# Mental Health Integration (MHI)

## From Process to Practice

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# HEALTHCARE EVOLUTION AND MHI TIMELINE

1600's — 2000 — 2010 — 2013 — 2019

**Descartes and Mind-Body Dualism**

# US Surgeon General Report on Mental Health, 1999

- **1 in 5** children has a diagnosable mental health disorder that interferes with daily function and requires intervention of monitoring.
- **Only 20%** of those children are receiving adequate management of their illness.
- Underutilization of Mental Health Professionals due to
  - Stigma
  - Reluctance to seek help
  - Cost

# AAP Task Force on Vision of Pediatrics 2020

- Formation of Task Force on Mental Health (TFOMH)
- Gaps in Mental Health is serious and is a top concern.
- **Mental Health Competencies:** **(**Knowledge and skills to care for)
  - ADHD
  - Anxiety
  - Depression
  - Substance abuse
  - Recognizing psychiatric and social emergencies
- Resident training is inadequate. Will require innovations in residency training and CME.
- Collaborative relationships with MH specialists must precede.

M. Burton, Pediatrics November 2010, 126 (5) 1006-1007

# AACAP Guide to Building Collaborative Mental Health Partnerships in Pediatric Primary Care:

- **Core Components:**
  - Timely access to psychiatric consultations
  - Direct psychiatric services to children and families
  - Care coordination
  - Education for PCPs

AACAP, 2010

# HEALTHCARE EVOLUTION AND MHI TIMELINE

## Historical Context

**MHI GROWTH & SCALE**

**TBC**

**MHI**
**+**
**Personalized Primary Care (PPC)**

**MHI Program** in Primary Care for 19 years

**1600's** — **Mind-Body** Dualism

**2000** — **Mental Health Integration (MHI) Introduced**

**2010** — **'Medical Home' Model Introduced**

**2013**

**2019** — **MHI instituted in 120+ Intermountain clinics**

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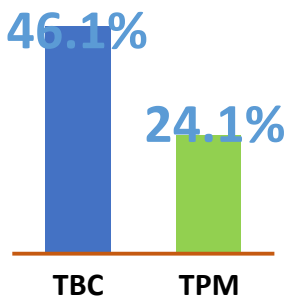
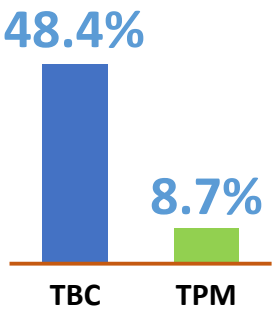
# MHI Has Demonstrated Value-Based Results

JAMA shows that integrating mental and physical health through primary care teams results in better clinical outcomes and lower costs.

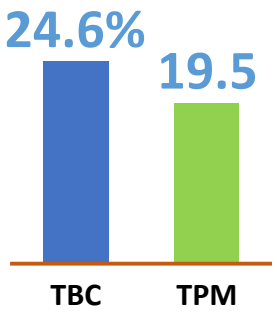
| 10-YEAR STUDY 2003-2013 | |
|---|---|
| **113,452** | Participants |
| **113** | Primary care providers |
| **27** | Team-based care (TBC) medical practices |
| **75** | Traditional practice management (TPM) medical practices |




SCREENED FOR DEPRESSION




DOCUMENTED SELF CARE PLAN




ADHERED TO DIABETES PROTOCOL

## 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 JAMA

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# Understanding the MHI Model – What Is It?

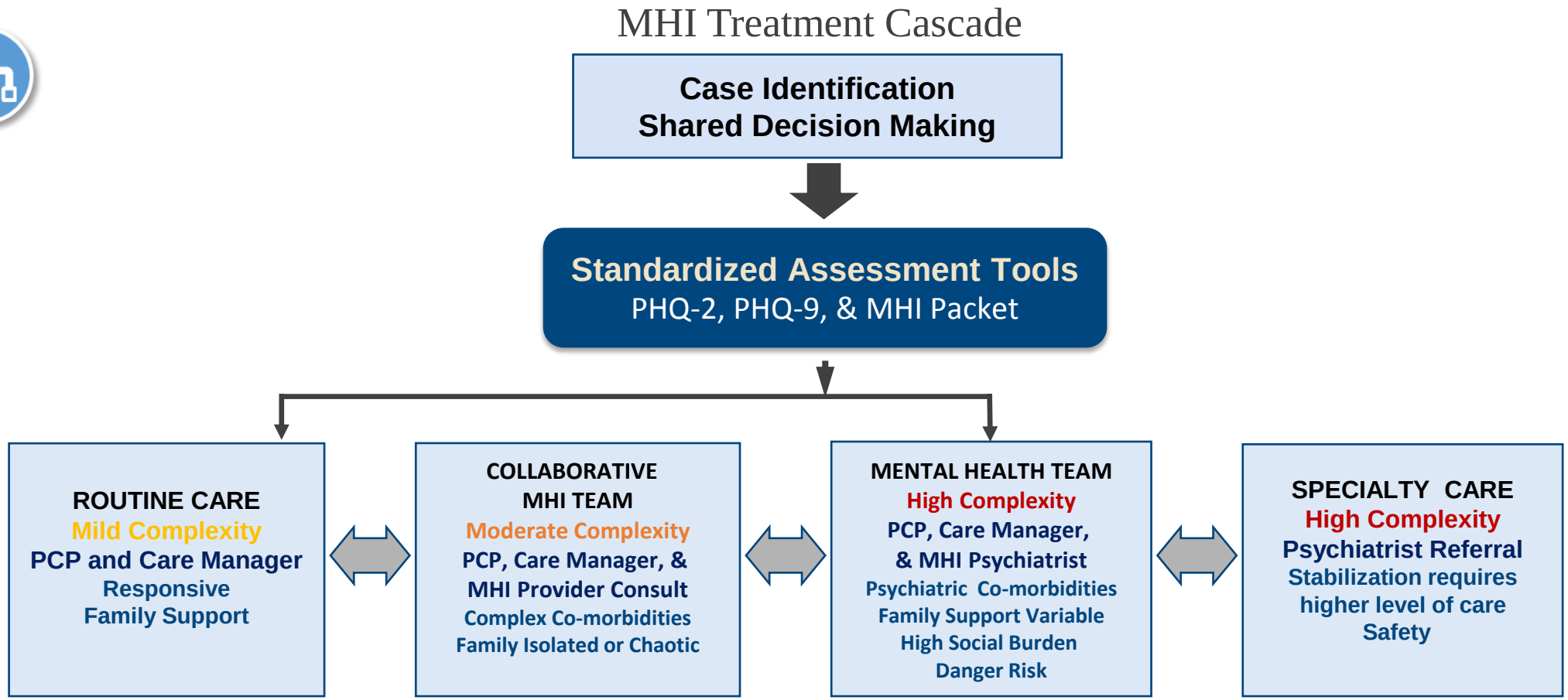
- Patient access to effective care team members accountable for team-based care
- Organized around the PCP; Monitored by operations managers
- PCPs trained in holistic patient care with measureable outcomes
- Followed Care Process Model protocols for mental/behavioral health conditions
- MHI Providers utilized when appropriate and necessary


- For every 4-6 PCPs:  4 hrs/wk prescriber and 8 hrs/wk therapist coverage

# Understanding the MHI Model and Resource Allocation

# MHI Incorporates Integrated Care Process to Provide Patient Support

## Screening Tools Help Determine Patient Severity & Complexity and Appropriate Team Care Support

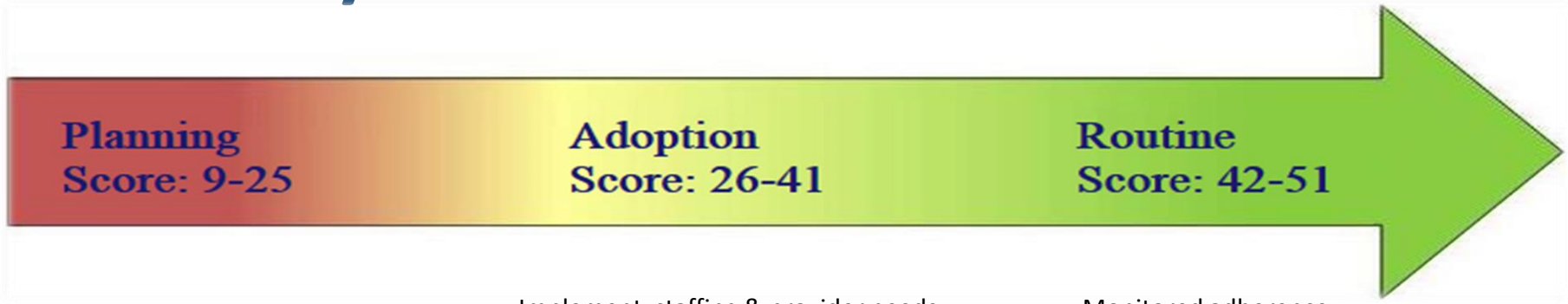


# Most Patients Cared For By Their PCP through MHI Process

| Mental Health Integration Infrastructure | | |
|---|---|---|
| Diabetes, Asthma, Heart Disease, Depression, Hypertension, ADHD, Obesity, Chronic Pain, SUD, etc. | | |
| 2/3 – cared for routinely in primary care | 1/6 | 1/6 |
| **Patient & Family, PCP, and Care Manager (CM) as needed** | **PCP, CM + mental health as needed** | **PCP with MHI Specialist Consult** |

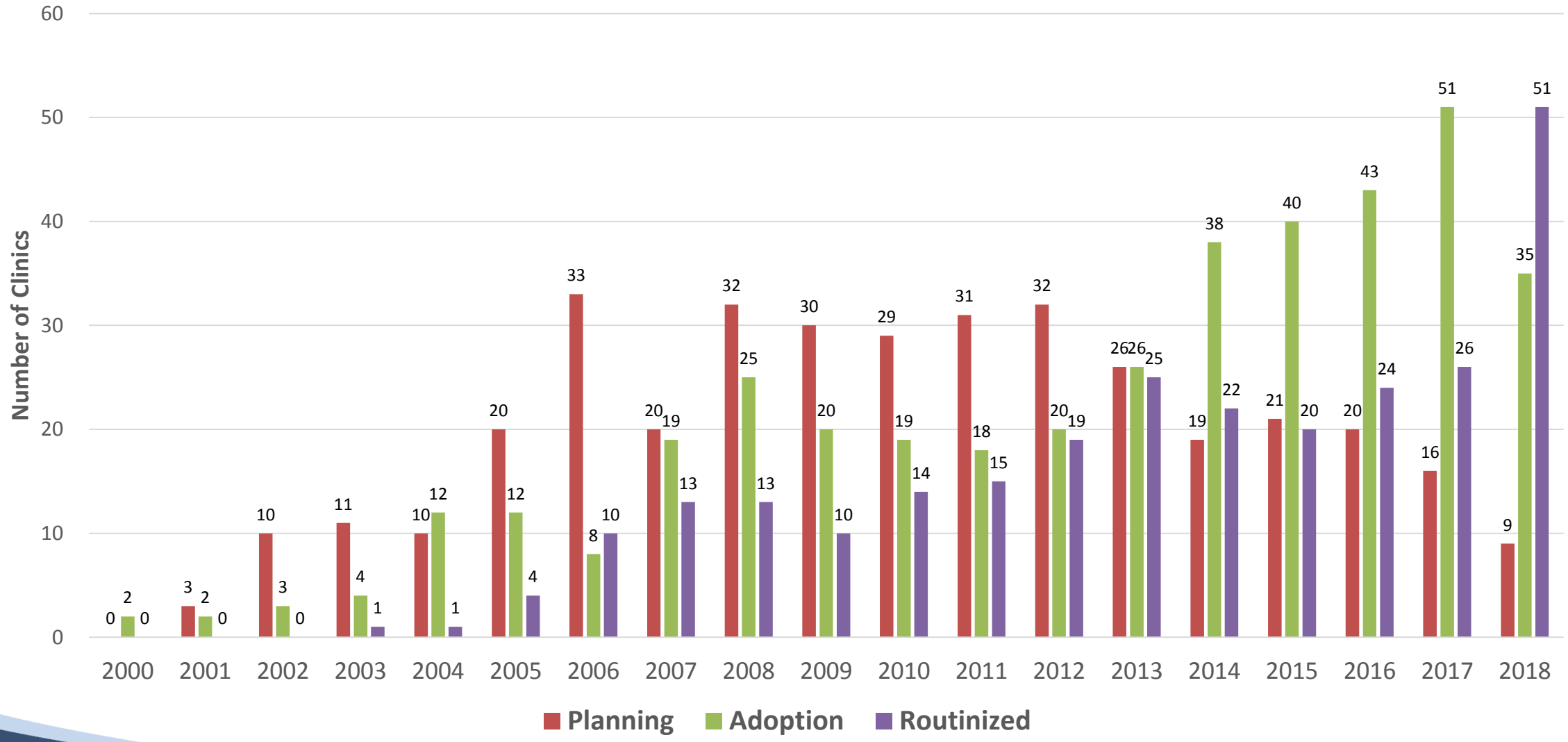
PCP includes: General Internist, Family Practitioner, Pediatrician

# A Cultural Pathway towards Team Routinization




| | Planning Score: 9-25 | Adoption Score: 26-41 | Routine Score: 42-51 |
|---|---|---|---|
| **Leadership & Culture** | Committed Leadership<br>Identify Population Complexity | Implement staffing & provider needs<br>Assign all roles relative to MHI CPM<br>Routine Meetings | Monitored adherence<br>Continuous training & support provided<br>Champions leading |
| **Workflow Integration** | Design patient workflow<br>Identify Patient & Family Complexity | Implement strategies to address barrier<br>Develop care management strategy | Identified workflow gaps; Improved process<br>Engaged providers w/ treatment cascade<br>Difficult case conferences |
| **Information Systems** | Complete team scorecard<br>Design MHI Dashboard | Providers assign complexity & stratification<br>Dashboard identifies gaps & chronic disease action plans | Tracked patient complexity data<br>Dashboard used to target outcomes results |
| **Financing & Operations** | Review & Track clinical & operational reports quarterly ; Team FTE | Gaps identified & action plans developed<br>Refine meaningful tools – TBC ROI | Reports used to improve performance<br>Data used to target utilization & cost gaps |
| **Community Resources** | Inventory of potential partners<br>Identify support groups & classes | Process developed to provide resources<br>Team link patients to groups, classes, peer support | Documented community referrals<br>Engage new partners; patient mentors |

# STEADY PROGRESS: MHI ADOPTION 2000-2018

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# MHI Scorecard Measures Provider & Clinic Performance

## Provides objective, real-time assessment of system performance of MHI

**Safety:**

***Screenings/Assessments*** (PHQ, Columbia, Risk Assessment, and Safety Plan)

***MHI Packet Utilization*** *(*e.g. % administered/completed, Complexity documentation, etc.)

**Quality:**

***Follow-Up PHQ*** at CPM Intervals: 6 Week, 3/6 mos., 11-13 mos.

***Depression Remission Rate*** (stratified by Partial/Full Remission, No Change, etc.)

**Experience:**

50% to ***CG-CAHPS*** scores

50% to ***Employee (Caregiver) Survey***

**Access:**

***Staffing:*** (e.g. Full staffing, minimum ratio compliance)

***Utilization/Productivity Metrics*** (e.g. Visit Volumes, Scheduled Time—70/30, Visit Range, No-Show, 3rd Next)

**Stewardship:**

***ED/IP Admission Rates***

***Cost*** *(e.g. PMPM, Neutrality: Billing/Collections vs. TBC Labor Expense, NOI, etc.)*

# A PROCESS-INFORMED APPROACH TO MHI IMPROVEMENT

## Returning To Green—Crosswalk:

| | Planning | Adoption | Routinization |
|---|---|---|---|
| **Safety** | **Develop screening processes** for PHQ, MHI Packet, C-SSRS, Risk Assessment, & Safety Plan | **Screening processes** are **trained**<br>Care team members know their roles<br>MHI Packet is utilized, coded, & referenced | **Monitored adherence** to screening processes<br>Tracked metrics associated to screenings<br>Continuous training & support provided |
| **Quality** | Design integrated **patient workflow**<br>Develop **care management** & **follow-up** processes<br>PHQ is administered at follow-up | **Strategy** put into place for **high risk patients**<br>**Remission rate** is captured during follow-up encounters<br>Physical health conditions tracked | Administered care plans, follow-up & given self management resources<br>**Follow-up rates reviewed**<br>**Remission rates reviewed** |
| **Patient Experience** | Clinic team made aware of **CG-CAHPS**<br>Clinic team takes **employee survey** once a year | CG-CAHPS **metrics are reviewed**<br>Employee survey results are retrieved | Gaps & shortcomings in performance assessed<br>**Plans to improve developed** |
| **Access** | Clinic aware/informed on **staffing needs**<br>Informed on **access metrics** (no show, 3rd next, slot utilization)<br>Supplied w/ **patient visit information** | Population complexity & staffing financials reviewed<br>Access & operations **metrics reviewed**<br>Patient visits info reviewed | **Staffing changes considered** and planned<br>**Gaps & shortcomings** to metrics identified<br>**Plans to improve** developed |
| **Stewardship** | **Billings/collections** & **labor expense** shared<br>**NOI**, MHI charges, & collections info provided | All data is reviewed at least once per year<br>How to **improve financial outcomes** towards cost neutrality is considered | Plans are developed and pursued to **better position the clinic financially** |

# MHI Investment Generates Projected ED Savings of $5.9M for Intermountain System

## MHI Financial Performance for December YTD 2018

| | Amount |
|---|---|
| **MHI Revenue** | $2,389,074 |
| —MHI Charges | $3,992,987 |
| —MHI Deductions | ($1,570,598) |
| **MHI Expense (Only MHI Provider Expense)** | ($1,812,255) |
| **MHI NOI** | $576,819 |
| Based upon JAMA Results Methodology<br>**Projected ED Savings** | $5,919,360 |
| **NOI net Projected ED Savings** | $3,288,706 |

| | |
|---|---|
| **Billed PCP Visits w/ Pysch.** | **134,565** |
| **Billed MHI Provider Visits** | **29,320** |
| **Total Billed Clinic Visits** | **1,509,129** |
| No Shows (9%) | 135,547 |
| No Show MHI Visits | 6,004 |
| # of Patients (MH Primary Dx) | 80,580 |

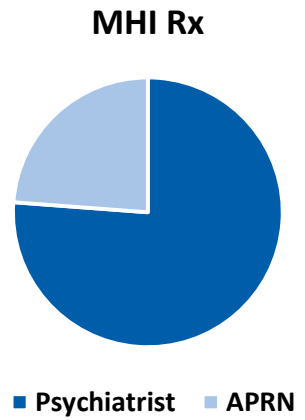
**30% in Action:**

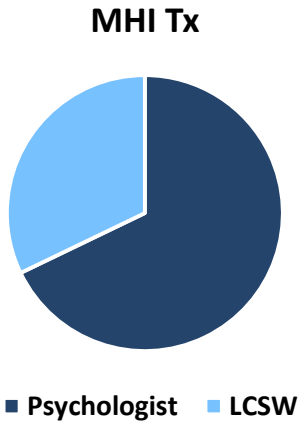
The Care Team is able to better manage MH visits in the absence of the MHI Provider

# MHI Provides Multidisciplinary Staffing to Support Clinic Teams

## MHI Staffing (Current Status)

| Geography | Primary Care Providers | Total Primary Care Clinics | Total Unique Patients | Total Rx FTEs | Total Tx FTEs | Total MHI Providers Involved | # of Fully Staffed Clinics* |
|---|---|---|---|---|---|---|---|
| Cache | 35 | 7 | 46,979 | 0.2 | 3.3 | 8 | 2/7 |
| Salt Lake (CSL) | 40 | 12 | 49,528 | 4.4 | 7.1 | 21 | 26/34 |
| Salt Lake (NSL) | 100 | 12 | 100,047 | | | | |
| Salt Lake (SSL) | 60 | 10 | 85,903 | | | | |
| Rural | 31 | 9 | 22,094 | 0.1 | 1.8 | 4 | 1/9 |
| Southwest | 41 | 10 | 61,330 | 0.9 | 3.2 | 13 | 5/10 |
| Utah Valley | 47 | 12 | 42,635 | 0.3 | 3.8 | 11 | 5/12 |
| MKD/Weber | 68 | 10 | 70,226 | 1.4 | 3.2 | 12 | 9/10 |
| **Total** | **422** | **82** | **478,742** | **7.3** | **22.4** | **69** | **48/82** |



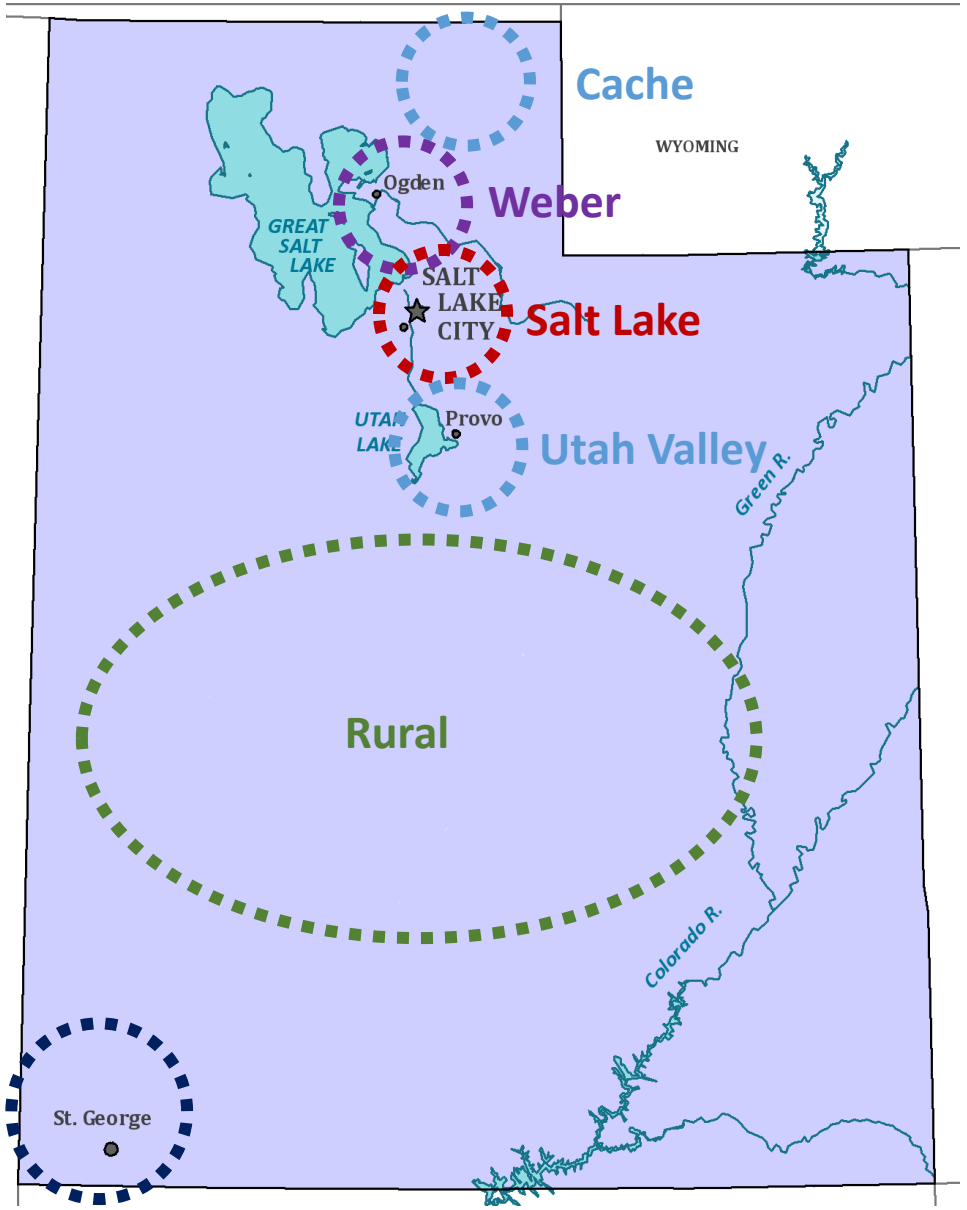




*** Fully-Staffed Clinics = both Rx and Tx FTE available for PCPs at clinic.**

# Adjusting MHI to Meet Geographic Needs

**CURRENT MODEL DELIVERY:**

- Hub & Spoke
- Hub & Spoke + Collaborative Care
- Fully-staffed MHI Team-based Care
- Hub & Spoke
- Virtual Psychiatric MHI Support
- Hub & Spoke w/ Triage Placement




**MODEL INNOVATION:**

- Dr. Jeff Clark and AIMS Model
  - BH Care Manager
  - Patient registry
  - 30-minute therapy
  - Psychiatrist as consultant
- Shuffle MHI FTE Providers to optimize need of clinics (Example: Mickelson and Bivens from SL Clinic to Bountiful)
- MHI Scorecard Huddle
  - Memorial Clinic (Dr. Mickelson & Dr. Lash)
- Dr. Jessica Jones as Consultant
  - Hub & Spoke w/ EMR Consult
  - Rural telehealth visits
- Rural = MHI + Outpatient Clinic Support
  - Dr. Burrow providing telehealth
  - Higher complexity then MHI

# MHI 2.0: Current Improvement Initiatives

**Safety:**

- **Crisis protocol (phone, in-person, primary, specialty) flashcards**
- CALM training

**Quality:**

- **Scorecard development (KPI, depression remission, CSSRS, etc.)**
- "Big 5" CPM flashcard (depression, suicide prevention, anxiety, SUD, ADHD) development & training

**Experience:**

- **MHI Provider leading huddles**
- PCP Lead roles & responsibilities defined & trained
- Care management alignment

**Access:**

- **Registry** - *Alluceo
- **Tiered triage –** PCP vs Specialty clinic, MD vs APP, PhD vs LCSW
- **Fidelity to short-term model** - # of visits/patient & 3rd next available

**Stewardship:**

- **Optimize MHI Provider 30% time -** quarterly 5-10 min clinical pearl handout during PPC meetings
- **Therapist as tiered-triage registry manager -** use of collaborative codes for non-commercial insurers
- **Explore MD/APP mix to value equation –** From MD to APP in routinized clinics

# MHI Major Depression Disorder & General Anxiety Disorder Treatment Overview

If PHQ2 is positive, administer PHQ9. If PHQ9 is positive, provide patient with MHI Packet.

**Standardized Assessment**
PHQ-2, PHQ-9, & MHI Packet

In case of a mental health emergency (positive question #9 on PHQ9)? Follow suicide prevention protocol: Assess risk, administer CSSR-S, & safety plan.

**Diagnosis of Major Depressive Disorder requires 5 or more symptoms according to DSM Criteria. Use PHQ Symptom Score.**
**Severity of Major Depressive Episode determines treatment recommendations, measures interventions and treatment to remission. Use PHQ Severity Score.**

**Stratify Patient**

**ROUTINE CARE**
Mild Complexity
PCP and Care Manager
PHQ Severity Score <14
Psychotherapy

**COLLABORATIVE MHI TEAM**
Moderate Complexity
PCP, Care Manager, & MHI Specialist Consult
PHQ Severity Score 15-19
Psychotherapy AND/OR Antidepressant

**MENTAL HEALTH TEAM**
High Complexity
PCP, Care Manager, & MHI Psychiatrist
PHQ Severity Score >20
Antidepressant AND Psychotherapy

**SPECIALTY CARE**
High Complexity
Psychiatrist Referral
Stabilization requires higher level of care

## Medication Recommendation for Antidepressant Therapy

1st line: SSRI: fluoxetine, escitalopram, sertraline, citalopram
2nd line: SNRI/Other: venlafaxine, duloxetine, bupropion, mirtazapine
FDA approved for children & adult  FDA approved for only adult

| Medication | Starting Dose | Titration Schedule | Average Most Effective Dose | Max Dose |
|---|---|---|---|---|
| fluoxetine | 5-10mg | 5-10mg q1-2weeks | 30-40mg | 80mg |
| escitalopram | 5-10mg | 5-10mg q1-2weeks | 10-20mg | 20mg |
| sertraline | 25-50mg | 25-50mg q1-2weeks | 100-150mg | 200mg |

## Psychotherapy

FOLLOW-UP in 4-6 WEEKS. Repeat PHQ9
In result of Good or Partial Response to PHQ, continue therapy and follow-up until 12 weeks.
Continue therapy until remission is achieved

***PHQ Response***

**Good Response** → Continue regimen until remission is achieved

**Partial Response** → Continue same regimen until next check up

**No Response** → Consider adding or changing to antidepressant

## Antidepressant Therapy

2-WEEK FOLLOW-UP phone call by CM. Reinforce patient/family education; check for side effects.
4-WEEK FOLLOW-UP visit. Repeat PHQ-9. If Partial or No Response, FOLLOW-UP in 4 WEEKS (at 8 WEEKS).
12-WEEK FOLLOW-UP visit. Repeat PHQ-9.

***PHQ Response***

**Good Response** → Continue regimen until remission is achieved → Continue for 9-12 months. Begin titration off medication until gradually done

**Partial Response** → Continue current therapy & dose. Follow up in 4 weeks → If partial response at 12 weeks, increase dose by 50% or consider augmentation

**No Response to Trial @ 4 weeks** → Assess for compliance, bi-polar, substance use, or other factors. Increase dose by at least 50% for 4 more weeks.

**No Response to Trial @ 8 weeks** → Reassess. Switch to another 1st-line drug

# Sascha

- 16 year old female
- Complex social situation
- Outlying primary care doctor
- Well Child visit, no depression screening, 2 months prior
- Presentation: Acute mental health crisis
- MHI process: Depression screening/Care management, PHQ score 15
- Diagnosis: Depression with severe anxiety, psychosocial stress
- Treatment, SSRI, Intensive outpatient psychotherapy
- Outcome:  Dramatic reduction in sx, PHQ score 4, ongoing SSRI and outpatient psychotherapy

# Tanner

- 14 year old male
- Top academic percentiles, every advantage
- Sustained concussion in sledding accident w/subdural hemorrhage
- Long post concussion recovery
- Presentation:  Persistently low school performance despite massive efforts
- MHI process:  PCP evaluation, Care Coordination, Neuropsychiatric Testing
- Diagnosis:  Acquired Attention Deficit Disorder
- Treatment:  Stimulant Therapy
- Outcome:  Increase to baseline performance, Academic scholarship

# Deandre

- 6 year old male
- Very Complex social situation, Domestic violence, substance abuse, limited resources
- Multiple Social Determinants of health issues
- Follow up and compliance chronic problem for family
- Presentation:  Anger outbursts, poor school performance, behavioral problems
- MHI process: PCP evaluation, Care management
- Diagnosis: Severe ADHD, ODD, anxiety, mood disorder, psychosocial stress
- Treatment:  High dose stimulant therapy, intermittent SSRI compliance, Care management, social work, psychotherapy
- Outcome:  Slow and intermittent improvement with improved compliance, 11 year follow up at 17 years, doing well at Farm school, plans on college in Engineering

# Riley

- 17 year old male
- 2+ years depression and anhedonia
- Presentation:  Persistently low mood, decreasing school performance, social withdrawal
- MHI process: PCP evaluation/MHI evaluation PHQ score 13
- Diagnosis:  Depression
- Treatment:  SSRI, psychotherapy
- Outcome:  Persistent symptoms, lack of clinical improvement at 6mos, max dose SSRI, changed SSRI lack of improvement
- Psychiatric Consultation:  Transition to Bupropion, persistent lack of improvement
- Joint consultation with psychiatry, outcome uncertain, management ongoing

# Thank You

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