hours during which each patient encounter was documented. Encounters were grouped by patient age (minors,
adults, or geriatric) and purpose of visit (initial evaluation or follow-up). The three PICOT questions that follow were developed after identifying gaps in current research from practice methods.

In adults ages 18 to 35 requesting an initial evaluation, how does \textit{blank} compare to the use of the PHQ 9, GAD 7 and MDQ by the PMHNP in the interview process affect the result of non-specific psychiatric disorders being diagnosed within an hour?

In older adults ages 55 to 77 diagnosed with an anxiety disorder and being treated with benzodiazepines, what is the effect of continuing benzodiazepine treatment on continued daily anxiety compared to \textit{blank} after two weeks?

In adults ages 18 to 35 with complaints of sleep disturbance, what is the effect of Trazodone or OTC (over the counter) Melatonin treatment on continued difficulty with sleep onset and maintenance compared with \textit{blank} after four weeks?

After review, the research focus was directed towards a need for a change in the initial evaluation process. During the ten-day reflective, eleven of the 16 adult patients who presented for an initial evaluation were diagnosed with unspecified mood and/or anxiety disorders. A review of the literature was performed to identify current evidence-based practices used to perform psychiatric assessments as well as guidelines to assess depression, bipolar disorder, and schizophrenia.

The SCID-5-CV was identified as empirically supported for use in patient evaluations. Approval by the administration of El Paso Mental Health was required for this change in practice within the organization. Eligibility criteria were established for participants and expected clinical outcomes were developed. The User’s Manual for the SCID-5-CV and the interview format were purchased and reviewed before their implementation.
Do: To aid in its implementation, the SCID-5-CV was electronically scanned and downloaded into the PMHNP-designated work electronic device. If a patient met eligibility criteria, the SCID-5-CV was electronically duplicated for use. Information gathered during the initial evaluation was electronically documented in the appropriate sections of the SCID-5-CV and results were saved. A .pdf documenting the patient-specific interview was generated for placement into the patients’ EHRs.

Study: Data collected were analyzed after the completion of the initial evaluation and after the QI project implementation. The patients were provided with copies of the findings and documentation of diagnoses that were included in the EHR. The study process also included a review of the SCID-5-CV findings to ensure that DSM-5 criteria were met for the given diagnosis. Possible barriers to implementation, for example, administration time and patient adherence to interview instructions were also reviewed. Improved patient outcomes and approval of supportive resources based on appropriate diagnosis were identified.

Act: The use of the SCID-5-CV facilitated the full elimination of non-specific psychiatric diagnoses and ensured that the criteria for each specific diagnosis were met. The time required to administer the SCID-5-CV was identified as the greatest obstacle to its implementation. After the initial evaluation of the results of the QI project, recommendations to change the approach used in the next PDSA cycle were made. Use of the NetSCID-5-CV, a web-based version of the SCID-5-CV, was found to decrease the administration time by 30% (Brodey et al., 2018). The benefits of the NetSCID-5-CV include immediate diagnostic reporting when criteria have been met, guidance for the interviewer, and comprehensive diagnostic reporting (NETSCID-5, 2021).
**Measures**

The primary intent of a QI project is to identify ways to improve healthcare outcomes via the translation of research findings into the clinical setting. When combined with current treatment guidelines, the practitioner can use a systematic approach in their attempt to facilitate acceptance of the desired change. Quality measures must be instituted during the planning phase of the project to ensure the appropriate data are collected and to determine if the desired goal has been achieved.

The quality measures discussed in the paragraphs to follow were identified as a means to improve both the clinical process and patient health outcomes.

*Process Measure*: All documented diagnoses will address DSM-5 criteria. This will decrease the risk of clinician bias and the opportunity for mistaken and/or underdiagnosis.

*Outcomes Measure*: Empirically supported treatment will be provided by the PMHNP to address the specific diagnosis.

**Analysis**

The findings collected during these six weeks were compared to those from patient evaluations performed by the PMHNP during the same period in 2021. Six patients who presented during this period in 2021 met the eligibility criteria. These six evaluations were performed and completed using the Patient Health Questionnaire 9 (PHQ-9), Generalized Anxiety Disorder 7 (GAD-7), and the Mood Disorder Questionnaire (MDQ). Four patients were provided with unspecified psychiatric diagnoses after the interview. No changes were made upon review of these findings one year later.

Nine participants met the eligibility criteria during the designated six-week period in 2022. Two participants were ultimately excluded. Seven evaluations were performed and
completed using the SCID-5-CV. After the interview process, all seven participants were provided with specific psychiatric diagnoses. These diagnoses were confirmed as meeting the appropriate criteria upon subsequent review.

**Ethical Considerations**

Patient safety is always the first priority during diagnosis and treatment. A PMHNP may recognize an acute psychiatric crisis once suicidal behavior and homicidal ideation are evident. These findings require a rapid response from the provider. Telemedicine and in-person services require different responses to ensure patient safety and may disrupt the completion of the interview process. Patients who present an immediate risk to themselves or others during the assessment process were excluded from this project. Proper actions were taken, and authorities were notified as necessary.

**Results**

Nine patients who presented between January 17, 2022, and February 22, 2022, met the eligibility criteria for this QI project. Two patients were excluded because they were unable to participate and presented with an immediate risk to their safety. Of the seven participants, four were evaluated via telemedicine, and three presented to the clinic in person. All seven participants were provided with a specific psychiatric diagnosis at the end of their first evaluation and the implementation of the SCID-5-CV. The time required to administer the SCID-5-CV varied from 40 to 90 minutes. Individualized treatment plans focused on evidence-based pharmacological and psychosocial approaches were provided according to the documented diagnoses. Table 1 provides a list of diagnoses found during the intervention period.
Table 1.

<table>
<thead>
<tr>
<th>Mood Disorders</th>
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<tbody>
<tr>
<td>Major Depressive Disorder, single episode, mild F32.0</td>
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<tr>
<td>Major Depressive Disorder, single episode, moderate F32.1</td>
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<tr>
<td>Major Depressive Disorder, single episode, severe without psychotic features, F32.2</td>
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<tr>
<td>Major Depressive Disorder, recurrent, moderate F33.1</td>
</tr>
<tr>
<td>Major Depressive Disorder, recurrent severe, without psychotic features, F33.2</td>
</tr>
<tr>
<td>Dysthymic Disorder, F34.1</td>
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<tr>
<th>Anxiety Disorders</th>
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<tbody>
<tr>
<td>Generalized anxiety disorder, F41.1</td>
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<tr>
<td>Post-traumatic stress disorder, chronic F43.12</td>
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<tr>
<td>Panic Disorder (episodic paroxysmal anxiety) F41.0</td>
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<tr>
<th>Substance Use Disorders</th>
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<tbody>
<tr>
<td>Alcohol dependence with withdraw, with perceptual disturbance F10.232</td>
</tr>
<tr>
<td>Cocaine use disorder, moderate in early remission F14.11</td>
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</table>

Discussion

Summary

The use of variable assessment methods can lead to the collection of poor-quality data. To decrease the potential for diagnostic error, high-quality diagnostic tools need to be used in routine clinical practice (Clark et al., 2019). Most clinical guidelines recommend the use of the SCIV-5 for formal individual assessments. Evidence-based pharmacological interventions and education tailored to the nature of the specific diagnosis are critical to providing the patient with efficient and effective healthcare.

The focus of this QI project was to implement the recommended diagnostic tool in an outpatient psychiatric setting during the initial evaluation. In this project, the SCIV-5-CV was implemented for the assessment of adults aged 18 to 65 who were able to respond independently to each of the interview questions. The use of the SCID-5-CV to assess these seven patients resulted in no unspecified psychiatric diagnoses after the initial evaluations. Other patient
outcomes were noted, including diminished barriers regarding qualification for supportive services. Based on the significant benefits observed, the use of the SCID-5-CV will continue and will be encouraged in daily clinical practice.

**Interpretation**

The SCID-5-CV is an important tool for the assessment of adults presenting with a potential psychiatric illness. The use of this semi-structured interview helps the PMHNP to ensure that current DSM criteria are met before formal diagnosis and to create individualized treatment recommendations. However, the time required to perform this evaluation may present barriers to its clinical use. The use of the electronic version, NetSCID-5-CV, may ultimately improve clinicians’ adherence to evidence-based assessment and treatment guidelines.

**Limitations**

No validated Spanish version of the SCID-5-CV is currently available. The English version of the SCID-5-CV used in this study was translated into Spanish by the doctoral student. Although a Spanish heritage speaker, the level of proficiency of the doctoral student has not been formally assessed. Bilingual provider certification was not obtained.

**Conclusion**

Consistent and appropriate psychiatric diagnosis is largely dependent on the information provided during the assessment, the nature of current symptoms, and the accuracy and reliability of the diagnostic method used (Tas & Ozusta, 2019). Patient follow-up should focus on confirmation or clarification of the documented diagnosis if not already specified (Tas & Ozusta, 2019). The absence of consistent measures may result in variable diagnoses and treatment recommendations that have a substantial impact on patient outcomes (Tas & Ozusta, 2019).
Other Information

Acknowledgments

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Competing interests:

None

Ethics approval:

The University of Texas at El Paso Institutional Review Board approved and found this project which was designated “NOT RESEARCH” on November 4, 2021.

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References


