Mental Health Integration

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Brenda Reiss-Brennan, PhD, APRN
Intermountain Healthcare  USA
Objectives

• Intermountain Healthcare Culture of Learning

• Impact of Mental Health Integration on Quality and Cost

• Key Lessons – Social Cooperation & Value
A highly integrated health system

Since 1975
- 22 hospitals
- 2,784 licensed beds

Since 1983
- Health plans
- 700,000 members

Since 1994
- 1,200 employed physicians
- 530 advanced practice clinicians

Since 1997
- 10 key service line
- $281MM in charity care (2013)
Evidence-based Care Models
Improving Outcomes and Lowering Costs
Per Capita Health Spending And 15-Year Survival For 45-Year-Old Women


Muennig P A, Glied S A Health Aff 2011;29:2105-2113
Additional Information, Paul Grundy, IBM Corporation, 2012
What Shapes Population Health?

- **Health Care**: 10%
- **Environment**: 19%
- **Human Biology**: 20%
- **Lifestyle**: 51%
  - Smoking
  - Obesity
  - Stress
  - Nutrition
  - Blood pressure
  - Alcohol
  - Drug use

1 death every 20 seconds by 2020  (WHO, 2014)
Need Leaders who are in touch with the quality of life of those they lead

Health and Social Problems are Worse in More Unequal Countries

Index of:
- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility

Impact of transformed team care on cost and quality is inconclusive

Association between participation in a multipayer medical home intervention and changes in quality, utilization and costs of care. Friedberg, MW et al. JAMA 2014

Interventions need refinement and achieving significant outcomes take time
Families come to primary care as ‘whole persons’ seeking respect, kindness and a solution for continued or better health.

“The Doctor’s Team will see you now” WSJ, 2-17-2014
Our efforts are ultimately centered around what matters most to our patients, families, employees, members and communities.

**Core Business**

- Perfecting the Clinical Work Process
- Best clinical care in the world doesn’t matter if no one can afford it.
- Always do the right thing!

**The Intermountain Way**

- Improved quality & service
- Evidence-based practice
- Systematic approach - measure & improve

**Culture of Learning**

Success is always led by clinical team but must include operational, financial, governance and patient engagement.
Mental Health Integration provides a framework, team-based approach and tools for caring for whole persons and families.

What is Mental Health Integration?

A standardized clinical and operational team process that incorporates mental health as a complementary component of wellness & healing.

Integration Steps

1. Leadership and culture – champions establishing a core value of accountable and cooperative relationships
2. Workflow – engaging patients on the team and matching their complexity and need to the right level of support
3. Information systems – EMR, EDW, registries, dashboard to support team communication and outcome tracking
4. Financing and operations – projecting, budgeting and sustaining team FTE to measure the ROI
5. Community resources – who are our community partners to help us engage our population in sustaining wellness
The Learning Healthcare System

Leaders accountable for range of goals

• Measured by
  “balanced scorecard”

• Fosters a collaborative culture
Strategy: Mental Health Integration – perfecting the clinical work process organized cooperation

Integration
- Care Manager
- Health Advocates
- Psychiatrist or Psychiatric NP
- Therapist (Psychologist, LCSW, EAP)
- Peer Mentor
- Clinic Manager

Personalized Primary Care

Our Families & Patients

Clinical Staff (RN, MA, Reception, Billing)

Community Resources
- Specialty Care
- NAMI
- Community Therapists
- Physical Therapists
- Nutritionist
- Pharmacists

Information Technology / EMR / Data / TeleServices
Work Flow - Match Population Social Needs

MHI Treatment Cascade

Case Identification
Shared Decision Making

MHI Packets

**ROUTINE CARE**
- Mild Complexity
- PCP and Care Manager
- Responsive
- Family Support
  - GS=1-3

**COLLABORATIVE MHI TEAM**
- Moderate Complexity
- Complex Co-morbidities
- Family Isolated or Chaotic
  - GS=4-5

**MENTAL HEALTH TEAM**
- High Complexity
- Psychiatric Co-morbidities
- Family Support Variable
- High Social Burden
- Danger Risk
  - GS=6-7

*Mental Health Integration (MHI) Packets & Treatment Cascade*
Everyone sees measurement, all accountable
I was left to figure it out on my own, we never talked about it, he just refilled my meds (p < .01) Non-MHI Clinic
Multiple Connected Team Touches
(p < .001)

'we are on the same page'
Main Reasons for Conducting the Study:

- Inform future medical home and MHI development and/or rollout
- Better understand population-based, person-centered, team-based care
- Provide an estimate of the ROI of the past and current activities
- Garner additional support from payers for value created
“A scientific step towards planning for the future needs of our populations”

**Key Research Aim**

“Do clinics with high performing team-based care provide greater value compared to other clinics operating under a more traditional patient management approach—as measured by quality/clinical outcomes, cost, utilization, patient and family service and staff outcomes?”
Team-Based Care (TBC) is the combination of Personalized Primary Care (PPC) and Mental Health Integration (MHI).

TBC = PPC + MHI
High Performing Team Based Care (TBC) = Mental Health Integration (MHI) + Personalized Primary Care (PPC)

Count of practices by Team Based Care (TBC) levels

<table>
<thead>
<tr>
<th>Year</th>
<th>Planning (TBC Level 1)</th>
<th>Adoption (TBC Level 2)</th>
<th>Routine (TBC Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>14</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>2011</td>
<td>22</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2013</td>
<td>3</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>2014</td>
<td>17</td>
<td>26</td>
<td>4</td>
</tr>
</tbody>
</table>

Legend:
- Red: Routinized
- Green: Adoption
- Brown: Planning
- Light Blue: Only MHI
- Light Blue: No MHI

Intermountain Healthcare
Team-Based Care: More Than Just a Program

“My doctor was the first person to treat me as a whole person…”
### Team-Based Care (TBC) Intervention

#### Characteristics of Routinized TBC
- Physician/patient engagement
- Care coordination and established routine protocols
- Team communication through EMR and reporting tools
- Outreach to community

#### MHI exposure based on Rodger’s diffusion of innovation levels and MHI scorecard:
- Level 0: No MHI
- Level 1: Planning (score 1 – 20)
- Level 2: Adoption (score 21 – 40)
- Level 3: Routinized (score 41 – 63)

#### PPC exposure based on modified NCQA self assessment tool:
- Level 0: No PPC
- Level 1: Planning (score 35 – 64)
- Level 2: Adoption (score 65 – 84)
- Level 3: Routinized (score >= 85)

**Note:** Each practice was given an MHI and PPC exposure level by year (2003 to 2013)
All Intermountain Primary Care Patients (560k)

DELCIVERY SYSTEM COHORT

Longitudinal closed cohort
- At least one visit to IMG PCP within 2003 – 2005.
- Adult patients (≥ 18 years of age).

Stable, consistent relationship with Intermountain
- Patients accessed care within Intermountain facilities/clinics for ≥10 years; allowing 1 gap year.

Size ≈ 130,000 patients
Delivery System Study: % Change in Quality (All Payers)

Routinized TBC vs. No TBC

<table>
<thead>
<tr>
<th></th>
<th>Annual visit with PCP</th>
<th>PHQ9 Screen</th>
<th>Adherence to DM Bundle</th>
<th>HTN In Control</th>
<th>Advanced Directives</th>
<th>Self Care Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TBC Rate / 1000 pt yrs</td>
<td>527.2</td>
<td>119.5</td>
<td>121.2</td>
<td>569.4</td>
<td>100.8</td>
<td>30.4</td>
</tr>
<tr>
<td>TBC Rate / 1000 pt yrs</td>
<td>573.3</td>
<td>227.7</td>
<td>152.6</td>
<td>496.7</td>
<td>-</td>
<td>170.2</td>
</tr>
<tr>
<td>TBC Difference / 1000 pt yrs</td>
<td>+46.1</td>
<td>+108.2</td>
<td>+31.4</td>
<td>-72.7</td>
<td>-</td>
<td>+139.8</td>
</tr>
</tbody>
</table>

*Self-Care Plans were also evaluated (outcome = 559%, p<0.0001); but was not included in graphic due to scale differences*
## Delivery System Study: % Change in Utilization (All Payers)

<table>
<thead>
<tr>
<th></th>
<th>No TBC Rate / 1000 pt yrs</th>
<th>TBC Rate / 1000 pt yrs</th>
<th>TBC Difference / 1000 pt yrs</th>
<th>Est. PMPY Pmt Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Visits</td>
<td>238.1</td>
<td>183.9</td>
<td>-54.3</td>
<td>-$35.5</td>
</tr>
<tr>
<td>Hospital Admissions</td>
<td>110.8</td>
<td>99.0</td>
<td>-11.7</td>
<td>-$111.1</td>
</tr>
<tr>
<td>Ambulatory Sensitive Admissions</td>
<td>44.8</td>
<td>34.4</td>
<td>-10.3</td>
<td>-$7.5</td>
</tr>
<tr>
<td>PCP Visits</td>
<td>1466.1</td>
<td>1363.5</td>
<td>-102.6</td>
<td>-$10.6</td>
</tr>
<tr>
<td>InstaCare Visits</td>
<td>350.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specialty Care Visits</td>
<td>1620.2</td>
<td>1596.0</td>
<td>-24.1</td>
<td>-$1.9</td>
</tr>
</tbody>
</table>

-22.78% \( p<0.0001 \)  
-10.58% \( p<0.0001 \)  
-23.03% \( p<0.0001 \)  
-0.47% \( p=0.728 \)  
-1.49% \( p=0.015 \)  

Est. PMPY Pmt Savings

- $35.5
- $111.1
- $7.5
- $10.6
- $1.9
PMPY Impact (Delivery System Payments) by # of Chronic Conditions

Routinized TBC vs. No TBC

<table>
<thead>
<tr>
<th>All Patients</th>
<th>None</th>
<th>1 condition</th>
<th>2 conditions</th>
<th>3 conditions</th>
<th>4 conditions</th>
<th>≥5 conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$-115$</td>
<td>$-72$</td>
<td>$-191$</td>
<td>$-285$</td>
<td>$-981$</td>
<td>$-745$</td>
<td>$-1349$</td>
</tr>
<tr>
<td>$p=0.008$</td>
<td>$p=0.184$</td>
<td>$p=0.010$</td>
<td>$p=0.025$</td>
<td>$p&lt;0.0001$</td>
<td>$p=0.029$</td>
<td>$p=0.060$</td>
</tr>
</tbody>
</table>

**Total Savings From Analyzed Sample:**
- Aggregate PMPY Payment Savings for the Routinized TBC Group is ≈ $20 Million
- Routinized TBC Group is roughly between 7-8% of Total Medical Group Patients
Key Conclusions for Leadership

For Persons or Members in Routinized TBC...

1. Quality significantly improved in the areas of clinical focus (depression and diabetes)

2. Utilization patterns significantly shifted away from ED and IP settings and into ambulatory settings

3. More significant cost reductions for patients with multiple chronic conditions and for patients with longer-term, continuous, and coordinated relationships with the delivery system

4. Considering all of the information, the *value* of the program (benefits/costs) appears to be impressively high as a long-term investment

5. This evaluation will inform opportunities to refine and improve our implementation going forward
A fundamental shift in focus

The future:

1) Payment based on health outcomes and value, not fee-for-service and volume
2) Incentives aligned for physicians, providers and patients
3) Patients engaged in decision-making, healthy behaviors, and managing chronic illnesses in optimal ways
4) Helping people live the healthiest lives
5) Providing continuous connected relationships