The Use of Registries to Guide and Improve Care Delivery:

What Can Behavioral Health Learn from Primary Care?

Crystal Eubanks, MSHS, Quality Director, LifeLong Medical Care

Marc Avery, MD, Clinical Associate Professor of Psychiatry, University of Washington School of Medicine
Marc Avery, MD

DISCLOSURES

Employment:
Associate Director for Clinical Services, Division of Integrated Care and Public Health and AIMS Center (Advancing Integrated Mental Health Solutions)
Clinical Associate Professor of Psychiatry, School of Medicine; Dept. of Psychiatry and Behavioral Sciences, University of Washington School of Medicine

Grant funding (current & recent)
Lowenstein Foundation

Contracts (current & recent)
California Institute of Mental Health
Wyoming Health Care Authority
Community Health Plan of Washington, Public Health of Seattle & King County
NAVOS Behavioral Health
Telehealth Corporation

NO FINANCIAL RELATIONSHIPS THAT PRESENT A CONFLICT OF INTEREST FOR TODAY’s PRESENTATION
I WILL NOT DISCUSS OFF LABEL OR INVESTIGATIONAL USE OF MEDICATIONS OR OTHER TREATMENTS.

DIVISION OF INTEGRATED CARE & PUBLIC HEALTH
Department of Psychiatry & Behavioral Sciences
DISCLOSURES

Employment:
LifeLong Medical Care

Grant funding (current & recent)
Center for Care Innovations
CVS
Kaiser Permanente
TJ Longs Foundation

Contracts (current & recent)
California Primary Care Association
Community Health Center Network
Community Health Partnership

NO FINANCIAL RELATIONSHIPS THAT PRESENT A CONFLICT OF INTEREST FOR TODAY’s PRESENTATION
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• 44,000 patients
• 13 health centers
  • NCQA Patient-Centered Medical Home Level 3 Recognition
• 3 counties – Alameda, Contra Costa, Marin
• Services:
  • Primary care
  • Mental and behavioral health
  • Dental
  • Podiatry
  • Complementary medicine
  • Social services
  • Wellness activities
A patient registry is an information system that is designed to support organized care management.
Functions of a Registry

Target and manage a specific population.

- Data Collection & Tracking
  - Assessment Date / Score
  - Panel Assignment
  - Follow-up actions

Identify unmet patient care needs for action and complete.

- Patient searches / queries based on clinical, billing, and demographic data
- Case Load / Panel Reports for Care Team
- Evidence-based prompts for care services on a schedule

Track, report, and improve outcomes.

- Quality Measure Reporting
- Risk Stratification for targeted interventions
A Non-Clinician’s Perspective

Cost-Savings
- Quality Assurance & Risk Mgmt.
- Performance Measurement & Improvement
- Data Efficiency
- Data Collection Standardization & Automation
- Data Validation

Revenue Generation
- Operational Efficiency
- Process Standardization
- Productivity & Capacity
- Demonstrate high quality to attract funding
- Population Analysis to refine services for patient needs
Primary Care
# Integrated Behavioral Health

## Current Patient

<table>
<thead>
<tr>
<th>Test, Ryan</th>
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<tbody>
<tr>
<td>ID: 145196</td>
</tr>
<tr>
<td>DOB: 2/22/1990</td>
</tr>
<tr>
<td>Sex: M</td>
</tr>
<tr>
<td>SSN: HR#: 145196</td>
</tr>
<tr>
<td>Language: <em>English</em></td>
</tr>
<tr>
<td>Status: Not Active</td>
</tr>
</tbody>
</table>

## Alerts (3)
- Follow-Up Required: get spec. report
- Follow-Up Required: reminder call for appts
- Follow-Up Required: get report from sleep study clinic

## CARE PROMPTS

### Items for 10/26/2012

<table>
<thead>
<tr>
<th>Item</th>
<th>Value for 10/26/2012</th>
<th>Most Recent Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>Add</td>
<td>Yes</td>
</tr>
<tr>
<td>Educations</td>
<td>Add</td>
<td>Refer</td>
</tr>
<tr>
<td>Goals</td>
<td>Add</td>
<td>Presc</td>
</tr>
<tr>
<td>Immunizations</td>
<td>Add</td>
<td>Record</td>
</tr>
<tr>
<td>Medications</td>
<td>Add</td>
<td>Presc</td>
</tr>
<tr>
<td>Anti-Depressant, Unspecified (2)</td>
<td>N/A</td>
<td>Φ</td>
</tr>
<tr>
<td>Antimanic (Sporadic)</td>
<td>N/A</td>
<td>Φ</td>
</tr>
<tr>
<td>Problems</td>
<td>Add</td>
<td>Yes</td>
</tr>
<tr>
<td>Procedures / Referrals</td>
<td>Add</td>
<td>Record</td>
</tr>
<tr>
<td>Treatment Plans</td>
<td>Add</td>
<td>Presc</td>
</tr>
<tr>
<td>Other Profile Items</td>
<td>Add</td>
<td></td>
</tr>
</tbody>
</table>

### Previous Entered Data

- BH Panel: Status: N/A
- BH Panel: Enrollment Date: N/A
- BH Panel: Signed Consent Form: N/A
- BH Provider: Case Management: N/A
- BH Provider: Mental Health: N/A
- BH Provider: Psychiatry: N/A
- BH Panel: Psychiatry Consult: N/A
- BH Assessment: CAGE: N/A
- BH Assessment: GAD 7: N/A
- BH Assessment: PHQ 9: N/A
- BH Assessment: PTSD: N/A

### Previous Entered Notes

- Mental Health - LCSW or MD
  - 5/1/2012 (5/1/2012)
  - 5/7/2012 (5/7/2012)

## Tracking Types

- BH: High-Risk Diabetes
- Diabetes
- Pedi Tracking (12)
- Perinatal Tracking (12)

## Multiple Registries

- Tracking Types
- BH: High-Risk Diabetes
- Diabetes
- Pedi Tracking (12)
- Perinatal Tracking (12)

## Data Fields

- Enter data for visit date 10/26/2012
- Template: BH: High-Risk Diabetes

## CARE PROMPTS

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Workflow Design Considerations
Expanded Functionalities of Clinical Registries in Mental Health

- Shared Care Planning
- Medication Reconciliation
- Tracking Referrals
- Consultation Support
- Clinical Workflow Support
- Clinical Decision Support
- Clinical Dashboard Features
- Treat to Target
Why don’t we just build our own clinical registry Template?

- APIs
- EMR template limitations
- Multiple Platforms
- Maintenance
- Customization
Population Registry History @ LifeLong

2009: Began using i2iTracks for Diabetes panel management and population performance monitoring

2010: Piloted project for behavioral health integration

2012: Expanded behavioral health panel management to increase access and increase screening for chronic disease patients. Developed registries for hypertension, HIV, cancer screenings, prenatal care, and referrals.

2013-14: Expand registry to conduct assessments, medication tracking, and improving outcomes through monitoring assessment scores. Automated interface with EHR.
Diabetes Process Measures

- HbA1c Testing
- LDL-C Screening
- Blood Pressure Recorded

Graph showing the percentage of the population with diabetes for different measures from 2010 to 2013.
Caring for Your Panel

- Stratify panels by risk for specific interventions

**A1c >9%**
- Schedule Appointment Every 3 Months
- Refer to LSCW and PharmD
- Visit Warm Hand-off to Health Education or RN Case Manager: DM Ed + Insulin Teaching [upon provider referral]

**A1c 7-9%**
- Schedule Appointment Every 3 Months
- Offer Support Services* during phone outreach when scheduling appts, labs
- Visit Warm Hand-off to CCA/Health Coach: Offer Support Services*

**New Diagnosis**
- Visit Warm Hand-off to CCA/Health Coach: Offer Support Services*
- Schedule 1:1 appointment for DM basics and offer New Diabetic Packet
- Follow-up phone call after diagnosis

**All DM patients**
- Schedule Appointment Every 6 Months
- Order DM Labs as Needed (Lipids, HbA1c, CMP)
Improving Population Health

Diabetes Outcomes

- HbA1c Poor Control (>9.0%)
- LDL-C Control

Linear (HbA1c Poor Control (>9.0%))
Linear (LDL-C Control)
Success Story: AIMS Center registry (IMPACT model of care)
AIMS Center registry: A few screenshots

Lessons Learnt:
- The EMR is NOT the patient
- Simple things can help a lot
- Patients appreciate getting info back
- When designing clinical registries, never put something on someone’s desk without taking something else off!
Examples and Ideas from You (or Questions)
Thank You!