Inpatient Depression Screening: Is it Feasible and Appropriate?

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Objectives

By the end of this presentation the learner should be able to:

1. Identify patient populations at risk for depression.
2. Describe evidence-based screening tools for depression and their utility in the inpatient population.
3. Discuss ICU depression screening pilot data and outcomes.
4. Discuss barriers to inpatient depression management.
Introduction
Why Should we Screen for Depression?

• Across multiple diagnoses, depression is correlated to:
  • Increased morbidity and mortality
  • Decreased quality of life
  • Poor patient compliance
  • Greater social disability
  • Increased healthcare costs and healthcare utilization
Focal Clinical Problem Assessment
Current State of Inpatient Depression Screening

• Littleton Adventist Hospital is a Neuroscience Specialty Center that cares for patients with neurologic illness who are at risk for depression

• The EMR has validated depression screening tools built into hospital documentation
  • The PHQ-2 and the PHQ-9 can be found in the EMR

• There is no current recourse for patients who screen positive in the inpatient setting
Current State of Inpatient Depression Screening

• The failure to screen patients as well as inaction for positive screens is incongruent with:
  • The current nurse practice model which supports high quality, patient-centered, whole-person care
  • The hospital mission to nurture the health of the people in the community, the vision to achieve care excellence through partnering with patients, and the values which necessitate care that treats mind, body, and spirit (Littleton Adventist Hospital, n.d.)
Literature Review Findings
Literature Review Findings

• Most of the evidence regarding treatment and follow-up for positive depression screen scores is in an outpatient setting

• There is a relative paucity of evidence related to depression screening and treatment in the acute care setting

• Co-morbid depression is associated with poorer outcomes in patients with stroke, cancer, congestive heart failure, myocardial infarction, Alzheimer’s, Parkinson’s disease, epilepsy, multiple sclerosis, and elderly medical patients

• Depression is correlated with increased readmission rates in medical inpatients and increased length of stay in surgical patients

(Ishak et al., 2017; Kerper et al., 2014, Raskind, 2008; Tu, Hsu, Chi, Lin, & Yen, 2014; McCusker, Cole, Ciampi, Latimer, Windholz, & Belzile, 2007; Sowden, Mastromauro, Januzzi, Fricchione, & Huffman, 2007)
## The Impact of Comorbid Depression and Neurologic Illness

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Depression Prevalence</th>
<th>Depression Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s Dementia</td>
<td>30-50%</td>
<td>It is positively correlated with institutionalizing patients with AD earlier and with increased mortality risk in nursing home residents</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>20-50%</td>
<td>Patients with depression are less compliant with epilepsy treatment</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>19-54%</td>
<td>Treating depression is associated with enhanced quality of life, improved adherence to treatment, and reduction in fatigue and disability</td>
</tr>
<tr>
<td>Parkinson’s</td>
<td>40-50%</td>
<td>Treating depression is associated with enhanced quality of life, improved adherence to treatment, and reduction in fatigue and disability</td>
</tr>
<tr>
<td>Stroke</td>
<td>20-72%</td>
<td>Has a negative influence on motor, cognitive, social disability and recovery, with patients less likely to regain levels of pre-stroke functioning</td>
</tr>
<tr>
<td>Traumatic Brain Injury</td>
<td>50%</td>
<td>TBI patients with depression have longer recovery periods and are less likely to return to a productive role in society</td>
</tr>
</tbody>
</table>

(Ishak et al., 2017; Kerper et al., 2014; Raskind, 2008; Tu, Hsu, Chi, Lin, & Yen, 2014; McCusker, Cole, Ciampi, Latimer, Windholz, & Belzile, 2007; Sowden, Mastromauro, Januzzi, Fricchione, & Huffman, 2007)
Literature Review Findings

• The majority of studies related to depression treatment in the acute care setting address two patient populations:
  • Patients post-cardiac procedure
  • Patients with acute stroke
  • Patients with cancer
Recommendations for Action
Recommendations

• Develop a screening and treatment algorithm specific to the acute care setting to:
  • Determine the feasibility and appropriateness of depression screening and treatment in the acute care setting
  • Evaluate the achievability of treatment initiation and arrangement of follow-up care after discharge
• Pilot the proposed algorithm in a patient population that is likely to have high rates of co-morbid depression
  • Inclusion criteria operationalized to patients with acute and chronic neurologic disorders admitted to the ICU from September to December of 2017
Depression Screen Algorithm
Depression Screen (PHQ-2)

Does the patient have a neuro diagnosis or a history of a TBI or chronic disability related to a neuro diagnosis?

No

Yes

STOP

Is the patient able to participate and answer questions?

No

Document reason for inability to complete the screen in the EMR (aphasia, decreased consciousness...)

Yes

Complete the depression screening flowsheet in the EMR

Did the Patient answer “Yes” to either question

No

STOP

Yes

SELECT “Complete Follow up Screen” under “Follow up action taken”, and complete and document the PHQ-9

STOP

Depression Follow up Screen (PHQ-9)

Score 0

No action needed

Score 1-4

Minimal Depression
*Provide education materials to patient/caregiver
*Consult Social work and Case Management

Score 5-14

Mild to Moderate Depression
*Provide education materials to patient/caregiver
*Consult Social work and Case Management
*If score is ≥10 notify LIP
*Repeat screen prior to discharge. If score remains ≥5, consider referral to psychiatrist and initiation of anti-depressant
*Rule out anemia, vitamin deficiency or hypothyroidism as causative factor.

Score ≥ 15

Moderately Severe to Severe Depression
*Provide education materials to patient/caregiver
*Notify LIP for in-depth safety assessment and management
*Consult Social work and Case Management
*Consider inpatient psych consult
*Consider initiation of anti-depressant
*Repeat screen prior to discharge. If ≥5, consider outpatient psychiatry and initiation of anti-depressant
*Rule out anemia, vitamin deficiency or hypothyroidism as causative factor.

Complete Columbia Suicide Severity Rating

Did the patient answer yes to any question?

No

STOP

Yes

Notify LIP for more in depth evaluation
Pilot Outcomes
Depression Identified

- Screening was attempted in 129 out of 166 patients

PERCENT OF PATIENTS SCREENED POSITIVE

- Negative Screen
- Positive Screen

- 83%
- 17%
Depression Identified

- Twelve patients screened positive for **mild** depression
  - Nursing provided depression education
- Eight patients screened positive for **moderate** depression
  - Nursing provided depression education; case management/social work provided information on outpatient services
- Two patients screened positive for **severe** depression
  - Received multi-disciplinary education, medication, inpatient psychiatry consults, and appropriate outpatient follow-up
Depression Identified

DEPRESSION BY DIAGNOSIS

- Traumatic Bleed
- Ischemic CVA
- Hemorrhagic CVA
- Encephalopathy
- Chronic Pain
- Epilepsy

Number of Patients

Diagnosis

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Depression Identified

- Patients who screened positive often did not report a history of depression
- Through the pilot we were able to identify depression, provide education, and ensure outpatient follow-up for patients who may have not received treatment otherwise

We make the difference!
Why Were Depression Rates Below National Averages for Persons with Chronic Illness?

- Many patients were significantly cognitively impaired in the ICU

Distribution of Incomplete Screens

Not Assessed
Incomplete Screen
Unable to Assess

Number of Patients
Barriers to Depression Screening and Treatment
Barriers

- No automatic prompts in the EMR
  - Case management/social work consult is not automatic
- PHQ-9 does not automatically cascade
- Does not automatically add depression education or time re-assessment at discharge
- Does not automatically trigger suicide risk assessment
- Limited availability of inpatient psych resources
Barriers Continued

• Missed or inaccurate screening- 27 missed screens, 10 screens incomplete
  • Most screening errors were related to lack of follow-up screen (no automatic cascade)
Implications for Practice
Implications

• Depression screening, treatment, and post-discharge referral is feasible in the acute care setting

• Appropriate depression management may:
  • Improve patient outcomes
  • Enhance quality of life
  • Reduce the healthcare costs

• Optimization of the EMR will be needed to support the algorithm
Summary

• The algorithm addresses the gaps between a positive screen for depression and standardized treatment

• It links instituting appropriate interventions to the results of screening which ranged from minimal to severe depression
  • Interdisciplinary interventions include patient and family education, social work consultation, medications, and most importantly, access to post-acute resources such as, psychiatry and psychology as appropriate, support groups, and other outpatient treatments

• The algorithm fosters closed loop communication with the patient’s primary care physician and/or receiving facility

• Depression screening, treatment, and post-discharge referral is feasible in the acute care setting

This presentation was peer reviewed by the Littleton Adventist Hospital Professional Development Council
Thank You

Questions?

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🌐 https://centurahealth.sharepoint.com/teams/LAHneuroedu/SitePages/Home.aspx
References


