Agenda

- Why Measure Outcomes
- Types of Outcomes
- Specifying & Refining Measures
- Challenges in Behavioral Health Outcomes Measurement
- Kaiser Permanente’s Journey in Depression Outcomes Monitoring
## Kaiser Permanente Membership by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>540,442</td>
</tr>
<tr>
<td>Georgia</td>
<td>233,880</td>
</tr>
<tr>
<td>Hawaii</td>
<td>224,591</td>
</tr>
<tr>
<td>Mid-Atlantic States (VA, MD, DC)</td>
<td>481,755</td>
</tr>
<tr>
<td>Northern California</td>
<td>3,403,871</td>
</tr>
<tr>
<td>Northwest (Oregon/Washington)</td>
<td>484,349</td>
</tr>
<tr>
<td>Ohio</td>
<td>86,338</td>
</tr>
<tr>
<td>Southern California</td>
<td>3,594,848</td>
</tr>
</tbody>
</table>
Why Measure Outcomes?

- Demonstrates Quality
- Ensures Effectiveness and Efficiency
  - Adherence to evidence supported treatments
  - Use resources most efficiently
  - Right person, right care, right time
  - Develop appropriate levels of care
- Builds Trust in the System
  - Public
  - Patients
  - Providers
  - Payors
- Allows for a Systematic Approach to Improvement
What is Quality?

A measure of whether services increase the likelihood of desired mental health outcomes and are consistent with evidence-based practice.

World Health Organization, 2003
“Quality” Has Many Dimensions To Measure

- Safe
- Effective
- Patient-Centered
- Timely
- Efficient
- Equitable

Source:
Institute of Medicine (2001).
Crossing the Quality Chasm:
A New Health System for the 21st Century.
How Can Stakeholders Use Outcome Measures?

- Public
- Patients
- Service Planners
- Researchers
- Clinicians
- Payors
- Families
- Professional Organization
- Policy Makers
Types of Measures

- Process
- Structure
- Outcome

QUALITY
<table>
<thead>
<tr>
<th>Structure</th>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td>• Easy to Gather</td>
<td>• Assess if Patient Status Improves</td>
</tr>
<tr>
<td>Limitation</td>
<td>• Subject to Response Bias • Vagueness in Terminology</td>
<td>• Sensitive to Differences in Illness Severity and/or Comorbidities</td>
</tr>
<tr>
<td></td>
<td>• Capture Care Elements Under Greatest Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Dependent on Patient Care-Seeking Behaviors</td>
<td></td>
</tr>
</tbody>
</table>

But, Did Good Care Happen?

Did Things not Happen due to Patient Factors or Provider Factors?

Will this Cause Providers Not Take ‘Sicker’ Patients?
Selecting & Refining Quality Measures

- **Clinical Importance**
  - Does this measure represent a substantial deficit in care?
  - Can this measure result in actionable improvement efforts?

- **Scientific Foundation**
  - Is there evidence supporting the relationship between the measure and clinical outcome?

- **Validity**
  - Is the measure scientifically sound?
  - Is it sensitive to change?
  - Is it easily understood?
  - Is it susceptible to being ‘gamed’?
  - Does it allow for differences in patient beliefs and preferences for care?

- **Feasibility**
  - How easy is it to collect across an episode of care?
  - How reliable/complete is the collection method and resulting data?
  - How easy is it to retrieve from charts (EHR or paper)?
  - How affordable is it to collect?
Expect Measurement Sets To Evolve Over Time

A Possible Profile

Time →

Number of Measures ↑

- Get the outcomes right
- Develop measures
- Focus on most useful measures
- Drive improvement
- Retain only essential few as focus shifts
Why Does BH Lag Behind?

- Lack of Sufficient Evidence
  - Poorly Defined Parameters
  - Unable to Develop Specific, Valid & Clearly Defined Measures
  - Lack of Agreement on ‘Quality Care’ in Behavioral Health

- Inadequate Infrastructure to Develop & Implement Measures
  - Provider Concerns (privacy, ‘cook-book care’, etc)
  - Care Often Contained within Silos (eg; BHS, PC, PEDS, etc)

- Lack of Electronic Health Information
  - Incomplete or Missing Data Elements
  - Having Data in Searchable Fields
Kaiser Permanente’s Journey
Emotional Health is Part of Total Health:
All KP members at-risk will be routinely screened and provided EST for emotional health needs until their symptoms remit.

Improve clinical outcomes for members with emotional health diagnoses by designing and implementing a standardized, reliable process for identification and treatment of members’ emotional health needs no matter where the member presents for care.

- Evidence Supported
- Member Centered
- Flexible
- Cost-Effective

- Scaleable
- Leverages KP Integrated Delivery System
Clinical Opportunity Areas – Where To Start?

- **Children**: ADHD; Autism Spectrum Disorders; Behavioral Disorders
- **Teens**: Depression/Suicide Prevention; Substance Use Disorders; Eating Disorders
- **Adults**: Major Depressive Disorder; Substance Use Disorders; Anxiety Disorders; ADHD; Eating Disorders
- **Older Adults**: Major Depressive Disorder; Substance Use Disorders; Anxiety Disorders
Agreeing on the PHQ9

- Able to build job aides and decision support tools
- Able to develop Depression Outcomes Report for internal benchmarking
- Able to apply population care strategies
- Able to develop stepped care models
PHQ9 – The New Standard of Depression Care at Kaiser Permanente
Taking it to the Street

Routine Use

- Medical Care Providers
- Psychotherapists
- Care Managers
- Psychiatrists
What Can the PHQ9 Do For Me?

- Help with Diagnosis
- Aid in Treatment Planning
- Track Outcomes
- Manage Time Effectively
- Improve Care Coordination
- Structure the Conversation
Diagnosis
Talking with Patients About Depression
Talking with Patients About Depression – Making the Right Thing Easier To Do
Treatment Decisions
Depression Management
Administration of PHQ9

Behavior Health Services Call Center phone numbers
Oahu: 432-7600 or 7602 | NI: 1-888-945-7600 or 7602

<table>
<thead>
<tr>
<th>PHQ9 Score</th>
<th>Check and Provide</th>
<th>Options</th>
<th>Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>Provide reassurance and education. BMS involvement if needed.</td>
<td>Offer Talk Therapy (BMS or BHS). Give pt Call Center phone #. Provide Resource Guide and refer to kp.org website</td>
<td>Phone appt within 4-8 wks, repeat PHQ9 &amp; re-evaluate. If PHQ9 score is 5-9 then repeat PHQ9 in 3 months.</td>
</tr>
<tr>
<td>10-14</td>
<td>Assess further to rule out Major Depressive Disorder (MDD). If no MDD provide reassurance and education.</td>
<td>Offer Talk Therapy (BMS or BHS). Consider starting medication (Acute phase for 18+yo - initial medication trial for minimum 84 days). Give pt Call Center phone #.</td>
<td>Phone appt within 4-8 wks, repeat PHQ9 &amp; re-evaluate.</td>
</tr>
<tr>
<td>15-19</td>
<td>Discuss treatment options. Check for suicidal ideation/plan.</td>
<td>Start, adjust or change medication. Do NOT exceed maximum dose. If 2 or more medication failures refer to BHS. Offer Talk Therapy (BMS or BHS). Provide a private place for pt. to call BHS Call Center.</td>
<td>Phone appt within 4-8 wks, repeat PHQ9 &amp; re-evaluate. If PHQ9 &lt;5: Continue treatment and repeat PHQ9 in 3 mos.</td>
</tr>
<tr>
<td>&gt;20</td>
<td>Assess risk for suicide: Do you have thoughts that life is not worth living or you’d be better off dead? Have you ever done anything to hurt yourself in the past? Have you thought about hurting yourself or committing suicide?</td>
<td>Start, adjust or change medication. Do NOT exceed maximum dose. If 2 or more medication failures refer to BHS. If suicidal: immediately call BHS Call Center or BHS for triage and emergency treatment. If no risk for suicide: Adjust/change medication and refer to BMS or BHS.</td>
<td>Schedule phone appt within 4 wks. Monitor, repeat PHQ9 at follow up.</td>
</tr>
</tbody>
</table>

Coding for Depression

<table>
<thead>
<tr>
<th>Description</th>
<th>ICD-9-CM Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>296.26B Depression, Single Episode Complete Remission 296.36A Depression, Major Recurrent, in Complete Remission 300.4B &amp; C Dysthymia 309.0A Depression (Grief Reaction) 311C Depression, Involutional</td>
</tr>
<tr>
<td>Major Depression</td>
<td>296.20B Depression, Major Single Episode 296.30B Depression, Major Recurrent</td>
</tr>
</tbody>
</table>
Monitoring Progress
### Flowsheet Report

**Select Flowsheets to View**

- DEPRESSION PHQ9 NATL [164]

#### DEPRESSION PHQ9

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Visit PHQ9 Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Visit PHQ9 Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Loss of Interest/ Pleasure</td>
<td>More than half the days</td>
<td>More than half the days</td>
<td>Several days</td>
<td>C) 10 - 14 MODERATE</td>
</tr>
<tr>
<td>2. Depressed Mood</td>
<td>Not at all</td>
<td>Not at all</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>3. Insomnia/Hypersomnia</td>
<td>More than half the days</td>
<td>More than half the days</td>
<td>More than half the days</td>
<td></td>
</tr>
<tr>
<td>4. Fatigue/Low Energy</td>
<td>Several days</td>
<td>Several days</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>5. Appetite Disturbance</td>
<td>Several days</td>
<td>Several days</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>6. Feelings of guilt/worthlessness</td>
<td>Not at all</td>
<td>Not at all</td>
<td>Not at all</td>
<td></td>
</tr>
<tr>
<td>7. Memory/Concentration Problems</td>
<td>Several days</td>
<td>Several days</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>8. Psychomotor Retardation/Agitation</td>
<td>Several days</td>
<td>Several days</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>9. Thoughts of Death/Self-Harm</td>
<td>Not at all</td>
<td>Not at all</td>
<td>Not at all</td>
<td></td>
</tr>
<tr>
<td>10. Impact to daily life</td>
<td>Not difficult at all</td>
<td>Not difficult at all</td>
<td>Somewhat difficult</td>
<td></td>
</tr>
<tr>
<td>PHQ9 Score</td>
<td>8.00 (Mild)</td>
<td>9.00 (Mild)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Panel Support Tool Caregaps:

### Therapeutic Care Gaps:

### Chronic Condition Monitoring Care Gaps:

### Preventive Care Gaps:
Flu Shot due - Last done: 9/23/08
Active Tobacco Use: Advise quitting today

## Patient Vitals
** Last BP 132 / 82 on 1/28/11  
Pulse 81 on 1/28/11  
Weight: 190.0 on 1/28/11  
Height 68.0 on 12/6/10  
BMI: 28.9  1/28/11  
Ten Year Cardiac Risk: 12%

## Utilization Profile
Last Discharge:  
Last ER Visit:  
** Preventive Care  
Last Flu Date: 9/23/08  
Last H1N1 Date:  
Last Pneumo:  
Last Td: 8/12/98  
Last Tdap: 9/22/08  
Last iFOBT: 9/23/10

## Depression Information
Med Management: BHS WAI  
PHQ9: 2 on 01/28/11  
22 on 09/15/10

## Laboratory Results
<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>** LDL</td>
<td>78</td>
<td>1/28/11</td>
</tr>
<tr>
<td>HDL</td>
<td>58.0</td>
<td>1/28/11</td>
</tr>
<tr>
<td>CHOL</td>
<td>154</td>
<td>1/28/11</td>
</tr>
<tr>
<td>** A1C</td>
<td>6.1</td>
<td>1/29/11</td>
</tr>
<tr>
<td>** FBG</td>
<td>113</td>
<td>6/15/10</td>
</tr>
<tr>
<td>ALT</td>
<td>31</td>
<td>1/28/11</td>
</tr>
<tr>
<td>** CRE</td>
<td>1.1</td>
<td>1/28/11</td>
</tr>
<tr>
<td>BUN</td>
<td>14</td>
<td>1/28/11</td>
</tr>
<tr>
<td>** GFR</td>
<td>72.6</td>
<td>1/28/11</td>
</tr>
<tr>
<td>** ALB/CRE</td>
<td>6</td>
<td>1/29/11</td>
</tr>
<tr>
<td>** PRO/CRE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HGB</td>
<td>14.8</td>
<td>1/28/11</td>
</tr>
<tr>
<td>HCT</td>
<td>42.6</td>
<td>1/28/11</td>
</tr>
<tr>
<td>NA</td>
<td>140.0</td>
<td>1/28/11</td>
</tr>
<tr>
<td>K</td>
<td>4.0</td>
<td>1/28/11</td>
</tr>
<tr>
<td>TSH</td>
<td>1.19</td>
<td>1/29/11</td>
</tr>
<tr>
<td>** URIC</td>
<td>4.5</td>
<td>1/28/11</td>
</tr>
</tbody>
</table>

**Hover over the result to see trended results if available

---

Most recent KP pharmacy dispense of each drug within certain drug classes in last 12 months. Bolded = dispensed in last 3 months

** SIMVASTATIN TAB 80MG Date: 12/28/10 Daily Dose: 80.0  
** LISINOPRIL TAB 10MG Date: 12/2/10 Daily Dose: 10.0  
** SERTRALINE HCL TAB 50MG Date: 10/21/10 Daily Dose: 75.0
Depression Dashboard Metrics

**PHQ-9 Usage**
- New episodes: initial PHQ-9 at index date
- New episodes: follow-up PHQ-9 2-4 after index date
- Existing episodes: annual PHQ-9

**Baseline PHQ-9 Completion**

**Depression Outcomes: Remission and Improvement**

**PHQ-9 Score Change Over Time**
- Episodes which improve by a severity class
- Episodes which improve to remission class
- Episodes which stay the same or severity class worsens
# Care Coordination

<table>
<thead>
<tr>
<th>Table 1: Care Coordination Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metric</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Access</td>
</tr>
<tr>
<td>Satisfaction</td>
</tr>
<tr>
<td>Readmissions</td>
</tr>
</tbody>
</table>

**Note:** Data reflects improvements post-implementation.
Straw Model: Psychological Therapies for Adult Depression
Stepped Care Model Adapted for Kaiser Permanente

Identification, Assessment & Education

- PHQ9 < 9
  - Low-Intensity Interventions

- PHQ9 = 10-14
  - High-Intensity Interventions

- PHQ9 = 15-19
  - Specialized Interventions

- PHQ9 > 20

Active Monitoring and Referral for Further Assessment & Intervention
But Will Patients Like It......?

Cautionary Note:
This material is copyrighted and not intended to be shared outside the organization or reproduced in any form without permission in writing from the Care Management Institute, Kaiser Permanente.
Inbox

From my doctor

Help with e-mailing my doctor

You are viewing information for WPPKNWFJKBKFN WPPKNIWGFJKBAJLN

Is someone missing from your list?

<table>
<thead>
<tr>
<th>Subject</th>
<th>From</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression Questionnaire</td>
<td>Alan George</td>
<td>09/16/2011 10:14 AM</td>
</tr>
<tr>
<td>Depression Questionnaire</td>
<td>Alan George</td>
<td>09/16/2011 09:57 AM</td>
</tr>
<tr>
<td>Depression Questionnaire</td>
<td>Alan George</td>
<td>09/16/2011 09:56 AM</td>
</tr>
</tbody>
</table>
Is someone missing from your list?

Please review your answers.

To change an answer, click "Change." When you are finished with the questionnaire, click "Submit questionnaire."

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the last 2 weeks, how often have you been bothered by any of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>following problems?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>More than half the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>days</td>
<td></td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>Several days</td>
<td></td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>Several days</td>
<td></td>
</tr>
</tbody>
</table>
Acknowledging it Takes Time
Questions - - Comments
Andrew Bertagnolli, PhD
andrew.bertagnolli@kp.org
510-271-5771