Health Indicators: Moving the Needle

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Agenda

• 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?

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 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 illness contributing to this early mortality is preventable? | • 20%  
• 40%  
• 60%  
• 80% |
| 3. What are the leading illnesses that contribute?                       | • Cardiovascular  
• Infectious disease  
• Cancers  
• All of the Above |
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

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>
</tbody>
</table>

Disparities: Rates of Non-treatment

![Bar chart showing rates of non-treatment for Diabetes, Hypertension, and Dyslipidemia.]


Selected adverse effects of antipsychotic medications for schizophrenia:

<table>
<thead>
<tr>
<th></th>
<th>Weight gain/diabetes</th>
<th>EPS/TD</th>
<th>Prolactin</th>
<th>Sedation</th>
<th>Anti-cholinergic side effects</th>
<th>Orthostatic hypotension</th>
<th>QTc prolongation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First generation agents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>+++</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>+</td>
<td>+++</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>+</td>
<td>+++</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Loxapine</td>
<td>++</td>
<td>+++</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Perphenazine</td>
<td>++</td>
<td>+++</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Thioridazine</td>
<td>++</td>
<td>+++</td>
<td>++</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Trifluoperazine</td>
<td>++</td>
<td>+++</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td><strong>Second generation agents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Asenapine</td>
<td>+</td>
<td></td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Clozapine**</td>
<td>+++</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Risperidone</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Diflupenthixol</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Quetiapine*</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>ND</td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Adverse effects may be dose dependent; EPS: extrapyramidal symptoms; TD: tardive dyskinesia; ND: no data.
* Clozapine also causes granulocytopenia or agranulocytosis in about 1 percent of patients requiring regular blood cell count monitoring.
** Clozapine, olanzapine, and quetiapine are also associated with dyslipidemia and decreased insulin sensitivity.
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/Pary 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>&quot;Nobody knows my name. Who are you?&quot;</td>
<td>&quot;I help your consumers.&quot;</td>
<td>&quot;I am your consultant.&quot;</td>
<td>&quot;We are a team in the care of consumers&quot;</td>
<td>&quot;Together, we teach others how to be a team in care of consumers and design a care system.&quot;</td>
</tr>
</tbody>
</table>

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 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
### Working with Psychiatric 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

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### “You’re killing me with those meds…”

Build a relationship with the Psychiatry 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 and let that drive the treatment decision
- Harm reduction strategies – taking a page out of the APA
Case Experience...

45 year old male with progressing COPD with schizophrenia and active psychosis considering smoking cessation. Patient is on Clozaril.

30 y/o woman with Bipolar, recent incarceration, 10 months sober from heroin, cocaine, alcohol.

46 y/o male just released from 2 yrs in prison with 40lb weight gain HbA1c 6.1, on Seroquel.
Building the Team

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, and licensed therapists are all equally important to the team

Population Based Care
• Tracking behavioral 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
• Treatments are actively 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
- Consulting Psychiatrist
- Care Manager
- Peer Support Coach
- Tobacco Cessation
- Medical Assistant
- Social Service Program

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
Case Experience...

44 yo, depression, metabolic syndrome, mentally stable (on invega), referred from BH, meeting with DM educator
Opportunities for Change

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

<table>
<thead>
<tr>
<th>Setting</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>4-6</td>
</tr>
<tr>
<td>Mental Health Settings:</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!

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
Low Hanging Fruit

- BMI
- Smoking
- Lipids
- Diabetes
- Hypertension

“Force Multiplier Effect”

Health Behavior Change
- Behavior change is the expertise of the psychiatric world
- 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>Mechanical Indicators</th>
<th>Percent at baseline and no longer at-risk at 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure - Combined</td>
<td>n=4379</td>
</tr>
<tr>
<td>Breath CO</td>
<td>n=3360</td>
</tr>
<tr>
<td>Waist Circumference</td>
<td>n=4949</td>
</tr>
<tr>
<td>BMI</td>
<td>n=7449</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blood Labs</th>
<th>Percent at baseline and no longer at-risk at 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDL Cholesterol</td>
<td>n=506</td>
</tr>
<tr>
<td>Tri-glycerides</td>
<td>n=714</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>n=534</td>
</tr>
<tr>
<td>Diabetes labs</td>
<td>n=1275</td>
</tr>
</tbody>
</table>

“In God we trust, all others bring data”

**Engagement & Treatment Adherence**

- **KISS**
- Daily, weekly, monthly check-ins
- Mobile Meds
  - One week at a time (don’t have too much to lose)
- ACCESS - onsite labs and pharmacy
- Flywheel Principle
- Engaging with the “right” team member
- HOPE
Utilization of Specialty Clinics

\[
\frac{(SBIRT + CDM + MAT) \times (C + DNH)}{(E \times IATC) \times T^2} = IPO
\]

(SBIRT + Chronic Disease Management + Medication Assisted Treatment) \times (Competence + Do No Harm)/(Engagement \times Immediate Access to Care) \times Technology = Improved patient Outcomes
Case Experience

58 yo Female, severe somatization disorder, Hepatitis C, seen weekly in PCP office for reassurance.

Sharing Experiences