# Evaluating the Feasibility of Capturing a Core Set of Harmonized Depression Outcome Measures in Primary Care and Mental Health Patient Registries

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# Background

Major depressive disorder is a significant public health problem in the United States that reduces quality of life for millions of individuals. Many critical questions exist about depression treatment and outcomes, and new, efficient approaches are needed to address these questions and improve patient outcomes.

Patient registries already collect large amounts of data on depression treatment and outcomes from diverse patient populations and could be useful for answering some of these questions. Yet, differences in the data collected in each registry makes it challenging to aggregate or compare data.

Collection of a core set of harmonized outcome measures across depression patient registries would yield a robust data infrastructure to answer questions about depression treatment and outcomes in the real-world setting.

# Methods

The Agency for Healthcare Research and Quality (AHRQ) recently supported an effort to harmonize depression outcome measures across patient registries and clinical practice. The harmonized measures use the PHQ-9, along with other clinical data, to measure and monitor depression outcomes over time at the patient level.

Implementation of these measures in patient registries and in the clinical practice setting would support both measurement-based care using the PHQ-9 and development of data infrastructure to address new depression-related research questions.

The purpose of this project\* was to assess the technical and operational feasibility of calculating the harmonized measures in two registries: the **PRIME Registry**, sponsored by the American Board of Family Medicine, and **PsychPRO**, sponsored by the American Psychiatric Association.

## Results

The feasibility assessment identified technical barriers related to the availability of data, particularly for measures such as suicide ideation and behavior where data may be entered in notes as opposed to in structured fields. Cause of death is also challenging to capture in the registry setting. Operational issues include developing workflows for collection of the PHQ-9 at consistent intervals, review of the outcome measures, particularly when patients report worsening symptoms, and developing appropriate language and processes for patients who indicate suicide ideation on the PHQ-9 outside of an office visit. Patients also must be engaged and willing to complete the PHQ-9 on a regular basis.

These issues will be addressed in the second phase of this project, which will focus on implementation of the measures at 20 pilot sites.



# Conclusions

- While many efforts have developed harmonized or core sets of outcome measures, few efforts have worked with registries and health systems to understand the impact and potential challenges of implementing the harmonized measures.
- This project assessed feasibility and identified potential barriers that may be useful for informing other harmonization initiatives and implementation efforts.

#### **Characteristics**

#### Participant

- Gender
- Age
- Race/ethnicity
- Family history of depression, other major mental illness
- Trauma and maltreatment exposure
- Access to care
- Pregnancy/post-partum
- Socioeconomic status

#### Disease

- Comorbidities (psychiatric, substance use/alcohol use, medical comorbidity)
- Disease course
- Type of depressive episode
- Depressive severity at diagnosis
- Duration of symptoms
- Previous relapses/prior history of depression
- Prior treatments including number of medications & number of failed antidepressant treatment attempts
- Lab tests (e.g., thyroid function, metabolic indices, inflammatory markers)
- Suicidality

#### Provider

Additional evidence as needed

#### Treatment

#### Туре

- Medication (dose, duration, and adherence)
- Psychotherapy
- Devices (type, dose, and duration)
- Alternative

#### Survival

- All-cause mortality
- Death from suicide

#### **Clinical Response**

- Recurrence, Other\*\*

### **Events of Interest**

- Adverse Events

### **Patient Reported**

#### **Resource Utilization**

- utilization
- Work productivity

\*\* Area for future investigation

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#### Outcomes

 Improvement in Depressive Symptoms: Remission, Response

• Worsening in Depressive Symptoms:

Suicide Ideation and Behavior

• Depression-specific Quality of Life

• Depression-related resource