SAMHSA-HRSA CENTER for INTEGRATED HEALTH SOLUTIONS

Health Indicators: Moving the Needle

Aristotle Sun MD MPH
Medical Director of Population Health & Primary Care Assurance Health and Wellness Center

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These modules are intended for PCPs working in public mental health settings, to deal with the health disparity experienced by patients with (SMI).

Goal: to help facilitate their work in this environment, which may be unfamiliar to many PCPs, so they can best serve this population of patients.

- Understanding the Target Population
- Building an Integrated Care Team
- 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:
   - 25-30 years
   - 20-25 years
   - 15-20 years
   - 10-15 years

2. What percent of diseases contributing to the early mortality in SMI is likely preventable?
   - 20%
   - 40%
   - 60%
   - 80%

3. What are the leading illnesses that contribute?
   - Cardiovascular
   - Infectious disease
   - Cancers
   - All of the Above

4. How much does smoking increase the risk of death in SMI population?
   - 1.5x
   - 2.0x
   - 3.0x
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, most of it preventable
• Patients with mental illness often receive a lower quality of care
• High cost of physically ill with mental illness
• Access Problems (5 A’s of access to health care)
Treatment Patterns in Mental Illnesses
(Wang et al., 2005 National Comorbidity Survey Replication)

41% of 12-month cases received some form of treatment

- General Medical Provider: 22.8%
- Non-psychiatrist Mental Health Provider: 16.0%
- Psychiatrist: 12.3%
- Human Services Provider: 8.1%
- Complementary/Alternative Medical Provider: 6.8%

Median number of treatment visits conducted

- Mental Health Specialist: 7.4
- General Medical Provider: 1.7

Adequate Treatment Duration:

- Specialty 48.3% vs PCP 12.7%
Cardiovascular Disease is Primary Cause of Death in Persons with Mental Illness

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

Premature Deaths in Schizophrenia

Standardized Mortality Ratio or SMR is how much more likely death will occur relative to expected in general population

$$ \text{SMR} = \frac{\text{Observed Mortality}}{\text{Expected Mortality}} $$

All-cause SMR: 3.7
Cardiovascular disease SMR: 3.6
Lung cancer: 2.4
COPD SMR: 9.9
Influenza / Pneumonia SMR: 7.0

Olfson M, et al. JAMA Psychiatry. 2015 Dec; 72(12): 1172-81
Disparities: Rates of Non-treatment

5 A’s of Access to health care

Access to health care is necessary but not sufficient for high quality health care (policy & management)

**Affordability**
- Can you afford to see the provider? Can you afford treatments prescribed?

**Availability**
- Is the provider available to see you? Immediately? Three months to a year?

**Accessibility**
- Is the provider office accessible to you? Within an hour of your home?

**Accommodation**
- Can they accommodate your situation (work schedule, disabilities, etc.)?

**Acceptability**
- Can you accept the provider – personal characteristics, demeanor, personality, etc.?

Ultimately, “meeting people where they are”
How does you or your practice address these deficiencies?

- Prevention of physical health problems
  - Primary (pre-disease)
  - Secondary (pre-symptoms/signs)
  - Tertiary (pre-complications/managing complications)
  - Quaternary (preventing iatrogenic harm)
- Quality of care issues in behavioral health populations
- Adherence and cost management in managing physical health with behavioral health patients
- Access Problems (5 A’s of access to health care)
Building an Integrated Care Team
Location + Collaboration = Integration

<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>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>
<td></td>
</tr>
<tr>
<td>Influence sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

“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.”

Where do you fall?
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 frequently not provided resources such as Medical Assistants

**Motivational**
- Lack of perceived need for care
- Lack of motivation as part of depression and/or negative symptoms of schizophrenia

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

**Physical Location**
- Proximity is crucial to success
- Same building is good; same suite is better
- Space limitations

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## Perceived Cultural Differences

<table>
<thead>
<tr>
<th>Primary Care</th>
<th>Behavioral Health</th>
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<tr>
<td>✓ Continuity is goal</td>
<td>✓ Termination is goal “close the chart”</td>
</tr>
<tr>
<td>✓ No stigma</td>
<td>✓ Stigma common</td>
</tr>
<tr>
<td>✓ Data more easily shared</td>
<td>✓ Data more tightly regulated</td>
</tr>
<tr>
<td>✓ Larger Panels</td>
<td>✓ Smaller panels</td>
</tr>
<tr>
<td>✓ Flexible scheduling</td>
<td>✓ Fixed scheduling</td>
</tr>
<tr>
<td>✓ Faster paced</td>
<td>✓ Slower pace</td>
</tr>
<tr>
<td>✓ Complexity-based</td>
<td>✓ Time-based, e.g. “50-min hour”</td>
</tr>
<tr>
<td>✓ Flexible Boundaries</td>
<td>✓ Firm Boundaries</td>
</tr>
<tr>
<td>✓ Treatment externalized (labs, procedures, medications)</td>
<td>✓ Relationship with provider is significant part of treatment</td>
</tr>
<tr>
<td>✓ Patients are less responsible for illness/treatment</td>
<td>✓ Patients are responsible for participating in treatment</td>
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**Primary Care**
- Continuity is goal
- No stigma
- Data more easily shared
- Larger Panels
- Flexible scheduling
- Faster paced
- Complexity-based
- Flexible Boundaries
- Treatment externalized (labs, procedures, medications)
- Patients are less responsible for illness/treatment

**Behavioral Health**
- Termination is goal “close the chart”
- Stigma common
- Data more tightly regulated
- Smaller panels
- Fixed scheduling
- Slower pace
- Time-based, e.g. “50-min hour”
- Firm Boundaries
- Relationship with provider is significant part of treatment
- Patients are responsible for participating in treatment
“You’re killing me with those meds…”

Build a relationship with the behavioral health staff

– Establish lines of communication with the extended BH treatment team
– Understand the importance of Psychopharmacology
– Stabilizing mental illness to treat the medical condition
– Understand the importance of patient goals, shared-decision making, and motivational interviewing
– Harm-reduction – taking a page out of basic public health and behavioral health strategies
Experiences across the cultures

Were those experiences similar to what you experienced or perceived?

Have your perceptions changed over time?
### Roles for PCPs in Behavioral Health Settings

<table>
<thead>
<tr>
<th>Direct Clinical Care</th>
<th>Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Prevention</strong> (Pre-disease prevention – diet/exercise/smoking cessation)</td>
<td><strong>Paternalistic → Shared Decision Making</strong></td>
</tr>
<tr>
<td><strong>Secondary Prevention</strong> (Screening for disease and complications)</td>
<td><strong>Behavioral Health Providers</strong></td>
</tr>
<tr>
<td><strong>Tertiary Prevention</strong> (Treating complications and reducing sequelae)</td>
<td><strong>Care/Case Managers, Peer Navigators</strong></td>
</tr>
<tr>
<td><strong>Quaternary Prevention</strong> (Reduce iatrogenic harm such as polypharmacy)</td>
<td></td>
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<table>
<thead>
<tr>
<th>Population-based Care</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establishing Priorities</strong></td>
<td><strong>Non-medical Staff</strong></td>
</tr>
<tr>
<td><strong>Tracking Outcomes</strong></td>
<td><strong>Patients</strong></td>
</tr>
<tr>
<td><strong>Improving Care Based on Outcomes</strong></td>
<td><strong>Families</strong></td>
</tr>
</tbody>
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<tr>
<th>Leadership</th>
<th></th>
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<tbody>
<tr>
<td><strong>Champion Healthcare Change</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Help Shape Systems of Care</strong></td>
<td></td>
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</tbody>
</table>
Building the Team

- Nurse
- Case Manager
- Addiction Specialist
- Primary Care Doctor
- Nutritionist
- Service Dog
- LCSW
- Admin
- Psychiatric Providers
- Psychologist
- Peers
- Pharmacist
- Pop Health Admin
- Community Support Workers
- Individual Therapy
- Group Therapy
- Voc Services

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Core Principles of Collaborative Care

Patient Centered Team Care

- Effective collaboration between PCPs and Behavioral Health Providers
- Nurses, social workers, psychologist, peers, pharmacists, medical assistants, data analysts, and licensed therapists are all equally important to the team

Population-Based Care

- Tracking behavioral & physical health patients in registries: no ones falls through the cracks

Measurement-Based Treatment to Target

- Measurable treatment goals clearly defined and tracked for each patient (individualization of clinical targets is also necessary despite use of registry and population level tracking)
- Treatments are actively monitored and changed until the clinical goals are achieved

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

AIMS 2015
Team-Based Population Management

Our Team

- Primary Care Provider
- Ambulatory Care Clinical Pharmacist
- Dietician
- Psychiatrist
- Therapist
- Care Manager
- Peer Support Coaches
- Population Health Administrator
- Wellness Educators

Drives our team

General Population
- Treatment resistant or Diagnosis Uncertain

SMI #1
- Loss to follow up
- Wanting to get back in to specialty care

SMI #2
- Loss to follow up
- Awaiting specialty care – capacity issue

SMI #3
- Refusing Specialty care
What does your team look like?

What is your team missing?

What do you think would make your team function more efficiently and more effectively?

Does your organization have the culture for improvement and the climate to foster positive change?
Team Training and Communication

- Show staff the importance of capturing health indicator data
- One pagers – Diabetes, Hypertension
- Share latest articles/websites tracking progress
- Case to Care Training
- Track organizational progress
  - Barriers to enrollment
  - Barriers to capturing data
  - PDSA Workflow Redesigns
Moving the Dial
“We always hope for the easy fix: the one simple change that will erase a problem in a stroke. But few things in life work this way. Instead, success requires making a hundred small steps go right – one after the other, no slipups, no goofs, everyone pitching in.”

- Atul Gawande, Better: A Surgeon’s Notes on Performance

In other words, there are no “silver bullets” in healthcare.
Improvement Requires Baseline

“It is wrong to suppose that if you can’t measure it, you can’t manage it – a costly myth.”

- W. Edwards Deming

But you do need a reference point to improve upon and manage – it does not always need a quantitative value attached to it, but it can certainly help.

Examples of non-quantifiables include mission, vision, values, organizational culture, staff morale, community contributions, interpersonal interactions, etc.
## Opportunities for Change

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

<table>
<thead>
<tr>
<th>Setting</th>
<th>Opportunities per 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!?

When you consider MA, PharmD, dieticians, educators, and start using registries & EHR tracking, the number of opportunities can skyrocket.
## Monitoring and Treatment Protocols

### Physical Health checks should focus on monitoring:

- Weight Gain and Obesity (BMI, WC)
- Blood Pressure
- Fasting Blood Glucose / Hgb A1c
- Lipid Panel / ASCVD Risk
- Use of tobacco, CO level
- Use of alcohol and other substances
- Thyroid Function Testing (if indicated)
- Medication Reconciliation
- Activity Level and Exercise
- Dietary Intake (Na/CHO/veggies)
- Comprehensive Metabolic Panel
- Vitamin D levels (if indicated)
- Complete Blood Count w/ Platelets
- Dental health
- Prolactin levels (if indicated)

### Standing Protocols

- Tobacco Cessation
- Point of Care Testing
- Diabetes Education Groups
- Whole Health Action Mgmt (WHAM)
Low Hanging Fruit

- BMI
- ASCVD
- Diabetes
- Hypertension
- Smoking Cessation
Health Behavior Change

- Behavior change is the expertise of the behavioral health world – but it needs to include physical health
- Motivational Interviewing, Health Action Model

Physical Health Indicators

- Using mechanical health indicators and blood labs to measure baseline, improvements
- “Target-to-treat” approach
### Effects of Interventions to Reduce Risks Factors

*Small* changes have a *Significant Impact*

<table>
<thead>
<tr>
<th>Blood Pressure - Combined</th>
<th>n=4379</th>
<th>37%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breath CO</td>
<td>n=3360</td>
<td>15%</td>
</tr>
<tr>
<td>Waist Circumference</td>
<td>n=4949</td>
<td>9%</td>
</tr>
<tr>
<td>BMI</td>
<td>n=7449</td>
<td>5%</td>
</tr>
<tr>
<td>LDL Cholesterol</td>
<td>n=506</td>
<td>29%</td>
</tr>
<tr>
<td>Tri-glycerides</td>
<td>n=714</td>
<td>21%</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>n=534</td>
<td>18%</td>
</tr>
<tr>
<td>diabetes labs</td>
<td>n=1275</td>
<td>12%</td>
</tr>
</tbody>
</table>

“*In God we trust, all others bring data*” (maybe W. Edwards Deming)
Engagement & Treatment Adherence

- Keep It Simple [&] Stupid (KISS)
- Daily, weekly, monthly check-ins
- Mobile Meds / Pillboxes / Bubble packs
- 5 A’s of Access to health care
  - affordability, availability, accessibility, accommodation, acceptability
- Flywheel Principle, i.e., building momentum for change
  - Engaging them with the “right” team member
- Behavior change / organizational change principles
- Hope
- Other?
“Better is possible. It does not take genius. It takes diligence. It takes moral clarity. It takes ingenuity. And above all, it takes a willingness to try.”

- Atul Gawande, *Better: A Surgeon’s Notes on Performance*
Sharing Experiences