Retooling Systems of Care to Prevent Nursing Home Placements for Persons with Serious Mental Illness

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Disclosures

- NIMH
- CDC
- New Hampshire Endowment for Health
- SAMHSA/NASHPD
- HRSA
Overview

• Background: Medical Comorbidity, Early Mortality, and Early Institutionalization in Nursing Homes
• Integrated Health Care and Rehabilitation
• Health Behavior Change Interventions
• Putting it Together: Future Models of Integrated Health Care, Health Promotion, and Rehabilitation
Background

• Rapid Growth Projected in Population of Older Persons with Severe Mental Illness (Jeste, Alexopolus, Bartels, et al., 1999)

• Deficits in Community Living Skills Associated with Institutionalization and High Cost Services (Bartels et al., 1997, 1999)

• Absence of Rehabilitative Interventions
Risk Factors for Nursing Home Placement Among the Elderly With SMI

Older adults with SMI are at increased risk of institutional care due to:

• **Medical Comorbidity** (McCarrick et al., 1986)

• **Functional and Cognitive Deficits & Greater Problem Behaviors**
  (Bartels et al., 1997)

• **Inadequate Social Support**
  (Speers, 1992; Semple et al., 1997; Meeks et al., 1990)
Early, Disproportionate, and Inappropriate Institutionalization in Nursing Homes
Age-Adjusted Annual Rates of Institutionalization for Dually-Eligible (Medicaid and Medicare) Elderly in New Hampshire in 1995 (age 60-79, mean age 68)

<table>
<thead>
<tr>
<th>Institutional Service Use</th>
<th>SMI Only (n=301)</th>
<th>All Dual Eligibles (n=1016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Home Admission</td>
<td>26.5%</td>
<td>8.5%</td>
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<tr>
<td>Psychiatric Hospitalization</td>
<td>20.2%</td>
<td>3.45%</td>
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<tr>
<td>Medical Hospitalization</td>
<td>53.9%</td>
<td>45.47%</td>
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<tr>
<td>Any Hospitalization</td>
<td>59.2%</td>
<td>46.44%</td>
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<tr>
<td>Nursing Home or Any Hospitalization</td>
<td>65.8%</td>
<td>49.38%</td>
</tr>
</tbody>
</table>
Schizophrenia: Hazard Plots

Overall

OR=1.9***
95% CI=1.5-2.2

Age 40-64

OR=3.6***
95% CI=2.8-4.7

Age 65+

OR=1.1
95% CI=0.8-1.4

Andrews et al., 2009
Depression: Hazard Plots

Overall

Ages 40-64

Age 65+

OR=1.1
95% CI=0.9-1.5

OR=0.9
95% CI=0.6-1.4

OR=1.5*
95% CI=1.1-2.1

Andrews et al., 2009
2008 MDS Study of New Admissions to Nursing Homes

- **Schizophrenia:** 60% < age 65
- **Depression:** 81% > age 65

- **Younger vs. Older schizophrenia admissions**
  - less cognitive impairment
  - lower rates of chronic medical illness
  - 3X more likely to be low care status

(Aschbrenner et al. 2011)
Nursing Home Residents in Higher Level of Care than Appropriate

- Schizophrenia: 60%
- Depression: 50%
- Bipolar: 40%
- Other: 30%
- Other: 20%
- Other: 10%
- Other: 0%
Characteristics of inappropriately placed nursing home residents with SMI

- Less Severe Problems in Cognition, Behavior, Social Skills, and Function
- No Difference in Severity of Depression or Negative Symptoms
- More Positive Symptoms
- No Difference in Age
Most Appropriate Residential Setting for Older Adults with SMI Currently Residing in a Nursing Home

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Home/Apartment</th>
<th>Group Home</th>
<th>Nursing Home</th>
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<tbody>
<tr>
<td>Consumer</td>
<td>36.8%</td>
<td>3.8%</td>
<td>59.4%</td>
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<tr>
<td>Clinician</td>
<td>3.8%</td>
<td>47.7%</td>
<td>49.1%</td>
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Implications for Long-term Care Services for Older Persons with SMI

• Appropriate Community-based Alternatives for the Rapidly Increasing Number of Aging Persons with SMI are Lacking

• Need for Innovative Rehabilitation, Community Support, and Integrated Medical Services Specifically Tailored for the Older Person with SMI

(Bartels et al., 1999)
The Epidemic of Premature Death in Older Persons with Serious Mental Illness

The average life expectancy in the US has steadily increased to 77.9 years (increasing by almost 5 years since the 90s alone)
At the same time........

Mentally ill die 25 years earlier, on average
By Marilyn Elias, USA TODAY

Adults with serious mental illness treated in public systems die about 25 years earlier than Americans overall, a gap that's widened since the early '90s when major mental disorders cut life spans by 10 to 15 years, according to a report due Monday.

For people with serious mental illness:
The average life expectancy is 53 yrs.
“50 is the New 75”
The Differential Mortality Gap for Schizophrenia Has Increased Over Recent Decades

# Cardiovascular Disease (CVD) Risk Factors

<table>
<thead>
<tr>
<th>Modifiable Risk Factors</th>
<th>Estimated Prevalence and Relative Risk (RR)</th>
<th>Schizophrenia</th>
<th>Bipolar Disorder</th>
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</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>45–55%, 1.5-2X RR&lt;sup&gt;1&lt;/sup&gt;</td>
<td>26%&lt;sup&gt;5&lt;/sup&gt;</td>
<td></td>
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<tr>
<td>Smoking</td>
<td>50–80%, 2-3X RR&lt;sup&gt;2&lt;/sup&gt;</td>
<td>55%&lt;sup&gt;6&lt;/sup&gt;</td>
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<tr>
<td>Diabetes</td>
<td>10–14%, 2X RR&lt;sup&gt;3&lt;/sup&gt;</td>
<td>10%&lt;sup&gt;7&lt;/sup&gt;</td>
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<tr>
<td>Hypertension</td>
<td>≥18%&lt;sup&gt;4&lt;/sup&gt;</td>
<td>15%&lt;sup&gt;5&lt;/sup&gt;</td>
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<tr>
<td>Dyslipidemia</td>
<td>Up to 5X RR&lt;sup&gt;8&lt;/sup&gt;</td>
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Poor Quality of Health Care for Older Persons with Severe Mental Illness

- Quality of Care and Morality Following Heart Attack
- Quality of Care for Diabetes
Older Adults with SMI: Increased Mortality and Less Use of Indicated Health Care

- Medicare Records of N=88341 Patients age 65+ Hospitalized for Acute MI
- Psychiatric Illness: 19% greater 1-year mortality
- Post-MI Treatment: 26% less reperfusion therapy (schizophrenia 52% less), 10% less B-blocker, 9% less aspirin therapy, 12% less Angiotensin tx
- After adjusting for differences in these quality indicators, no difference in 1-year mortality
  (Druss et al., 2001)
Receipt of Diabetes Quality of Care Indicators

• Controlling for demographic variables and number of medical visits…

• Compared to older beneficiaries without schizophrenia, those with schizophrenia were:
  – 31% as likely to receive a lipid profile
  – 53% as likely to receive an eye examination
  – 54% as likely to receive hemoglobin A1c monitoring

Van Citters, Bartels, Gottlieb, Fisher, Under review
Disparities in care: impact of mental illness on diabetes management

313,586 Veteran Health Authority patients with diabetes
76,799 (25%) had mental health conditions (1999)

Odds ratio for:
- No HbA test done
- No LDL test done
- No Eye examination done
- No Monitoring
- Poor glycemic control
- Poor lipemic control

Summary

- Older adults with SMI in Nursing Homes vs. the Community Greater Impairments in:
  - Community Living Skills (IADLs)
  - Social Skills and Networks
  - Health and Health-related Disability

- Early mortality associated with obesity and cardiovascular risk factors, sedentary behavior, and poor health care.
Examples of Integrated Psychosocial Rehabilitation and Wellness for Middle-aged and Older Persons with Serious Mental Illness
I. Integrated Nurse **Health Care Management** and **Health Skills Training** for SMI

Pilot Study Results (mean age: 66.5)

- Increased rates of preventive health care, eye care, and dental care
- 1/3 of sample newly detected medical problems: gall bladder disease, hypothyroidism, ischemic heart disease, cellulitis, esophageal web,
- Improved Illness Self-Management Skills

Integrated Rehabilitation and Health Care Management RCT

• Multi-site RCT (n=183, mean age 60):

• **Rehabilitation:** Skills Training Groups to Teach Community Living Skills, Social Skills, and Health *Self-Management* Skills

• **Health Management:** Health Education, and Monitoring, Facilitation, & Coordination of Primary & Preventive Health Care by HM Nurse

Rehabilitation and Health Care for SMI: *NIMH R01 MH62324 (PI Bartels)*
Skills Training Classes

Co-lead by Group Leader (grant-funded) and Co-leader (agency staff or student/recent grad)

• **Intensive Year:**
  – 2 sessions per week
    • 1 in late morning, lunch provided, 1 after lunch
  – 2 community practice sessions per month

• **Maintenance Year:**
  – 2 review sessions per month (on the same day)
  – 1 community practice session per month
Curriculum:
7 Skills Training Modules

1. Making the Most of Leisure Time
2. Communicating Effectively
3. Using Medications Effectively
4. Living Independently in the Community
5. Making and Keeping Friends
6. Making the Most of Health Care Visits
7. Healthy Living
Format of Classes

Morning Class (90 min)
- Review of Personal Goals (15 min)
- Review of Previous Skill (5 min)
- Review of Home Practice (15 min)
- Introduction of New Skill (45 min)
- Light Exercise (10 min)

Lunch (30 min)

Afternoon Class (60 min)
- Demonstration of Skill (5 min)
- Role-play or Practice Skill (45-50 min)
- Assignment of Home Practice (5-10 min)
Living Independently in the Community (8 weeks)

1) Traveling Independently
2) Reading Transportation Maps
3) Making Positive Requests
4) Communicating Effectively on the Telephone
5) Leaving an Effective Telephone Message
6) Making a Monthly Budget
7) Acquiring Important Items from a Store
8) Solving Community Living Problems
Skill Module 2: Living Independently in the Community

Class 2: Reading Transportation Maps

Traveling Independently is an important part of Living Independently in the Community. Even when it is very cold or rainy outside, people who live independently need to travel to places like the grocery store, the doctor’s office, the pharmacy, and so on. Several transportation options have been reviewed. Sometimes it can be confusing trying to decide which mode of transportation is the best one to use to get from one place to another. Using the steps of problem solving may be helpful when you are unsure about which option to select. Asking yourself the following questions may also help you choose from among the many transportation options that are available to you.

1) Do I need anything other than my own two feet?
In other words, is your destination within walking distance of your home? Walking is an excellent way to maintain flexibility in your joints and to get some aerobic exercise, which will keep you healthier. So, whenever you can, walk!
Making the Most of Leisure Time:
Inviting Someone to Share a Leisure Activity

My job for the week is to practice making the most of my leisure time by sharing the fun with someone else. I would really appreciate your help with this skill. Here is a review of what I learned in class:

Enjoying activities with other people is great way to Make the Most of Leisure Time. Many older people have lost friends and grow accustomed to pursuing leisure activities that could easily be enjoyed with other people alone instead. Sharing a leisure activity with someone else can help to enhance each of the 3 Stages of Fun. Anticipating an activity, for example working on plans for an event, can be more enjoyable when more than one person is contributing. Savoring the Moment can expand the experience of an activity. For example, one person may notice sights or sounds that another person doesn’t see or hear. When it comes to Reminiscing, having someone to talk to who shared an experience can make it more fun to reflect on it. If an older person invites a friend to share a leisure activity with him or her, this may increase the likelihood that he or she will be able to enjoy it again in the future – perhaps the next time the friend will do the inviting!

Steps for inviting someone to share a leisure activity:
Step 1: Choose a suitable person to ask.
Step 2: Find a suitable time for the invitation.
Step 3: Suggest a specific activity and be open to alternatives.
Step 4: Make a mutual plan for the activity, including day, time and place you will meet.

**Ways you can help**

- Provide positive feedback when you notice me inviting someone else to do something.
  *For example: “I think it’s great that you made plans with [person invited].”*
- Encourage me to connect with other people and to invite others to pursue activities with me.
  *For example: “Are there people you would like to reconnect with or get to know better?” “Why don’t you call……and get together with him/her?”*
- Help me to practice this skill in role-plays.
  *For example: “Why don’t we do a role-play to help you practice?”*
Example:
Making the Most of Health Care Visits (8 weeks)

1) Making and Preparing for An Appointment
2) Pros and Cons of Taking Medications
3) Sharing Health Information With Your Doctor
4) Reporting Physical Symptoms
5) Asking About Treatment Options
6) Making a Visit to the Dentist
7) Making an Advance Care Plan
8) Naming a Health Care Agent
Skill Module 6: Making the Most of Health Care Visits

Tasks for the day
- Set up video camera.
- Review personal goals of 2-3 participants.
- Review Community Practice Trip (if necessary).
- Review previously learned material (Anxiety Management).
- Review Home Practice.
- Introduce Module 6: Making Most of Health Care Visits.
- Prompt class discussion of past experiences with doctors and other care providers.
- Elicit rationale for having a collaborative relationship with the doctor.
- Introduce material for Making an Appointment with Your Primary Doctor.
- Elicit rationale for Preparing for an Appointment
- Introduce steps of Preparing for an Appointment.
- Lead class in stretching/light exercise.
- Prompt and reinforce socialization during lunch.
- In Class Practice.
- Plan Community Trip (if necessary).
- Assign Home Practice.

Class 1: Making and Preparing for a Health Care Visit

© Warmly greet group members.

Welcome! It’s wonderful to see you all today. Let’s begin as always by reviewing the goals that some of you have been working on, reviewing what we covered last week, and reviewing the Home Practice.

Review Goals
Spend 5-10 minutes reviewing personal goals set by 2-3 class members. Include discussion of the steps participants are taking to achieve their goals. Provide praise for progress toward or attainment of goals. If progress has not been made, encourage other class members to help brainstorm solutions to obstacles and to help break goals down into smaller steps. Make sure that participants who shared their goal have a clear behavioral assignment to further work on a goal at the end of the discussion. For people who report that they have achieved their goal,
HOPES
Helping Older People Experience Success
Participant Workbook
Sharing Physical Symptoms with the Doctor

The better the quality and quantity of information provided to the doctor, the greater chance that symptoms and side effects can be accurately identified.

Step 1: Tell the doctor what the symptom is.
The more precise you are in naming the symptom, the more helpful the doctor can be.
For example: “I need to tell you about some dizziness I have been experiencing.”

Step 2: Describe the symptom in detail including information about location, duration, frequency, severity, changes, timing, things tried to make it better.
It will be much easier for your doctor to help you quickly if you provide a DETAILED explanation of the problem.
For example: “I have been getting sharp (severity) headaches focused near my temples (location), every day (frequency) for the past 2 weeks (duration). The headaches come and go (timing) all day and last for about an hour (duration). I tried taking ibuprofen (to make it better) but that isn’t helping.”

Step 3: Describe how much the symptom is bothering you and how it is affecting your functioning.
Don’t forget to describe how the problem is affecting you.
For example: “These headaches are really bothering me. They are so bad that I have not been able to go out with friends or do my shopping. They are also interfering with my sleep.”
Health Management

- Comprehensive initial evaluation of health and receipt of preventive health services
- Establishment of medical problem list and health care goals
- Tracking & promotion of preventive health care, acute problems, chronic medical illnesses
Health Management

• Monthly 1:1 meetings of nurse and client for 18 months then group meetings for 6 months
• Communication and coordination with other care providers
• Scheduling and taking clients to appointments
• Role-play before appointments
### C. PREVENTIVE HEALTH CARE CHECKLIST

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Date</th>
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<tbody>
<tr>
<td><strong>Fundoscopic Exam (yearly)</strong></td>
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<tr>
<td>Needed</td>
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<tr>
<td>Date Received</td>
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<td><strong>Visual Acuity Test (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<tr>
<td><strong>Hearing Ability Screened by PCP (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<td><strong>Dental Exam (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<td><strong>Flu Vaccine (yearly for ≥ 60 or with risk factors)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<td><strong>Pneumonia Vaccine (once for ≥ 60)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<td><strong>Tetanus Booster (once every 10 years)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<tr>
<td>*<em>Colon Cancer Screen</em></td>
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<td>Needed</td>
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<td>Date Received</td>
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<tr>
<td><em>Fecal occult blood test yearly and flexible sigmoidoscopy every 3-5 years or colonoscopy every 10 years.</em></td>
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<td><strong>Random glucose (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<tr>
<td><strong>Fasting Lipid Profile (yearly)</strong></td>
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<td>Date Received</td>
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<td><strong>CBC (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<tr>
<td>For all patients &lt;75 or anyone with diagnosis of CAD, diabetes, or cerebrovascular disease.</td>
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<td><strong>Renal function (yearly)</strong></td>
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<td>Needed</td>
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<td>Date Received</td>
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<td><strong>Liver Function (yearly)</strong></td>
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<td>Date Received</td>
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<td><strong>TSH (yearly)</strong></td>
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<td>Date Received</td>
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<td><strong>Cholesterol</strong></td>
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<td>Triglycerides</td>
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<td>Ratio</td>
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<td>Normal</td>
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<tr>
<td>Abnormal</td>
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HOPES
Health Care
Resource
Book
HOPES
Health Care Workbook
If You Have Diabetes…

1. Check blood sugar as directed by doctor.

2. Place a ✓ in the appropriate box after you have the exam

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<td>Foot exam by doctor</td>
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<td>Blood glucose test</td>
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<tr>
<td>Urine glucose test</td>
<td>✓</td>
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<tr>
<td>Eye exam (fundoscopic)</td>
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Nurse Health Care Management Component

- Intake Assessment
- Health examination
- Medication list
- Vital signs monitoring
- Preventive health care
- Disease specific goals
- Action plan
- Health care proxy

- Health Education
- Accompany visit to physician with consumer
- Medical information communication
- Monthly (or more frequent) visits
Study Participants
n=183, Mean Age 60
58% female

- Bipolar Disorder 20% (n=36)
- Major Depression 24% (n=44)
- Schizophrenia 28% (n=52)
- Schizoaffective 28% (n=51)
Results at Two and Three-Year Follow-up

- Improved Community Functioning
- Improved Independent Living Skills
- Improved Self-efficacy
- Less Severe Psychiatric Symptoms and Negative Symptoms
- Greater Preventive Health Care
- 2x Greater Advance Directives
II. Integrated Self-Management and Nurse Disease Management: “Wellness Management and Recovery” (NIMH R34 MH074786)

A two component model (age 50+):

- Individualized integrated wellness self-management skills training provided by a Master’s level clinician
- Co-located medical disease management provided by a public health nurse in the community mental health center focusing on metabolic/cardiovascular, and pulmonary disorders (hypertension, hyperlipidemia, congestive heart failure, diabetes, cardiovascular disease, and COPD)
Integrated “Wellness Management and Recovery”

**IMR**
- Recovery
- Psychoeducation
- Stress and mental illness
- Social Supports and MH
- Psych Med Adherence
- Psych Relapse Prevent
- Psych Problem Solving
- Coping with Psych Sx
- Substance Abuse
- Navigating the Mental Health System

**I-WMR**
- Wellness
- Health education
- Stress and health
- Social supports and wellness
- Medical med adherence
- Medical relapse prevent
- Medical problem solving
- Coping with pain
- Medication misuse
- Navigating the Physical Health Care System

*Integrated Illness Management and Recovery (NIMH R34 MH074786)*
Integrated “Wellness” Management and Recovery (NIMH R34 MH074786)

A two component model (age 50+):

- Individualized *integrated mental health and wellness self-management skills training* provided by a Master’s level clinician

- Co-located *medical disease management* provided by a public health nurse in the community mental health center focusing on metabolic/cardiovascular, and pulmonary disorders (hypertension, hyperlipidemia, congestive heart failure, diabetes, cardiovascular disease, and COPD)
Integrated Illness Management and Recovery Sessions

Weekly sessions aimed at:

• Establishing goals steps towards recovery and wellness

• Increasing knowledge through education of psychiatric and medical problems

• Enhancing self-management skills through skills training, cognitive behavioral, and motivational interventions.
I-IMR Disease Management

• Comprehensive initial evaluation of health and receipt of preventive health services
• Establishment of health care goals
• Tracking & promotion of preventive health care, acute problems, chronic medical illnesses
• Periodic assessment of health status
• Health education and support for self-management of medical problems
Summary of Major Findings Comparing I-IMR and Usual Care

• Client Rated Illness Self-Management:
  – Knowledge of Symptoms, Meds, Coping
  – Relapse Prevention Planning

• Clinician Rated Illness Self-Management
  – Symptom Distress
  – Symptoms Affecting Functioning

• Trend for Greater Chronic Dis. Self-Management Scale
• Trend for Greater Physical Activity
• Greater Information Seeking and involvement in health care medical encounters
III. Integrated Health Promotion and Health Behavior Change: In SHAPE

- Initial Fitness Assessment
  - Individualized fitness and healthy lifestyle assessment
- Individual Meetings with a “Health Mentor”
- Membership Vouchers to Local Fitness Centers
  - YMCA; Dance-exercise center; Women’s fitness center
- Motivational rewards
- Group Health Education/Motivational “Celebrations“
- Nurse Evaluation and Consultation

Promoting Health and Functioning in Persons with SMI: CDC - R01 DD000140 (PI: Bartels)
Health Promotion and Fitness for Younger and Older Adults With SMI: R01 MH078052-01 (PI: Bartels)
The In SHAPE Health Promotion Intervention

Participants spend time each week with personal mentors working out, taking walks, in classes or working on nutrition plans.

Mentors help participants to track their progress, set goals, and stay motivated.
The In SHAPE Health Mentor Program
Pre-post Design

Two Year Award

Assessments at baseline, 3, 6, 9, 12, & 18 mo.

N=98

Final 18 month assessments continue

Preliminary 9 month outcomes to follow

Site: Keene, NH
Demographic Characteristics n=98

Age

- Age 50+
  - 29%
- Age 45-49
  - 18%
- Age 18-45
  - 53%
- Other
  - 13%

Diagnosis

- Schizophrenia
  - 25%
- Depression
  - 38%
- Bipolar
  - 24%
- Other
  - 13%

Gender

- Male
  - 32%
- Female
  - 68%

Employment

- None
  - 67%
- Full- or Part-time
  - 23%
- Volunteer
  - 10%
Baseline Health Status

• Medical diagnoses
  – 40% Arthritis
  – 26% Asthma
  – 17% High blood pressure
  – 13% Angina or chest pain on exertion
  – 12% Thyroid disease
  – 11% Diabetes
  – 9% COPD

• At-risk for heart disease
  – 50% At risk

• Flexibility
  – 71% Below Average
Body Mass Index

- Normal: 17%
- Overweight: 19%
- Obese: 64%

Average weight = 204 pounds
Do you Exercise Regularly?

Exercising > 6 months 8%
Exercising < 6 months 12%
Pre-contemplation 3%
Thinking about it 18%
Planning to do it 59%
Hours of Exercise

Exercise (Hours)

BL 3Mon 6Mon 9Mon

(p<.01)
Waist Circumference

( p<.001)
Evaluations of In SHAPE

1. Pilot Study Evaluation of the In SHAPE Model Endowment for Health (PI: Bartels) Monadnock Family Services, Keene, NH

2. Promoting Health and Functioning in Persons with SMI: CDC - R01 DD000140 (PI: Bartels) Concord, NH

3. Health Promotion and Fitness for Younger and Older Adults With SMI: NIMH R01 MH078052-01 (PI: Bartels) Boston, MA
Putting it Together:
“Statewide Intervention to Reduce Early Mortality in Persons with Mental Illness”

1) Health-Promotion
   In SHAPE targeting patient health behaviors: Exercise, nutrition, smoking cessation

2) Academic Detailing (AD) targeting physician screening and prescribing practices

   • Facilitated by Medicaid reimbursement (NIMH R01 Implementation Study)
IV. Smoking Cessation and Relapse Prevention

• RCT: Group-based CBT, Varenicline (Chantix), Nicotine patch, & Nicotine gum vs. CBT and placebo drug, placebo patch and placebo gum

• Smoking Cessation and Relapse Prevention Phase

• R01 DA021245 PI: Evans, Co-PI: Pratt

• Sites: Boston, Nashua NH, Keene NH
V. Automated Remote Telemedicine Disease Management RCT

- Pilot study funded by Riverbend Mental Health (Concord)
- Evaluate use of the Health Buddy (electronic unit attached to phone that asks questions about health to facilitate self-management of psychiatric and medical illness)
- Enroll 100 participants age 18+ with SMI plus CHF, COPD, Diabetes, or CAD
- Randomize to Health Buddy or wait list for 6 months, then groups will switch
Automated Daily:
- Self-monitoring,
- Health Data Entry
- Self-management Education
- Remote DM Nurse Monitoring
The Big Picture: Mortality Risk Factors and Integrated Wellness

- Inactivity
- Poor Diet
- Smoking
- Cardiometabolic Syndromes: Heart Disease, Diabetes, Hypertension, Hyperlipidemia

- Exercise & Nutrition Lifestyle Change
- Smoking Cessation
- Disease Management
- Self-Management
- Switching to Lower Metabolic Burden Agents
Addressing the Causes of Morbidity and Mortality in Persons with SMI

Underlying Risk Factors

Patient
- Symptoms & Life style
- Poor health behaviors
- Poverty, Uninsurance
- Lack of self management

Provider
- Lack of knowledge
- Competing demands
- Therapeutic nihilism

System
- Limited onsite capacity
- Lack of medical home
- Lack of reimbursement for prevention & health promotion programs

Proximal Risk Factors

Lifestyle:
- Inactivity, poor diet, smoking

Medications

Cardiometabolic Risk Factors

↑ Weight
↑ Glucose
↑ Lipids
↑ BP

Integrated Wellness:
- Diet, Exercise
- Smoking Cessation
- Medication Switching

Routine Health Screening

CAD
DM

Poor Quality Detection, Treatment

Integrated:
- Disease Management
- Care Management
- Self-Management

Adapted from Druss, 2007
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