Overview

I. IHS GPRA Measures – BH Screening Background
II. Depression Screening
III. Effective Screening
IV. Recommended Screening Setup
V. Current Concerns
VI. Closing Comments
IHS GPRA Measures – BH
Screening Background
IHS GPRA Measures

GPRA BH Screens Share:

1. Focus on primary care level identification of concern – early intervention where possible
2. Follow generally accepted USPSTF guidelines (United State Preventive Services Task Force)
3. Do NOT specifically identify activity in Behavioral Health settings but Behavioral Health activity across the entire system of care
IHS GPRA Measures

GPRA BH Screens include:
1. Depression Screening
2. Alcohol Screening (FAS Prevention)
3. Domestic Violence Screening
4. Suicide “Screening” is currently not recommended
5. Several GPRA measures are BH-oriented (Tobacco, Obesity, HIV status)
Depression Screening – GPRA 06-12
Functions of Screening

Screening Programs work best:

1. When integrated into a larger system of care
2. When able to reliably connect to appropriate sources of care
3. When screening is part of an ongoing conversation with patient
4. When conditions are treatable
Screens should:

- Target an identifiable problem
- Have sensitivity and specificity appropriate to the prevalence of the condition in the population
- Result in doing or not doing something
- Any good due to screening should be carefully balanced with potential harm
  - Self-breast exam
  - PSA
- Be done in a manner that respects the patient and with genuine concern
Case Finding vs. Screening

Case Finding

- Applied to populations with established risk for illness
- Disease already established
- Treatment for established disease may have some benefit
- May prevent transmission of disease to others

Screening

- Vulnerability to Disease/Disorder
- Potential for prevention of progression to full disease
BH Screens

- Do not work well in the absence of “relationships”
- Should be considered as much strategies for opening discussions on uncomfortable topics as screening for disease
- Are likely context dependent
- Do not rule out concerns
Depression Screening
Why Screen for Depression?

- High Prevalence in Primary Care Settings
- Associated with risk for suicide and self-injurious behaviors
- Related to poorer outcomes of a range of common medical conditions
  - Cardiovascular Illness
  - Diabetes
  - Dementia
- Majority of patients with condition present initially to primary care and most stay there
- Treatment is generally safe and effective (NNT for antidepressant tx - 6-7)
Past Year Major Depressive Episode among Adults Aged 18 or Older, by Race/Ethnicity: 2002-2006

Percent in Past Year

White: 7.7
Black or African American: 6.4 (+)
American Indian or Alaska Native: 10.7
Native Hawaiian or Other Pacific Islander: 9.2
Asian: 3.3 (+)
Two or More Races: 12.2
Hispanic or Latino: 6.2 (+)

+ Difference between this estimate and American Indian/Alaska Native estimate is significant (p<.05).

NOTE: Major Depressive Episode (MDE) is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).
Past Year Major Depressive Episode among Adolescents Aged 12 to 17, by Race/Ethnicity: 2002-2006

NOTE: Major Depressive Episode (MDE) is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

+ Difference between this estimate and American Indian/Alaska Native estimate is significant (p<.05).
Suicide in Native American Youth

- Second leading cause of death for Native youth 15-24 (vs. third in US general population)
- Adolescent males highest risk (vs. elderly males in general population)
- 33.9 per 100,000 complete suicide, at least 3 times the rate in US overall
- More than half of those who complete suicide have never seen MH provider

Fatimi, Pediatric Mood Disorders 2009
Clear Benefits of Integrated Care

- Most benefits appear to accrue to depression managed as part of an “integrated” treatment approach
- Depression management is part of chronic disease management and similar practices are instituted
- The condition is monitored regularly
- Treatment is titrated according to response
- Patient engagement and activation is encouraged
- Early detection and briefer, lower intensity interventions are supported

Cost = 25 cents per additional depression free day
Integrated Care

Bogner et al. Integrated Management of Type 2 Diabetes Mellitus and Depression Treatment to Improve Medication Adherence: A Randomized Controlled Trial. Ann Fam Med. 2012;10(1)15-22.
Bogner et al. Integrated Management of Type 2 Diabetes Mellitus and Depression Treatment to Improve Medication Adherence: A Randomized Controlled Trial. Ann Fam Med. 2012;10(1)15-22.
Recommendation: Depression Screening

Screening for Depression

• Release Date: May 2002 Summary of Recommendations / Supporting Documents. The information found here is current for adults. This recommendation has been updated in part for children and adolescents. Go to [http://www.ahrq.gov/clinic/uspstf/uspschdepr.htm](http://www.ahrq.gov/clinic/uspstf/uspschdepr.htm) to view the new recommendation for children and adolescents, published in March 2009.

• Summary of Recommendations

  • The U.S. Preventive Services Task Force (USPSTF) recommends screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up. Grade: B Recommendation.

  • The USPSTF recommends screening of adolescents (12-18 years of age) for major depressive disorder (MDD) when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up. Grade: B recommendation.

  • The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening of children (7-11 years of age). Grade: I Statement.
GPRAMA Measure for IHS 2013

- Depression Screening: Proportion of adults ages 18 and over who are screened for depression. [outcome]
- Goal: Rate 58.6% (Current Target)
Effective Screening
Problems with Screening Approaches

1. The Rote Screen
2. The Agitating Screen
3. The Feel Like I’m Doing Something Screen
4. The GPRA Star Screen
5. The On a Mission Screen
Screening Should Be:

- Engaging
- Efficient
- Consistent
- Reliable
- Effective
- Sustainable
- Connectable
Best Practice Process In Primary Care

SBIRT

Screening
Brief Intervention
Referral to Treatment

Taken from SAMHSA and the SBIRT program for alcohol and drug abuse prevention
IHS Specific Recommendations

- Do not screen in the absence of good referral and support mechanisms
- For adolescents consider the capacity of the system to deal with students needing secondary assessment
  - See Teen Screen
Does It Work?

- The more common – the better the bang for the buck
- Consider two-stage screening system
- Depression screening can lead to benefit if part of a systematic approach to care
- It is more effective in situations where new or patients who have not been seen for a longer period of time are screened
Recommended Screening Setup
Screening Burden by Task

Magruder and Yeager, Screening for Depression in Primary Care, 2008
## 2-Stage Screening Approach

### 20% Prevalence

#### Gold Standard

<table>
<thead>
<tr>
<th></th>
<th>MDD +</th>
<th>MDD -</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage I</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen +</td>
<td>190</td>
<td>320</td>
<td>510</td>
</tr>
<tr>
<td>True Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>False Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen -</td>
<td>10</td>
<td>480</td>
<td>490</td>
</tr>
<tr>
<td>False Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>200</strong></td>
<td><strong>800</strong></td>
<td><strong>1000</strong></td>
<td></td>
</tr>
<tr>
<td>MDD Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDD Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Stage II**

<table>
<thead>
<tr>
<th></th>
<th>MDD +</th>
<th>MDD -</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen +</td>
<td>152</td>
<td>64</td>
<td>216</td>
</tr>
<tr>
<td>True Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>False Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen -</td>
<td>10</td>
<td>304</td>
<td>314</td>
</tr>
<tr>
<td>False Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>48</strong></td>
<td><strong>380</strong></td>
<td><strong>428</strong></td>
<td></td>
</tr>
<tr>
<td>MDD Positive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDD Negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PPV:**
- Stage I: $\frac{190}{510} = 37.3\%$. For every 100 screen positives, approximately 37 would be depressed.
- Stage II: $\frac{152}{216} = 70.4\%$. For every 100 screen positives, approximately 70 would be depressed.

**Excess diagnostic burden:**
- $\frac{64}{1000} = 6.4\%$. Diagnostic assessment would be performed on 64 patients who were not depressed.

Magruder and Yeager, *Screening for Depression in Primary Care, 2008*
1-Stage Screening Approach

20% Prevalence
80% Sensitivity, 80% Specificity

<table>
<thead>
<tr>
<th></th>
<th>Gold Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MDD +</td>
</tr>
<tr>
<td>PHQ-9 +</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>True Positive</td>
</tr>
<tr>
<td>PHQ-9 -</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>False Negative</td>
</tr>
<tr>
<td></td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>MDD Positive</td>
</tr>
<tr>
<td></td>
<td>1000</td>
</tr>
</tbody>
</table>

PPV: 160/320 = 50%. For every 100 screen positives, only approximately 50 would be depressed.

Excess diagnostic burden: 160/1000 = 16%. Diagnostic assessment would be performed on 160 patients who were not depressed.
Comparison of Patient, Staff, and Provider Time (min) for One and Two Stage Screeners

<table>
<thead>
<tr>
<th>MDD Prevalence</th>
<th>5%</th>
<th>10%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One Stage</td>
<td>Two Stage</td>
<td>One Stage</td>
</tr>
<tr>
<td>Patient</td>
<td>6,600</td>
<td>4,136</td>
<td>7,200</td>
</tr>
<tr>
<td>Staff</td>
<td>2,000</td>
<td>1,856</td>
<td>2,000</td>
</tr>
<tr>
<td>Provider</td>
<td>4,600</td>
<td>2,280</td>
<td>5,200</td>
</tr>
</tbody>
</table>

Magruder and Yeager, Screening for Depression in Primary Care, 2008
Recommended  First Screen Tool

- PHQ-2 Scaled Version
  - Patient Health Questionnaire
- Possible results:
  - Negative
  - Positive
- A positive result means further evaluation is indicated; it does not constitute a diagnosis of depression
PHQ-2 Scaled Version

Over the last two weeks, how often have you been bothered by any of the following problems?

- Little interest or pleasure in doing things
  - Not at all \hspace{1cm} Value: 0
  - Several days \hspace{1cm} Value: 1
  - More than half the days \hspace{1cm} Value: 2
  - Nearly every day \hspace{1cm} Value: 3

- Feeling down, depressed or hopeless
  - Not at all \hspace{1cm} Value: 0
  - Several days \hspace{1cm} Value: 1
  - More than half the days \hspace{1cm} Value: 2
  - Nearly every day \hspace{1cm} Value: 3

- Total PHQ-2 score possible: \hspace{1cm} Range: 0-6
PHQ-2 Scaled Version Scores

- $0 - 2 = \text{Negative}$
  - Depression Screening Exam Code Result: NEGATIVE

- $3 - 6 = \text{Positive; further evaluation is indicated}$
  - Depression Screening Exam Code Result: POSITIVE

- The patient may decline the screen or refuse to answer
  - Depression Screening Exam Code Result: REFUSED

- Some patients cannot be screened due to disability or other reasons
  - Depression Screening Exam Code Result: UNABLE TO SCREEN
What to do if PHQ-2 is Positive

- Evaluate further in the primary care setting
  - Consider using PHQ-9 tool (next slide)
- If further evaluation is positive for depression…
  - Discuss treatment options with the patient including:
    - Counseling
    - Medication
    - Combination of counseling and medication
- Refer to Behavioral Health as needed
  - Medication consultation
  - Counseling
PHQ-2 Scaled Version Scores

- 0 – 2 = Negative
  - Depression Screening Exam Code Result: NEGATIVE
- 3 – 6 = Positive; further evaluation is indicated
  - Depression Screening Exam Code Result: POSITIVE
- The patient may decline the screen or refuse to answer
  - Depression Screening Exam Code Result: REFUSED
- Some patients cannot be screened due to disability or other reasons
  - Depression Screening Exam Code Result: UNABLE TO SCREEN
Recommended 2\textsuperscript{nd} Stage Screening Tool: PHQ-9

- Self-administered version of the PRIME-MD diagnostic instrument for common mental disorders
- PHQ-9 is the depression module
  - Criteria-based diagnoses of depressive disorder
  - Scores each of the 9 DSM-IV criteria for depressive disorders
    - 0 (not at all) to 3 (nearly every day)
  - Half the length of other depression measures with comparable sensitivity and specificity
  - Can establish diagnosis and grade depressive symptom severity
Preferred Screening Tools

PHQ-9 or PRIME-MD-Depression

Nine Symptom Checklist*

Name __________________________ Date _________

Over the last 2 weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

(For office coding: Total Score _____ = ___ + ___ + ___)

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

*From the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues. For research information, contact Dr. Spitzer at jspitzer@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright © 1999 Pfizer Inc. All rights reserved. Reproduced with permission.
PHQ-9 Uses

- **Diagnosis**
  - Helping providers distinguish between adjustment concerns, minor depression, major depression and dysthymia
- **Severity Monitoring**
  - Monitor response to treatment over time
Adolescent Depression Screening

- Several validated instruments
- Version of PHQ-9 for adolescents is available
- Beck Depression Inventory II also normed for adolescents (proprietary instrument)
- Connors Child Behavior Checklist – widely and broadly used, parent and teacher versions (proprietary instrument)
Documenting Depression Screening in the EHR

- Tools for evaluating depressive symptoms are on 2 components
  - Exam (Depression Screening)
  - Measurements (PHQ2, PHQ9)
- This can pose a dilemma for some users who aren’t certain where to document screening
  - Users and sites need to define locally – who does screening, what tools are used, where are they documented
- Current development in EHR will allow screening to be documented in one place using the Reminder Dialog tool
Trending PHQ-9 to Assess Treatment Response

**Vitals**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiration</td>
<td>16</td>
<td>16</td>
<td>20</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>117/60</td>
<td>130/70</td>
<td>124/80</td>
<td>144/82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>124</td>
<td>124.12</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Body Mass Index</td>
<td>23.13</td>
<td>22.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHQ2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PHQ9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

**Graph:**

- PHQ9 values from 7/1/06 to 9/1/09, with peaks at different intervals.

**Options:**

- Enter Vitals...
- choose dates from Today, One Week, Two Weeks, One Month, Six Months, One Year, Two Years.
- All Results, Date Range.
- Default Units:
  - Values
  - Zoom
  - 3D
  - Grid
  - Age
Current Concerns
Suicide rates among middle-aged Americans have risen sharply in the past decade, prompting concern that a generation of baby boomers who have faced years of economic worry and easy access to prescription painkillers may be particularly vulnerable to self-inflicted harm.
The suicide rate among Native American adults grew 65.2 percent in the past decade, the Centers for Disease Control and Prevention said in a new report.

The rate of suicide among American Indians and Alaska Natives ages 35-64 was 11.2 per 100,000 in 1990. It grew to 18.5 percent in 2010, the CDC said, the largest increase of any racial or ethnic group in the U.S.

The report did not examine the reasons for the increase. But overall, more older Americans are committing suicide, according to the CDC.
Assessment of Suicide Risk

• 80% of seriously depressed patients think of suicide

• Assess risk factors:
  • PRIOR ATTEMPTS
  • Family history of suicide
  • Hopelessness
  • Demographics
  • Clinical
    • Substance abuse, psychosis, potentially terminal illness
Suicide Risk Assessment

- Use a gradual, sensitive approach to raise the subject:
  - How does the future look to you?
  - Living with (pain/anxiety/patients’ symptoms) can be very difficult. Do you sometimes wish your life was over?
  - Have you had thoughts that you would be better off dead?
  - Have you had thoughts of hurting yourself?
  - Have you thought about how you might hurt yourself?
Suicide Risk Assessment

- There is no evidence that talking about suicide will introduce a new idea or provoke the patient to take action.

- Patients with specific plans are at greater risk for suicide than those who only think about it or express concerns.
Caveat: Broad Suicide Screening Programs Not Sufficiently Supported to Recommend

• Release Date: May 2004

Summary of Recommendation

• The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against routine screening by primary care clinicians to detect suicide risk in the general population.
  Grade: I Statement.
IHS Suicide Reporting Database

- Built into the RPMS BH module
- Form for entry available as EHR tab
- Collects data on site, type of event, contributors
- Connected to i-Care community alerts
- Variety of canned reports available on-site
- National Suicide Data datamart for regional data will become available by early 2010
- As good as the data that goes into it . . . .
Further Resources

• *MacArthur Initiative on Depression and Primary Care*

  [www.depression-primarycare.org](http://www.depression-primarycare.org)
Closing Comments
Is the problem in our clinics really depression?

Begging the question – is the problem depression?

Or is it other conditions that contribute to depression range symptoms?

Should the focus be on depression itself – or on depression as a non-specific indicator of life distress and vulnerability?

How would our treatment approaches change if we focused on depression as a harbinger of psycho-social-emotional-economic-bio-ecologic breakdown?
BH Measures

- Moving from measuring screening to interventions and outcomes
  - Depression - tracking PHQ-9 scores and adjusting interventions
  - Alcohol – tracking use of the Brief Intervention and trauma
  - Suicide – tracking use of suicide form to tracking suicide attempts and deaths
  - Domestic Violence – tracking presentations for injury related to DV/sexual assault
- Focus increasing attention on BH-program-specific performance
- EHR BH measurement panels and provider dialogs are in the works
Screening in BH For 2014

- Don’t forget it’s about the relationship
- Be aware of the time investment involved and assess the appropriateness and type of screening for your population carefully
- Screening in the absence of intervention and support is not generally useful

**Integrated Care** – getting BH involved early, frequently, and as part of the larger PC team is the future
Focusing on the Future –
Screening in BH For 2015 and Beyond

- Programming focused on charting and developing sources of resilience in our communities
- Coping training and support
- A network of early identification and intervention resources managed in part by patients and the community
- Parenting/Early Childhood Emphasis
THE FUSCO BROTHERS  J.C. Duffy

Do you have a life plan, Lars?

Hey, I don't even have a life.
Contact Info

- Peter Stuart, MD
  peter.stuart@ihs.gov
  Phone: 928 245 7050