SAMHSA-HRSA CENTER for INTEGRATED HEALTH SOLUTIONS

Health Indicators: Moving the Needle
Goal: How through integration can we best deal with the health disparity experienced by patients with severe mental illness (SMI) and best serve this population of patients.

- Understanding the Target Population
- Building an Integrated Care Team
- Health Indicators: Moving the Dial
Understanding the Target Population
What do we know about the SMI population?

1. The premature mortality seen in the SMI population is:

   a) 25-30 years
   b) 20-25 years
   c) 15-20 years
   d) 10-15 years
2. What percent of illness contributing to this early mortality is preventable?

a) 20%
b) 40%
c) 60%
d) 80%
3. What are the leading illnesses that contribute?

a) Cardiovascular

b) Infectious disease

c) Cancers

d) All of the Above
Cardiovascular Disease is Primary Cause of Death in Persons with Mental Illness

<table>
<thead>
<tr>
<th>Cardiovascular Disease Risk Factors</th>
<th>Estimated Prevalence (%) and Relative Risk (RR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Schizophrenia</td>
</tr>
<tr>
<td>Metabolic syndrome</td>
<td>37-60%, 2-3 RR</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>25-69%, 5 RR</td>
</tr>
<tr>
<td>Hypertension</td>
<td>19-58%, 2-3 RR</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>10-15%, 2-3 RR</td>
</tr>
<tr>
<td>Smoking</td>
<td>50-80%, 2-3 RR</td>
</tr>
<tr>
<td>Obesity</td>
<td>45-55%, 1.5-2 RR</td>
</tr>
<tr>
<td></td>
<td>Bipolar disorder</td>
</tr>
<tr>
<td>Metabolic syndrome</td>
<td>30-49%, 2-3 RR</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>23-38%, 3 RR</td>
</tr>
<tr>
<td>Hypertension</td>
<td>35-61%, 2-3 RR</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>8-17%, 1.5-3 RR</td>
</tr>
<tr>
<td>Smoking</td>
<td>54-68%, 2-3 RR</td>
</tr>
<tr>
<td>Obesity</td>
<td>21-49%, 1-2 RR</td>
</tr>
</tbody>
</table>


Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center

integration.samhsa.gov
- Cluster of metabolic risk factors
- With these risk factors together, the chances for future cardiovascular problems are greater than any one factor presenting alone
- Affects about 34 percent of adults and places them at higher risk of cardiovascular disease, diabetes, stroke and diseases related to fatty buildups in artery walls.
- Major characteristics of the metabolic syndrome include central obesity, hypertension, dyslipidemia, glucose intolerance or insulin resistance
- Metabolic syndrome occurs when a person has 3 or more of the following:
  • Abdominal obesity (Waist circumference of 40 inches or above in men, and 35 inches or above in women)
  • Triglyceride level of 150 milligrams per deciliter of blood (mg/dL) or greater
  • HDL cholesterol of less than 40 mg/dL in men or less than 50 mg/dL in women
  • Systolic blood pressure (top number) of 130 millimeters of mercury (mm Hg) or greater, or diastolic blood pressure (bottom number) of 85 mm Hg or greater
  • Fasting glucose of 100 mg/dL or greater
About 50% of people with behavioral health disorders smoke, compared to 23% of the general population.

People with mental illnesses and addictions smoke 50% of all cigarettes produced.

Smoking-related illnesses cause half of all deaths among people with behavioral health disorders.

Lifetime smoking rates are even higher in patients who are diagnosed with major depression disorder (59%), bipolar disorder (83%), or schizophrenia and other psychotic disorders (90%).

- December 2015 Article - Retrospective study showed approximately 74,000 deaths within a national cohort of 1.1 million individuals with schizophrenia between 2001-2007.

- Those with schizophrenia were more than **3.5 times as likely to die** in the follow-up period compared to general population.

- On average, the years of potential life lost for each person - 28.5 years.

- More than 85% of known all-cause deaths due to natural causes: cardiovascular disease contributed 35%, followed by cancer 17% and diabetes mellitus (5%).

- Editorial – “**An Urgent Call to Address the Deadly Consequences of Serious Mental Disorders**”

- “The findings are shocking but not surprising because they are consistent with a large body of research. The obvious challenge arising from these findings is how to do more to prevent and treat the risk factors and diseases identified…WHAT DO WE NEED TO DO NOW?”

Olfsen, M. et al. JAMA Psychiatry 2015 Dec;72(12):1172-81
Seutani, S. et al. JAMA Psychiatry 2015 Dec;72(12):1166-7
Serious Mental Illness: A Cardiovascular Disease Risk Equivalent?

- In 2002, diabetes National Heart Lung and Blood institute labeled diabetes a cardiovascular disease (CVD) risk equivalent, indicating patients with diabetes have a risk of CVD events equal to that of people with known CVD.

- A paradigm shift occurred in how physicians treated diabetics; aggressive cardiovascular event prevention.

- Dr. Morden in Journal of American Board of Family Medicine wrote in 2009: "A similar shift may be warranted for people with serious mental illness (SMI) (schizophrenia spectrum, bipolar disorder, and refractory depression)... the high prevalence of cardiometabolic risk factors, CVD, and cardiovascular death in this population may justify classification of SMI, like diabetes, as a CVD risk equivalent. At very least SMI should signal a need for attentive cardiovascular risk assessment and prevention efforts. Such a shift in understanding will focus physicians on the cardiometabolic hazards this group faces and prompt appropriate attention to the problem."

Morden et al. J Am Board Fam Med March-April 2009 vol. 22 no. 2 187-195
DIABETES = CARDIOVASCULAR DISEASE RISK EQUIVALENT

SMI = CARDIOVASCULAR DISEASE RISK EQUIVALENT
Factors in SMI population contributing to higher risk of morbidity and mortality

- **Higher rates of modifiable risk factors**
  - Smoking
  - Poor diet / obesity
  - Lack of exercise
  - Substance use - drugs, alcohol consumption
  - “Unsafe” sexual behavior
  - Residence in group care facilities, homeless shelters, prisons (exposure to infectious diseases as well as less opportunity to modify individual nutritional practices)

- **Vulnerability due to higher rates of**
  - Homelessness
  - Victimization / trauma
  - Unemployment
  - Poverty, lack of transportation
  - Incarceration
  - Social isolation, stigma of mental illness

- **Impact of symptoms associated with SMI**
  
  Ex. paranoid ideation causing fear of accessing care, disorganized thinking causing difficulty in following medical recommendations,

- **Symptoms can mask symptoms of medical/somatic illnesses**

- **Psychotropic medications may contribute to symptoms of medical illness and cause metabolic syndrome**

- **Polypharmacy**

- **Lack of access to appropriate health care and lack of coordination between mental health and general health care providers**

Parks J et al. Morbidity and Mortality in People with Serious Mental Illness NASMHPD 2006
Even in the absence of therapy with atypical antipsychotics, cardiovascular disease is the single largest cause of death in patients with schizophrenia.

Medications often used to treat the SMI population are known to cause metabolic problems including weight gain, dyslipidemia, and hyperglycemia including new-onset type 2 diabetes mellitus.

Table 1. Relative Effect of SGAs on Metabolic Disturbances

<table>
<thead>
<tr>
<th>Generic (Trade Name)</th>
<th>Weight Gain</th>
<th>Dyslipidemia</th>
<th>T2DM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olanzapine (Zyprexa)</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Clozapine (Clozaril)</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Risperidone (Risperdal)</td>
<td>Moderate</td>
<td>Low to moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Quetiapine (Seroquel)</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low to moderate</td>
</tr>
<tr>
<td>Aripiprazole (Abilify)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Paliperidone (Invega)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Asenapine (Saphris)</td>
<td>Low to moderate</td>
<td>Low</td>
<td>Unknown</td>
</tr>
<tr>
<td>Iloperidone (Fanapt)</td>
<td>Low to moderate</td>
<td>Low</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

* Due to the limited trial data for these agents, their metabolic-effect profiles are based on the package insert.

SGA: second-generation antipsychotic; T2DM: type 2 diabetes mellitus.
Source: References 1, 6.

“Paradoxically superimposed on the iatrogenic disease that results from prescription medication access and use is a pattern of insufficient access to and use of quality health care.”

Morden et al. J Am Board Fam Med March-April 2009 vol. 22 no. 2 187-195
Disparities: Rates of Non-treatment

% of Patients

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Diabetes

45%
Not Treated

Hypertension

62%
Not Treated

Dyslipidemia

88%
Not Treated


Courtesy of Dr. Todd Wahrenberger, Medical Director Pittsburgh Mercy Family Health Center
OBSTACLES TO CARE

- SMI population less likely to seek care and adhere to prescribed treatments. - amotivation, fearfulness, social instability

- PCP may be uncomfortable to treat patients with SMI – ex do not want to be touched, can’t come from back, disorganized thoughts

- PCP may feel meds causing problems; why not just stop, change them.

- Psychiatrists may believe physical health is not their responsibility and may not feel knowledgeable about physical medicine.

- Time constraints and competing demands perceived by physicians may limit willingness and ability to expand scope of practice. PCPs often pressured to see patient every 10-15 min to fiscally exist, review labs/reports, refills, return calls, etc.

- SMI population may be less able to communicate symptoms, and physicians may question the truthfulness of symptoms made by those with SMI.

- Within a busy primary care setting, patients with SMI and poor organizational skills may be limited to few topics per visit. Visits may focus on acute symptoms rather than chronic illness, risks, and prevention.

- Therapeutic nihilism on the part of clinicians may limit efforts.

- Complex and fragmented care systems may be particularly difficult for those with SMI to effectively navigate.

- Fee-for-service models that favor procedures, multiple short visits, and specialty care over longer encounters and primary care, undoubtedly magnify these potential sources of limited care.

Morden et al. J Am Board Fam Med March-April 2009 vol. 22 no. 2 187-195
Different models must be tested – the cost of suffering and doing nothing is unacceptable.”


Why primary care services in mental health?

- High rates of physical illness in severely mentally ill
- Premature mortality
- Patients with mental illness receive a lower quality of care
- High cost of physically ill with mental illness
- Access Problems

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center
Building an Integrated Care Team

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center

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**Location + Collaboration = Integration**

A Standard Framework For Levels of Integrated Care - CIHS

<table>
<thead>
<tr>
<th>Minimal Collaboration</th>
<th>Basic Collaboration from a Distance</th>
<th>Basic Collaboration Onsite</th>
<th>Close Collaboration/Partly Integrated</th>
<th>Fully Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate systems</td>
<td>Separate systems</td>
<td>Separate systems</td>
<td>Some shared systems</td>
<td>Shared systems and facilities in seamless bio-psychosocial web</td>
</tr>
<tr>
<td>Separate facilities</td>
<td>Separate facilities</td>
<td>Same facilities</td>
<td>Same facilities</td>
<td>Consumers and providers have same expectations of system(s)</td>
</tr>
<tr>
<td>Communication is rare</td>
<td>Periodic focused communication; most written</td>
<td>Regular communication, occasionally face-to-face</td>
<td>Face-to-Face consultation; coordinated treatment plans</td>
<td>In-depth appreciation of roles and culture</td>
</tr>
<tr>
<td>Little appreciation of each other’s culture</td>
<td>View each other as outside resources</td>
<td>Some appreciation of each other’s role and general sense of large picture</td>
<td>Basic appreciation of each other’s role and cultures</td>
<td>Collaborative routines are regular and smooth</td>
</tr>
<tr>
<td>Little understanding of each other’s culture or sharing of influence</td>
<td></td>
<td>Mental health usually has more influence</td>
<td>Collaborative routines difficult; time and operation barriers</td>
<td>Conscious influence sharing based on situation and expertise</td>
</tr>
<tr>
<td>Influence sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where do you fall?

“**Nobody knows my name. Who are you?”**  
“I help your consumers.”  
“I am your consultant.”  
“We are a team in the care of consumers”  
“Together, we teach others how to be a team in care of consumers and design a care system.”

Courtesy of Dr. Todd Wahrenberger, Medical Director  
Pittsburgh Mercy Family Health Center

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Integration - a continuous spectrum.
Goal: to actively and constantly work on moving from wherever we are – Level 1, 2, 3 to full integration.
Fully integrated care: when behavioral and physical health care providers with other providers function as a true team in a shared practice with a shared vision, and both providers and patients experience the practice as a single system treating the whole person.
NOT ONLY COLOCATION AND CLOSE COLLABORATION BUT TRANSFORMATION IN THE COMPLETE MINDSET OF PRACTICE

![Continuum of Physical and Behavioral Health Care Integration](image-url)
FULL INTEGRATION

-BH and PC same facility, using same practice space and systems - scheduling/check out, access to same medical records.
-Communicate frequently in person at the system, team and individual level (ie team meetings/ huddles involving BH and PC staff, walk down the hall to consult on pt)
-Roles and culture that blend/blur (i.e. case manager does care management and vice versa, BH staff ask about physical health and PC ask about mental health) CHANGE IN MINDSET
-One treatment plan
-Standard practice of population based medical and behavioral health screening with response protocols and results available to all (ie tobacco screening, SBIRT)
-Warm handoffs: walk down the hall to have patient meet PC staff, increases compliance
FULL INTEGRATION
- Patients experience a unified response to all their healthcare needs; their physical and mental health are treated, not as separate issues but as one whole, by a team working together.

- Patients experience “one-stop” care. Instead of separate practices at different locations, one location where their behavioral, medical and social needs are all addressed seamlessly by a team working together. Even have their PC and BH appts scheduled same day. Labs drawn on site. On site pharmacy.

- Both BH and PC providers completely embrace and buy in to concept of integrated care and are actively involved in practice change.

- Organization leaders strongly support integration as practice model.

- Integrated funding based on various sources – i.e. contracts, grants. Billing maximized for integrated model. Resources shared across whole practice.
Core Principles of Collaborative Care

Patient Centered Team Care

- Effective collaboration between PCPs and Behavioral Health Providers. Using shared care plans that incorporate patient goals. Care management.
- Increased patient engagement often results in a better health care experience and improved patient outcomes.
- Nurses, social workers, psychologist, peers, pharmacists, medical assistants, and licensed therapists are all equally important to the team.

Population Based Care

- Tracking behavioral health patients in registries: no one falls through the cracks. Practices track and reach out to patients who are not improving.

Measurement Based Treatment to Target

- Measurable treatment goals, evidence based, clearly defined and tracked for each patient. i.e. PHQ9, A1C target
- Treatments are actively changed until the clinical goals are achieved. Avoid clinical inertia.

Evidence Based Care

- Treatments with credible research evidence to support their efficacy in treating the target condition

Accountable Care

- Providers are accountable and reimbursed for quality of care and clinical outcomes, not just the volume of care provided.

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center

Advancing Integrated Mental Health Solutions AIMS 2015
Barriers to Providing Primary Care to SMI Population

Cultural
- Mental health staff and patients not used to incorporating primary care as part of job
- Psychiatric staff feel time pressure to address screening, vital signs and may feel “out of scope” for specialty

Financial
- Limited funding
- Different billing structures
- High no show rates, takes extra time
- Psychiatric providers not provided resources such as Medical Assistants

Motivational
- Lack of perceived need for care
- Lack of motivation as part of negative symptoms of schizophrenia

Organizational
- Devoting space, time, and money
- Specialists do not cross boundaries
- Different languages
- Behavioral health EHRs may lack capacity to track physical health indicators
- Not perceived as part of the Mission

Physical Location
- Proximity is crucial to success
- Same building is best
- Space limitations.

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center

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Working with Psychiatric and Primary Care Providers

**Primary Care**
- Continuity is goal
- No stigma
- Data shared
- Large Panels
- Flexible scheduling
- Fast Paced
- Time is independent
- Flexible Boundaries
- Treatment External (labs, procedures)
- Patient not responsible for illness

**Behavioral Health**
- Termination is goal “close the chart”
- Stigma common
- Data private
- Small panels
- Fixed scheduling
- Slower pace
- Time is dependent, “50 min hour”
- Firm Boundaries
- Relationship with provider IS treatment
- Patient responsible for participating in treatment

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center
Building the Team
ALL are Equally Important

Psychiatric Providers

Nurse

Psychologist

Case/Care Manager

Primary Care Doctor

Service Dog

Admin

Addiction Specialist

Pharmacist

LCSW

Peers

Community Support Workers

Individual Therapy

Psych

Patient

Group Therapy

Substance Use

Voc Services

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Roles for PCPs in Behavioral Health Settings

<table>
<thead>
<tr>
<th>Direct Care</th>
<th>Collaboration</th>
<th>Population Based Care</th>
<th>Education</th>
<th>Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Screening for Chronic Medical Conditions</td>
<td>• Paternalistic high levels of Coordination</td>
<td>• Establishing Priorities</td>
<td>• Non Medical Staff</td>
<td>• Champion health Care Change</td>
</tr>
<tr>
<td>• Treatment of Chronic Medical Conditions</td>
<td>• Psychiatric Providers</td>
<td>• Tracking Outcomes</td>
<td>• Patients</td>
<td>• Help Shape Systems of Care</td>
</tr>
<tr>
<td>• Preventative Care</td>
<td>• Care Managers, Case Managers</td>
<td>• Improving Care Based on Outcomes</td>
<td>• Families</td>
<td></td>
</tr>
</tbody>
</table>

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
Team Training and Communication

• Show staff the importance of capturing health indicator data
• One pagers – Diabetes, Hypertension
• Share latest articles/websites tracking progress. Share stories how integration working.
• Case to Care Training
• Track organizational progress
  • Barriers to enrollment
  • Barriers to capturing data
  • PDSA Workflow Redesigns

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
PDSA stands for Plan, Do, Study, Act. This provides a way of testing ideas safely by starting small and building on the results of the cycle. With each cycle more knowledge is gathered to help make the next improvement.

“Your killing me with those meds…”

Build relationship and understanding between BH and PC through collaboration and education

- Establish lines of communication with PC and the extended BH team (even if FQHC attend their meetings, invite to BH meetings, educate)
- Understand the importance of Psychopharmacology
- Stabilizing mental illness to treat the medical condition.
  - PC develops working relationship with a psychiatrist around psychopharmacology to get mental health under control. PCP understands can’t manage the diabetes until we’ve got some stability around mental illness.
- Understand the importance of patient goals and let that drive the treatment decision
- Harm reduction strategies – taking a page out of the APA – way of managing risk behavior that is both pragmatic and nonjudgemental. Rather than shame or guilt, more advantageous to provide information and problem-solving strategies that empower patients to make more informed decisions regarding their risky behavior.

Courtesy of Dr. Todd Wahrenberger, Medical Director
Pittsburgh Mercy Family Health Center
EDUCATION IS PARAMOUNT

- Cross Training – PCPs attend and present primary care topics at Behavioral Health Medical Staff meetings and vice versa; BH staff present and attend Primary Care Medical Staff Meetings

- Case Managers learn Care Management (taking bp, using a glucometer, doing wellness teaching, etc)

- Care Managers learn Case Management (help apply for housing, food stamps, ALFs, SOAR, rehab facilities etc)
- Resistance to change initially will be high. Take small steps. Be ready to offer support. “Not just throwing you in to do all by yourself. We are all here as a team to support and help each other.”

Examples –

4-5 y ago resistance to taking vitals and entering in EHR. Now every psychiatrist visit has vitals. Now pt seen for high blood pressure – we already have more than 2 readings.

Medicare had a program for free mammograms. Our medical director who is a psychiatrist asked psychiatrists to order. Much resistance but comfortable once pcp said if abnormal will assist.

Recently one of the BH LPN came and asked for a glucometer to use to check patient’s sugar. Case managers are willing to come and learn to use glucometer to assist patient.

Presented at BH staff meeting re diabetes. Asked that the BH staff ask about DM. Gave cheat sheet. Talked about asking about tobacco.

Working on wellness training for our case managers. Planning slowly checking blood pressures and blood glucose monitoring.
Example – Diabetes Handout given to BH Staff

**IMPORTANT FACTS ABOUT DIABETES**

**HEMOGLOBIN A1C**
- Less than 5.7% - Normal
- 5.7% to 6.4% - Prediabetes
- 6.5% or more – Diabetes

**FASTING BLOOD GLUCOSE LEVELS (FPG)**
Fasting means not having anything to eat or drink (except water) for at least 8 hours before the test – no caloric intake.
- Less than 100 mg/dl – Normal
- 100 mg/dl to 125 mg/dl – Prediabetes
- 126 mg/dl or higher – Diabetes

**RANDOM PLASMA GLUCOSE TEST**
This test is a blood check at any time of the day when one has severe diabetes symptoms. Diabetes is diagnosed at blood glucose of greater than or equal to 200 mg/dl.

**CRITERIA FOR DIABETES DIAGNOSIS**
- A1C ≥6.5%
- FPG ≥126 mg/dl: Fasting defined as no caloric intake for 8 hrs
- Random PG ≥200 mg/dl, in persons with symptoms of hyperglycemia
- 2-hr PG ≥200 mg/dl during OGTT (75-g)

**DIABETES CAN BE PREVENTED OR DELAYED!**
- Research shows that one can lower their risk for type 2 diabetes by 58% by:
  - Losing 7% of body weight (or 15 pounds if one weighs 200 pounds). Losing even 10 to 15 pounds can make a HUGE difference!
  - Exercising moderately (such as brisk walking) 30 minutes a day, five days a week (> 150 minutes per week)

**HELP CLIENT WITH DIABETES KNOW THEIR ABCS**
- A—the A1C test, measures average blood sugar over 2 to 3 months.
  - GOAL - A1C of 7% or less. Usually done every 3-6 months.
- B—blood pressure, the force of blood flow inside blood vessels.
  - GOAL ≤140/90
- C—cholesterol - group of blood fats that affect the risk of heart attack or stroke. Use statins as needed.
  - GOAL LDL < 100
- S—Stop smoking or don't start.

**PEOPLE WITH DIABETES SHOULD GET**

**ANNUALLY**
- Dilated eye exam
- Complete foot exam, with podiatrist if possible
- Complete dental exam
- Urinary albumin to creatinine ratio (looking for protein in urine – evaluating kidneys)
- Flu vaccine
- Fasting serum lipids (if normal once a year, if abnormal more frequently)

**EVERY 3 MONTHS (6 months if well-controlled) - A1C**

**EVERY DOCTOR VISIT (usually every 3 months)**
- Blood pressure
- Foot exam
- Smoking cessation counseling if applicable

**VACCINES**
- Flu ANNUALLY
- Pneumovax (Once but patients > age 65 years need a second dose if vaccine was received ≥5 years previously and age was <65 years at time of vaccination.)
- Hepatitis B (unvaccinated adults who are ages 19 to 59 years)
SMOKING QUESTIONNAIRE

-May I ask you some questions about smoking/tobacco use for the doctor?         Yes          No

-Do you smoke now or used to smoke before?
Never           Quit             Current smoker

-During the past 12 months, have you stopped smoking for one day or more because you were trying to quit?         Yes          No

-When do you want to quit?

___ Within the next 30 days (preparation stage)

   o Are you interested in using medications and/or attending a group to help you quit?         Yes          No

___ In the next 6 months (contemplation)

___ More than 6 months from now (precontemplation)

○ What do you like about smoking?

○ What are the bad effects of smoking for you?

○ What would be hard for you if you tried to quit?

○ How might you be better off if you quit smoking?  
  (Why is quitting important to you?)
Health Indicators: Moving the Dial

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
Monitoring and Treatment Protocols

Physical Health checks should focus on monitoring:

- Weight Gain and Obesity (BMI, WC)
- Blood Pressure
- Fasting Blood Glucose
- Lipid Panel
- Use of tobacco, CO level
- Use of alcohol and other substances
- Activity Level and Exercise
- Dietary Intake
- Prolactin levels (if indicated)
- Cardiovascular Disease
- Dental health
- Liver Function Test

Standing Protocols

- Tobacco Cessation
- Point of Care Testing
- In office lab
- WHAM
- Diabetes Education Groups
- Medication Reconciliation
“Force Multiplier Effect”

Force multiplication: find and use factors that increase the effective power that you have. Refers to combination of traits which make a given force more effective than that same force would be without it.

- What do we know? - Mortality gap, why a 25 year? Tobacco rates higher, Metabolic Syndrome, Diabetes, HTN, Obesity, Hyperlipidemia
- Everything about treating these requires both Medical and Behavioral – need to use each other to change and maintain modifiable health behaviors

Health Behavior Change

- Behavior change - expertise of the psychiatric world. Need to empower BH team
- Motivational Interviewing, Health Action Model

Physical Health Indicators

Using mechanical health indicators and blood labs to measure baseline, improv “Target-to-treat” approach

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
Opportunities for Change

How Many Interactions with Patients in Different Settings During a Year?

<table>
<thead>
<tr>
<th>Setting</th>
<th>Opportunities/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>4-6</td>
</tr>
<tr>
<td><strong>Mental Health Settings:</strong></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>4</td>
</tr>
<tr>
<td>Nurse</td>
<td>4</td>
</tr>
<tr>
<td>Case Manager</td>
<td>20</td>
</tr>
<tr>
<td>Therapist/Crisis</td>
<td>5</td>
</tr>
<tr>
<td>Peer Specialists</td>
<td>5</td>
</tr>
</tbody>
</table>

30-40 opportunities a year!?

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
Low Hanging Fruit

BMI
Lipids
Diabetes
Hypertension
Smoking

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center
Engagement & Treatment Adherence

- CARE MANAGEMENT - Daily, weekly, monthly check-ins
- Mobile Meds - One week at a time (don’t have too much to lose)
- ACCESS - onsite labs and pharmacy - if you don’t have access when you are gone and they don’t take their meds
- Flywheel Principle
  - consistency in a single direction over time, you’ve talked to them 10 times about taking that medication, but that 11th time was the time they took it. Most providers would have given up, get burned out.
- Engage community and organization resources…case studies
- Engaging with the “right” team member
  - This is where the team approach comes in to play – when you the provider can’t get through to the person – maybe you aren’t the best person on the team to engage. Where is the need? Social (housing) Get that person to work on engagement – EVERY PERSON ON THE TEAM EQUALLY IS AS IMPORTANT
- **HOPE** - If you give up on a person, you are telling them that there is no hope for them.
- All of this will increase likelihood of appointment compliance, medication adherence, etc.

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center

integration.samhsa.gov
Care Managers help with teaching self-management. Teaching for chronic diseases, diabetes, hypertension, hyperlipidemia, weight management. Check medication compliance. Involved in communicating and coordinating between PC and BH, specialists, other providers. Help with socioeconomic needs.

What works: First empathy, listening. Meeting patient where they are at. Addressing their immediate concerns first. With client consent, getting family involved.

Education and support by providers is very important. Weekly meetings to discuss, emails, phone.

How is treating people with SMI different?

- Paternalistic – high touch care (we make sure your appts is schedule, that you made it to that appointment, that you followed up afterward). Help you navigate.
- Externalization vs. internalization – you are responsible for what happens, but we have to apply some external pressure to make things happen.

Integrating Primary Care into Behavioral Health Settings: What Works for Individuals with Serious Mental Illness Martha Gerrity, MD, MPH, PhD
Small changes have a Significant Impact

- 10% decrease in total cholesterol levels reduces the risk for coronary heart disease by 30%
- For a blood pressure reduction of 10 mm Hg systolic or 5 mm Hg diastolic, 22-25% reduction in CAD and a 36-41% reduction in stroke
- If client comes with a systolic of 180 and you get down to 160 in the first few weeks, though not normal, you have still decreased their cardiovascular risk. Important to remember when counseling patients as we treat high blood pressure.
- Research shows that one can lower their risk for type 2 diabetes by 58% by:
  - Losing 7% of body weight (or 15 pounds if one weighs 200 pounds)
  - Exercising moderately (such as brisk walking) 30 minutes a day, five days a week (> 150 minutes per week)
  - Losing even 10 to 15 pounds can make a HUGE difference!
- In general, every percentage point drop in A1c blood test results (e.g., from 8.0% to 7.0%) can reduce the risk of microvascular complications (eye, kidney, and nerve diseases) by 40%

National Center for Chronic Disease Prevention and Health Promotion 2009
M R Law et al. BMJ 2009;338:b1665
Percent of consumers who were at-risk at baseline and no longer at-risk at their most recent follow-up

<table>
<thead>
<tr>
<th>Indicator</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>10362</td>
<td>6%</td>
</tr>
<tr>
<td>Waist Circumference</td>
<td>6410</td>
<td>10%</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>6137</td>
<td>39%</td>
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<tr>
<td>Breath CO</td>
<td>4481</td>
<td>16%</td>
</tr>
<tr>
<td>Diabetes labs</td>
<td>2411</td>
<td>19%</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>1349</td>
<td>25%</td>
</tr>
<tr>
<td>Tri-glycerides</td>
<td>1826</td>
<td>25%</td>
</tr>
<tr>
<td>LDL Cholesterol</td>
<td>1107</td>
<td>44%</td>
</tr>
</tbody>
</table>
WHY ALL THE EMPHASIS ON DATA?

“In God we trust, all others bring data”  
W. Edwards Deming

- Without data we CANNOT continue to make practice improvements to “move the dial” towards better for this population.

- Are people getting better….are we seeing health improve over time?

- What are best practices leading to health improvement?

- Helps us identify best practices to encourage behavior modifications.

- If health is not improving, data helps us to identify new practices to implement.

Why is this important for telling the integration story?

Funding from Congress
Continue PBHCI grants
What works and doesn’t work

Courtesy of Dr. Todd Wahrenberger, Medical Director, Pittsburgh Mercy Family Health Center

integration.samhsa.gov
WHY ALL THE EMPHASIS ON DATA?

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WE ALL KNOW INTEGRATION WORKS. WE WITNESS THE EVIDENCE IN OUR STORIES OF SUCCESS.

-We NEED those success stories.

-However, to prove our case for integration, along with the subjective, we NEED OBJECTIVE data.

Funding, resources are limited. Everyone wants to allocate resources wisely to what IS PROVEN to work. Congress, Medicaid/Medicare, private payors –

HEAR, SEE, EMBRACE DATA, RESULTS
DO THE NUMBERS SHOW WE ARE MAKING A DIFFERENCE?
Are we getting our SMI population healthier?
Are we keeping them out of hospitals and ERs?
WHY ALL THE EMPHASIS ON DATA?

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- Funding, resources are limited.
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- Congress, Medicaid/Medicare, private payors –
  HEAR, SEE, EMBRACE DATA, RESULTS
  DATA/NUMBERS SPEAK LOUDLY FOR THEMSELVES
  DO THE NUMBERS SHOW WE ARE MAKING A DIFFERENCE?
- Are we engaging our SMI population and helping them be healthier?
- Are we keeping them out of hospitals and ERs?
- Movement is towards “pay for performance.”
- Organizations are trying to get better/enhanced reimbursement for the work we do especially in primary care.
- Our patients need more time and effort. To be able to survive fiscally, we have to balance that with numbers we see.
- Trend towards acknowledging the unique nature of chronic disease management.
- Medicare is paying for “coordination of care.”
- As you heard all of us graduating organizations are working hard on sustainability.

DATA PROVES THE CASE FOR ENHANCED FUNDING
“Overall, evidence for BHI, and specifically the CCM model, is even stronger than in 2010. New findings are emerging regarding components of CCM associated with improved outcomes and strategies for addressing comorbid mental and medical disorders.

- The predominant model for BHI is the CCM model, where care or case managers systematically link patients with mental health and primary care providers.
- High-quality evidence from more than 90 studies involving over 25,000 individuals support that the CCM model improves symptoms from mood disorders and mental health-related quality of life.
- CCM components that appear to be most strongly associated with improved patient outcomes are well-trained and supported care managers who provide systematic monitoring and follow-up of patients, communicate with providers, and in some studies provide psychological interventions.

CCM improves mental health outcomes for patients with chronic medical conditions (e.g., chronic pain, diabetes, cardiovascular risk) and may improve medical outcomes, especially if care managers also address the medical conditions.25,26 Research involving patients with diabetes has the strongest evidence base and generally demonstrates improvement in hemoglobin A1C.”
Does integration work? And the data says...

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<table>
<thead>
<tr>
<th>Element</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Team-Driven</td>
<td>A multidisciplinary group of healthcare delivery professionals providing care in a coordinated fashion and empowered to work at the top of their professional training.</td>
</tr>
<tr>
<td>Population-Focused</td>
<td>The Collaborative Care team is responsible for the provision of care and health outcomes of a defined population of patients.</td>
</tr>
<tr>
<td>Measurement-Guided</td>
<td>The team uses systematic, disease-specific, patient-reported outcome measures (e.g., symptom rating scales) to drive clinical decision-making.</td>
</tr>
<tr>
<td>Evidence-Based</td>
<td>The team adapts scientifically proven treatments within an individual clinical context to achieve improved health outcomes.</td>
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The Collaborative Care Model has the most evidence among integration models to demonstrate its effective and efficient integration in terms of controlling costs, improving access, improving clinical outcomes, and increasing patient satisfaction in a variety of primary care settings – rural, urban, and among veterans. Multiple studies show that having a psychiatrist to provide caseload consultation to a care manager who coordinates with patients and a PCP is an essential element of the model and correlates with improved outcomes.
DOES INTEGRATION WORK? And the data SAYS……

“In God we trust, all others bring data”

W. Edwards Deming

“….a small, comparative effectiveness study consisting of three matched PBHCI and control clinic pairs. Results…showed that, relative to consumers receiving services at control clinics, PBHCI consumers showed improvements in some (diastolic blood pressure, total cholesterol, LDL cholesterol and fasting plasma glucose) but not all (systolic blood pressure, body mass index, HDL cholesterol, hemoglobin A1c, triglycerides, self-reported smoking) of the physical health indicators examined.

Ongoing and future cohorts of grantees could consider several options to improve program implementation, such as maximizing data-driven, continuous quality improvement; monitoring implementation fidelity to evidence-based wellness programs; and investing in strategies that improve consumer access to integrated services, among others.”

Based on these findings and evidence that CCM model works the best, emphasis and evaluation of how grantees are using evidence based practices, care management, how integrated a program is etc.

Evaluation of the SAMHSA Primary and Behavioral Health Care Integration (PBHCI) Grant Program by RAND Corporation

integration.samhsa.gov
TAKE AWAYS:
- SMI 25 year premature mortality gap
- SMI = Cardiovascular Disease Equivalent. HAVE TO ACT NOW

- Integration – Change in the mindset, attitude of entire organization. Entire BH and PC works together for whole wellness of person served. Remember in year we see client 30-40 times – each a gem of opportunity when everyone in team is involved in physical and mental health. Seize that moment!

- Communication, education among all the team. Case mgmt = Care mgmt BH providers ask re physical health and PC ask re mental health. Everyone on team is equally important to achieve success!

- Care management

- Most evidence in support of Collaborative Care Model: Team Driven, Evidence Based, Measurement Guided, Population Focused

- **COLLECT DATA, DATA, DATA, DATA, DATA, DATA**

Numbers have a language and strength of their own and will speak on our behalf.

**SUSTAINABILITY = FUNDING, ENHANCED REIMBURSEMENT = DATA!!!!**

DC IN DC - In DC, we need DATA to implement Change!
This is our HILL team!!!! We could not do what we do without everyone on the team!!!!

THANK YOU FOR ALL YOU DO!!!!!!!