Integrating Behavioral Health into Primary Care (IBH-PC)
University of Vermont
Patient Centered Outcomes Research Institute Award
PCORI

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Does increased integration of evidence-supported behavioral health and primary care services, compared to simple co-location of providers, improve patient-centered outcomes in patients with multiple morbidities?
AIM 1:
Compare co-location and IBH to see which one has better outcomes for patients.

AIM 2:
See if a structured process to help practices offer INH helps them succeed.

AIM 3:
Explore how the type of practice and the health care system influence how well integration works.
## Co-Investigators

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Dan Mullin, PsyD</td>
<td>University of Massachusetts</td>
<td>Behavioral Health Integration</td>
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<tr>
<td>Chet Fox, MD</td>
<td>SUNY Buffalo</td>
<td>Family Medicine</td>
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<td>Roger G. Kathol, MD</td>
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<td>Theory of IBH</td>
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<td>Wilson Pace, MD</td>
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<td>Data access</td>
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<td>Patient Investigator</td>
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<td>Patient Viewpoint</td>
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<td>Sarah Scholle, DRPH</td>
<td>NCQA</td>
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<td>Kurt Stange, MD</td>
<td>CWRU</td>
<td>Family Medicine</td>
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<td>Consultants</td>
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<td>Dan Mullin, Psy. D.</td>
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<td>C.R. Macchi, PhD</td>
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<td>Family Medicine</td>
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<tr>
<td>Name</td>
<td>Affiliation/Association</td>
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<tr>
<td>Farifteh F. Duffy, PhD</td>
<td>American Psychiatric Association</td>
<td>Patient Investigator</td>
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<tr>
<td>Seth Ginsberg</td>
<td>Global Healthy Living Foundation</td>
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<td>James Hester, PhD</td>
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<tr>
<td>Gene A. Kallenberg, MD</td>
<td>UCSD, Collaborative Family Health Association</td>
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<td>Mara Laderman</td>
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<tr>
<td>Susan H. McDaniel</td>
<td>University of Rochester, American Psychological Association</td>
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<td>John Muench, PhD</td>
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<tr>
<td>Betty Ramber, PhD, RN</td>
<td>UVM Green Mountain Care Board</td>
<td>Patient Investigator</td>
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<tr>
<td>Andrea Auxier, PhD</td>
<td>NBDH</td>
<td>Patient Investigator</td>
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</tbody>
</table>
Practice Inclusion Criteria (40 practices)

- Score on Practice Integration Profile < 75
- Minimum .5 BH clinician for practice duration
- Willingness to accept randomization
- Willingness to participate in training and improvement components of intervention
- If in control, during that time commit to not engaging in a similar intensity integration project
- Willingness to execute relevant Data use Agreements for sharing or extracting data from DARTNet
- Willingness to be supervised by a cluster PI
Subject Inclusion Criteria

- At least one target chronic medical condition (arthritis, asthma, chronic obstructive lung disease (COPD), diabetes, heart failure (HF), or hypertension) and evidence of a behavioral problem or need

- Specific diagnosis (anxiety, chronic pain including headache, depression, fibromyalgia, insomnia, irritable bowel syndrome, problem drinking, or substance use disorder)

- Persistent use of certain medications used for behavioral concerns (antidepressants, anxiolytics, opioids, antineuropathy agents, etc.)

- Persistent failure to attain physiologic control of a medical problem (blood pressure > 165 while on 3 or more medications, A1C > 9% for 6 months)

- Unscheduled care (in the clinic, hospital or emergency room) for a medical or behavioral problem within 6 months

- Presence of 3 or more of the target chronic medical conditions.
Subject Inclusion Criteria

Subject Identification by Phase

**Co-location**

A. Community Patient Panel

C. Study Subject Panel

D. Identified and treated patients

All patients in the practice

**Integration**

A. Community Patient Panel

C. Study Subject Panel

D. Identified and treated patients

(Group B not shown)
The intervention consists of training for practice leaders, BHCs, PCPs, and office staff, a structured improvement process support for practice redesign, and a toolkit of suggested tactics for implementation.

- **Training of the entire office in team based integrated behavioral health**
- **Implementation of the Integration Toolkit**
The Practice Integration Model

**Leadership**
- Institutional Support

**Structure**
- Skills
- Protocolized Process
- Tactics

**Clinical Tasks**
- A. Identification
- B. Assessment
- C. Treatment
- D. Surveillance

**Care**
- Medical Services
- Behavioral Health Services
- Integrated Care

**Patient-Centered Outcomes**
- Things that matter to patients and families

**Environmental and Organizational Context**
Project Structure and Delivery

Media and delivery
- Asynchronous, online modules
- Flipped classroom approach employing monthly coaching/consultation via AdobeConnect webinars - discuss module topics and related skills and practice-related examples
- Program-specific website portal
  - Registration tool
  - Online learning community (webinars and interactive blog)
  - Continuing Education (CE)/Continuing Medical Education (CME) records/archive

Training process, evaluations, and participant performance targets
- Established competencies
  - APA Competencies for Psychology Practice in Primary Care [McDaniel, et al. 2014]
  - Core Competencies for Interprofessional Collaborative Practice, Association of American Medical Colleges (2011)
  - Behavioral health integration into primary care - Primary Cary Behavioral Health Model (PCBH), Robinson & Reiter (in press)
  - Primary Care Toolkit-medical provider competencies, Runyan (2009)
  - National Integration Academy Council, Agency for Healthcare Research & Quality (AHRQ)

CE management
- PCPs Continuing Medical Education Units (CMEs) - provided by Center for Integrated Primary Care
- BHC Continuing Education Units (CEUs) - provided by Arizona Psychological Association
Interprofessional

- Principles of integrated behavioral healthcare
  - Why should we go to all the trouble? - BH integration aimed at facilitating practice changes to provide better care, improve patient satisfaction, and reduce costs (Triple Aim)
  - IBH is best thought of an expansion and enriching of primary care rather than as a changing of venue for mental health or substance abuse services
  - Population Health Management - Population health-focused care delivery
  - Team-based approach to healthcare delivery
  - Cost and outcome evidence related to integrated delivery models compared to coordinated and co-located models
Interprofessional

- Team-based approaches to patient care
  - The interaction of patient activation and shared decision-making
  - Addressing and improving health literacy
  - Scripts for patient engagement
  - Scripts for patient activation
  - Team transparency and patient engagement
  - The role of the Patient Centered Care Plan (PCCP)
  - Making goal-setting a brief and regular part of care
Interprofessional

- Team role distinctions, overlaps, and complementarity
  - From “physician-led team” to “team-supported physician”
  - The advantages of leveraging screening into a new workflow
  - Role clarity and task flexibility in successful teams
  - How team members learn to pass a relationship with the patient to other team members
  - Integrating roles of BHC, Care Manager (CM) and Care Coordinator (CC) on the team, especially where there is not a different person for each role

- Behavioral health and population health management
  - The population care model
  - Screening
  - Registries
Interprofessional

- Protocolized process - Overview
- Including patients in redesign
  - What do patients have to offer?
  - Respect, trust and transparency among the team
  - Suggested “ground rules” for behavior in the team
- DIAMOND Team Audit
Clinical and practice management skills for IBH
  - Developing/implementing/evaluating IBH within primary care clinics
  - Warm handoffs (PCP & BHC)
  - Primary focus on brief interventions (adaptation to < 30 minute hour, brief treatment across the lifespan)
  - Common BH treatment strategies (i.e. CBT, MI, fACT)
  - Productivity expectations of each provider

Examples of a medical team’s typical day
Behavioral Health Clinicians

- Common co-morbidities and needs
  - Symptoms, mechanisms and treatments
    - Asthma
    - Diabetes
    - Heart disease
    - Chronic pain
    - Obesity
    - COPD
    - Hypertension
  - BH needs
    - Behavioral assessment
    - Functional assessment
    - Validated measures appropriate for use in primary care
- Innovative delivery models (e.g., Group Medical Visits, web-based apps, etc.)
Behavioral Health Clinicians

- Common behavioral patterns related to specific medical conditions
  - Obesity
  - Nutrition and dietary issues
  - Physical inactivity
  - Smoking cessation
  - Sleep disorders
  - Anxiety
  - Depression
  - Substance misuse/abuse
  - Problem drinking
Behavioral Health Clinicians

- Evidence-supported approaches to health behavior change
  - Health behavior change strategies
    - Building the doctor/patient relationship for better health
    - Stages of Change model
    - Motivational interviewing
    - Matching approaches to stages of change
  - Treating the Patient with Medically Unexplained Symptoms (MUS)
    - Teamwork in engaging patients with MUS in behavioral care
    - Language that engages the patient
    - Use of uncertainty in uncertain situations
    - Case examples
Behavioral Health Clinicians

- Behavioral Medicine Skills
  - Relaxation response therapies
  - Sleep promotion
  - Progressive relaxation and autogenics
  - Hypnotic methods (without trance)
Primary Care Physicians

- Screening and referrals to BH
  - Indications
  - Team roles
  - Workflows
  - Monitoring
- Team approaches to address patient BH co-morbidities
- What does a BHC do?
- Evidence-supported approaches to behavioral issues
- Wise prescribing for behavioral problems
- Referral to specialty mental health
- Dual appointments with BHCs
- Shared records
Other Staff

- Impact of workflow on patient experiences
  - How workflow affects patients
  - Development, implementation, and refinement of workflow
- Team collaboration and feedback
- Communication skills
- Documentation practices
Project Facilitator

- Protocolized process
  - Implementation Pathway
  - The Model for Improvement
  - Rapid improvement cycles
    - Describe the Current State
    - Define the Future State
    - Test and Measure

- Stage I: Preparation
  - Assess practice readiness, challenges, and opportunities
  - Measure baseline
  - Prepare and select team
  - Outcome: team objectives and schedule
Project Facilitator

- **Stage 2: Design**
  - Current State
  - Future State
  - Outcome: implementation plan

- **Stage 3: Implementation**
  - Rapid improvement cycles
  - Measure
  - Outcome: evaluation and maintenance plan

- **Managing change and including patients**
  - The dynamics of change
  - Lessons learned
  - Tips for getting started
  - Including patients in the process
Care Manager

- **Core content**
  - Care Management in PCMH
  - Networking in the Medical Neighborhood
  - High Risk Registries for Population Management
  - Effective Patient Centered Care plans

- **Electives**
  - Heart Disease 101
  - Caring for Patients with SMI
  - Geriatric Patients and Their Families
  - Diabetes Care
  - EBP for Depression Care Management
  - Shared Decision Making
Care Manager

- **Electives**
  - Smoking Cessation
  - Managing Weight
  - Trauma Informed Care
  - Crisis Intervention
  - Caring for the Homeless
  - Unhealthy Substance Use
  - Chronic Pain
  - Patient Experience
  - An Introduction to MI
  - Fostering Patient Activation
  - Mind-Body connection and Stress Response
  - Behavior chain analysis and solution focused
Practice Manager

- Principles of IBH management
- Registries and data-driven practice management
- Transforming systems of care
  - Tactics for changing care
  - Algorithms for care - electronic or manual
  - Workflows for team-based approaches
  - Staff roles
- Financial dimensions of treatment and billing practices
  - Costs and outcomes of IBH
  - Reimbursement options
- Documentation standards
- Personnel and administrative procedures
- Quality assurance and documentation
- Productivity and access to care
The toolkit provides over two dozen clinical, operational, and financial tactics that support the preparation and design activities of the structured improvement process.
The IBH Implementation Toolkit

- Project Preparation
- Selection of Tactics
  - Clinical
  - Operational
  - Financial
- Workflow Design
- Implementation
- Measures & Follow Up
PRACTICES WILL BE ENCOURAGED TO:

- **Address the need to screen patients**
- **Use brief BH visits** (rather than traditional 50 minute psychotherapy visit)
- **Support BHC and PCP collaboration** (joint meetings, case reviews, educational sessions, etc.)
- **Enhance communication between BHCs and PCPs about specific cases** (shared records, standardized forms, case conferences, etc.)
- **Develop support for referral to specialty mental health or community resources outside the practice...** (alcoholics anonymous, pastoral care, medication assistance, etc.)
- **...and BH services inside the practice** (streamlined referral and appointment-making, same day visits, warm hand-offs, maintaining a directory of community assistance, etc.)
Measurement

- Practice Integration Profile (PIP)
- PROMIS
Measuring the Degree of Integration: The Practice Integration Profile (PIP)

- Based upon CJ Peek’s Lexicon
  *(Describes Common Dimensions of Collaborative Care)*
- Compares models on six common dimensions
  
  30 items, 10 minute electronic, soon to be web based

  Generates domain scores and total score

- Provides detailed descriptions and examples for operationalizing each dimension

- Provides a way to quantify degree of integration for each dimension

- Composite dimension scores provide an overall rating for clinic-level of integration
Measuring the Degree of Integration: The Practice Integration Profile (PIP)

- **Model Type**: Professional consensus and extrapolation of current conceptual models
- **Theory Base/Reference – AHRQ**: Lexicon for BH and PC Integration, National Agenda for Research in Collaborative Care
- **Use of Model for Integration Level**: Measures multiple dimensions of integration, provides composite rating for clinic-level integrated medical/BH care
- **Psychometrics**: Operationalizes BH components related to each dimension
- **Validation**: Initial beta testing with clinicians and healthcare managers, follow up beta test related to scenarios of four different sites, distribution to multiple sites, contacts, and time points
- **Storing Data**: Electronic distribution, respondent online access to data entry, online data management
## Patient Reported Measures

### Patient-Reported Outcome Measures

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<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Number of Questions</th>
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<tbody>
<tr>
<td><strong>Aim 1a) Primary Outcomes – all patients</strong></td>
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<tr>
<td>Emotional Distress – Anxiety</td>
<td>PROMIS-29 v2 [Cella 2010]</td>
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<tr>
<td>Emotional Distress – Depression</td>
<td>PROMIS-29 v2</td>
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<tr>
<td>Fatigue</td>
<td>PROMIS-29 v2</td>
<td>4</td>
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<tr>
<td>Pain – Interference &amp; Intensity</td>
<td>PROMIS-29 v2</td>
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<tr>
<td>Physical Function</td>
<td>PROMIS-29 v2</td>
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<td>Sleep Disturbance</td>
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<tr>
<td>Social Participation</td>
<td>PROMIS-29 v2</td>
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<td><strong>Aim 1b) Secondary Outcomes – all patients</strong></td>
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<tr>
<td>Communication</td>
<td>CAHPS 12-Month PCMH Adult Questionnaire 2.0 [AHRQ 2014]</td>
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<td>Empathy</td>
<td>Consultation and Relational Empathy measure [Mercer 2004]</td>
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<tr>
<td>Self-management</td>
<td>Patient Activation Measure-13 [Hibbard 2005]</td>
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<tr>
<td>Adherence</td>
<td>Modified Self-reported Medication-taking Scale [Morisky 1986]</td>
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<tr>
<td>Time lost due to disability</td>
<td>Restricted Activity Days [Adams 1999]</td>
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<tr>
<td>Physical Function</td>
<td>Duke Activity Status Index [Hlatky 1989]</td>
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<td><strong>Aim 1c) Disease Control - administered only to subjects with the specific condition noted</strong></td>
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<tr>
<td>Depression, Anxiety, Pain, Insomnia</td>
<td>PROMIS-29 v2</td>
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<tr>
<td>Diabetes</td>
<td>Hgb A1C</td>
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<td>Substance Use disorder &amp; Problem Drinking</td>
<td>30-day use [Snodgrass 2007]; Global Appraisal of Individual Needs – Short Screener [Dennis 2006]</td>
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<td>Hypertension</td>
<td>Systolic blood pressure</td>
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<td>Asthma</td>
<td>Asthma Symptom Utility Index [Revicki 1998; Bime 2012]</td>
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<tr>
<td>COPD, CKD, CAD, HF</td>
<td>Duke Activity Status Index</td>
<td>12*</td>
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## Timeline

### Figure 1. Practice allocation scheme.

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<tr>
<th>Randomization Groups</th>
<th>Study year:</th>
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<th>3</th>
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</tbody>
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#### Early practices:

- **Early Integration (12 practices)**
  - Assemble panel: ↑
  - Baseline subject measures: ↑
  - Follow-up: ↑

- **Early Co-location (12 practices)**
  - Assemble panel: ↑
  - Baseline subject measures: ↑
  - Follow-up: ↑

  *Early analyses without subgroups: ✓*

#### Late practices for added sample size:

- **Late Integration (8 practices)**
  - Assemble panel: ↑
  - Baseline subject measures: ↑
  - Follow-up: ↑

- **Late Co-location (8 practices)**
  - Assemble panel: ↑
  - Baseline subject measures: ↑
  - Follow-up: ↑

  *Final analyses with subgroups: ✓*
Questions

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