Achieving Population Well-Being through Mental Health Integration & Team Based Care
Impact on Quality, Healthcare Use, Cost & Patient Experience

NASEM Forum on Mental Health and Substance Use Disorders
October 16, 2019

Brenda Reiss-Brennan, PhD, APRN
Mental Health Integration Director
Chief Clinical Science Officer
Disclosures

I have no financial or non financial conflicts of interest to disclose
We are on a Measured Journey –
“Helping people live the healthiest lives possible®”
Using Data to Improve Care Delivery and Patient Outcomes
Built on Intermountain’s Rich History of Innovation, Improvement, and Excellence

- Health plans
- Vertical integration strategy
- Continuous Quality Improvement

- Supply Chain Organization
- Revenue Cycle Organization
- Patient Flow
- Efficiency improvements
- New care process models

1975
- System-wide standards (quality, management)
- First clinical & financial information systems

1980s
- Medical Group
- Clinical Programs
- Clinical Board goals

1990s
- Population Health
- iCentra
- New Mission Statement
- National brand
- Zero Harm
- New business development
- Reorganization
- Partnering for Success

2010s
- to Present

Intermountain Foundation
American Healthcare: Amazing Successes and Tragic Failures

Rescue Care

VS

Prevention and Effective Management of Chronic Conditions
# Normalizing Mental Health is a Growing Global Priority

## Global Health Priority

- **43M** Americans suffer a form of mental illness
- **300M** People worldwide live with depression
- **68%** of adults with mental disorders have other medical conditions

## Significant cost

- **$200 billion** annually, exceeding all medical conditions

## Rising death toll

- **20M** Americans suffer from substance mental illness of substance abuse
- **~64,000** drug overdose deaths annually in 2016
- **1 suicide death every 40 seconds** (2014)

## The costliest medical conditions ($B, 2013)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cost ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental disorders</td>
<td>201</td>
</tr>
<tr>
<td>Heart conditions</td>
<td>147</td>
</tr>
<tr>
<td>Trauma</td>
<td>143</td>
</tr>
<tr>
<td>Cancer</td>
<td>122</td>
</tr>
<tr>
<td>Pulmonary conditions</td>
<td>95</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>91</td>
</tr>
<tr>
<td>Normal birth</td>
<td>67</td>
</tr>
<tr>
<td>Diabetes</td>
<td>62</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>54</td>
</tr>
<tr>
<td>Hypertension</td>
<td>52</td>
</tr>
</tbody>
</table>
“Mental health is a state of successful performance of mental and physical functioning, resulting in productive activities, fulfilling relationships with others, and the ability to adapt to change and cope with adversity”

David Satcher, M.D.
Surgeon General of the United States

Team based, mental health integration is focused on prevention and access via normalizing mental and behavioral health as routine medical care through unified connected team interactions
Our journey is focused on enhancing the conditions for good health.

“The circumstances in which people live and work are related to their risk of illness and length of life” – Marmot (2004) The Status Syndrome
## Management of Complex Chronic Disease in Primary Care

### Team Based Care / Mental Health Integration Infrastructure

<table>
<thead>
<tr>
<th>Diabetes, Asthma, Heart Disease, Depression, Hypertension, ADHD, Obesity, Chronic Pain, including Substance Use Disorders, etc.</th>
<th>2/3 – cared for routinely in primary care</th>
<th>1/6</th>
<th>1/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient &amp; Family, PCP, and Care Manager (CM) as needed</td>
<td>PCP, CM + mental health as needed</td>
<td>PCP with MHI Specialist Consult</td>
<td></td>
</tr>
</tbody>
</table>

*Primary Care Physician (PCP) includes: General Internist, Family Practitioner, Pediatrician*
“If I don’t do it, who else will? I am all they have. I have been forced to treat depression alone.”

PCP Non-MHI/TBC Clinic

“Don’t ask…”

“The cringe list keeps my stomach in knots.”
“I was left to figure it out on my own, we never talked about it, he just refilled my meds” (p < .01) Non-MHI/TBC Clinic
Team-Based Care / Mental Health Integration: More Than Just a Program

Culture of Accountable Relational Reciprocity

- “My doctor was the first person to treat me as a whole person.” (p < .001)
- “I am connected to a team that talks to each other” (p < .05)
- “Being on the same page I get better results” (p < .01)
Difference between patient and care team perception of coordinated care by MHI phase

What is Mental Health Integration (MHI)?

Mental Health Integration (CPM) provides evidence based team approach and tools for caring for patients/persons and families.

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

Essential Integrated Elements

1. **Leadership and culture** – champions establishing a core value of accountable and cooperative relationships

2. **Clinical Workflow** – engaging patients and families 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
### Actionable Data Helps Support Decision-Making & Care Improvement

**Clinical Process**

- MHI Treatment Cascade
  - Case Identification
  - Shared Decision Making
- Standardized Assessment Tools
  - PHQ-2, PHQ-9, & MHI Packet

**Data Input**

- Use of EMR
- Registry (EDW) – 1999 to present
- Depression Registry

**Team Feedback: MHI Dashboard**

- Clinical Process Data Input
  - Actionable Data Creation

**Depression Registry**

- Depression registry $n = 604,160$
  - Accurately captures “active” depression patients
  - Includes various process & outcomes measures
  - Aligned with iCentra EHR
Intermountain’s Integrated Team Based Care Cultural Journey

Getting to routinized team-based care (Study period 2003 – 2013)

- **2000**: Started Mental Health Integration (MHI)
  - Physical and mental health interdisciplinary teams in patient care.

- **2003 – 2009 BASELINE MHI**

- **2003**: Patient Cohort Identified
  - (aged < 18 years) (aged ≥18 years)
  - Patients had to have at least 1 outpatient visit with a primary care physician (family medicine, internal medicine, geriatric, or pediatric specialty)

- **2005**: MHI tools are deployed system-wide throughout Intermountain’s 22 hospitals, 185 clinics and 59 urgent care/emergency departments using a common electronic health record and screening tools. Healthcare providers communicate with each other via notes in the patient record and track results as a united team. Total patients annually 967,445.

- **2010**: PPC Started
  - Personalized Primary Care (PPC)

- **2013**: r-TBC Study Period
  - Continuous Encounters
  - Differences associated with their exposure to TBC compared with TPM

- **2018**: MHI Program primary care practices 18 years
Published JAMA study showed that integrating mental and physical health through primary care teams results in better clinical outcomes and lower costs.

**10-YEAR STUDY 2003-2013**

<table>
<thead>
<tr>
<th>113,452</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>113</td>
<td>Primary care providers</td>
</tr>
<tr>
<td>27</td>
<td>Team-based care (TBC) medical practices</td>
</tr>
<tr>
<td>75</td>
<td>Traditional practice management (TPM) medical practices</td>
</tr>
</tbody>
</table>

- **Screened for Depression**: 46.1% (TBC) vs. 24.1% (TPM) - Reduced 23%
- **Documented Self Care Plan**: 48.4% (TBC) vs. 8.7% (TPM) - Reduced 40%
- **Adhered to Diabetes Protocol**: 24.6% (TBC) vs. 19.5% (TPM) - Reduced 7%
- **Emergency Room Visits**: Reduced 23%
- **Hospital Admissions**: Reduced 10.6%
- **Primary Care Encounters**: Reduced 7%
- **Payments to Providers**: Reduced 3.3%

($3,401 for TBC vs. $3,516 for TPM)

**Savings of $115.00 Per patient per year (PPYR)**

**Savings of over $13 Million per year**

*• Brenda Reiss-Brennan, PhD, APRN, et al. 2016*
After JAMA was published and more TBC/MHI resources were applied, rapid adoption and routinization followed.

Alluceo believes layering intuitive technology on top of TBC/MHI can even further accelerate a clinic’s timeline between adoption and routinization.
10 years of Intermountain TBC/MHI experience shows $115 PMPY savings\(^1\)

- **$115** PMPY savings at $22 program cost
- **$260** PMPY savings for commercial payer patients
- **$1,400** PMPY savings for patients with other chronic conditions\(^2\)
- **$5M** Saved during implementation, which covered 7-8% of patients

Representing a meaningful opportunity for other health systems and payers

- **$2B+ in savings** if scaled across a national payer such as United Health\(^4\)
- **$800M+ in savings** if adopted broadly at 10 large hospital systems\(^5\)
- **$200M in savings** if 10 largest US employers adopted the system\(^6\)

---

1. Association of Integrated Team-Based Care With Health Care Quality, Utilization, and Cost https://jamanetwork.com/journals/jama/fullarticle/2545685?resultClick=1
2. Chronic Patients: patients with multiple comorbidity
3. Over a 4 year study period: jamanetwork.com/journals/jama/fullarticle/2545685?resultClick=1
4. Assuming 50% penetration of plan members (excluding Medicare Supp, Medicaid etc.)
5. Assuming 50% penetration at the hospital of similar size as IM
6. Assuming 50% penetration
What Is the Real Cost?

Pie chart:
- Diabetes in control: 38.7%
- Diabetes out of control: 61.3%
Identifying Drivers & Opportunities

NOTE: 680 primary care patients that asks about patient experiences with their “doctor and others at the clinic” over the prior 12 months

* Combined self-perceived change in patient’s health, health engagement/self-care, & confidence in health care compared to 12 months prior
Time to provide prevention and effective management through holistic care teams -in everyday life-
At Alluceo, we are leading the way to wellness by integrating physical and mental health into routine everyday life.
Building on 20 years of integrated team-based care science and operational excellence at Intermountain Healthcare – Engagement Lessons

- Lead with Passion
- Embrace Complexity
- Meaningful Innovation
- Strategic Value Overtime
- Partnering for Success

Leadership and culture

Community resources

Patients and families

Workflow integration

Financing and operations

Information system
Alluceo is creating something unique

10 years of Intermountain data on clinical and cost outcomes

Practice management to assess and optimize resources

Holistic and integrated suite of care tools

Only solution with documented peer reviewed outcomes

Unique algorithm assembles a personalized care team for each patient and their family

Best in class integrated digital solution
Normalizing Mental Health is Everyone’s Business

Brenda.Reiss-Brennan@Alluceo.com