

16<sup>th</sup> in a  
Series of  
Technical  
Reports



# Measurement of Health Status for People with Serious Mental Illnesses

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# I. Foreword

Recent evidence reveals that the incidence of serious morbidity (illness) and mortality (death) in the population with serious mental illnesses has increased. ***In fact, people with serious mental illnesses are now dying 25 years earlier than the general population.***

This increased morbidity and mortality is largely due to treatable medical conditions caused by modifiable risk factors such as smoking, obesity, substance abuse, psychotropic medication side effects, and inadequate access to medical care.

An earlier report, *Morbidity and Mortality in People with Serious Mental Illness*, reviewed the causes of excess morbidity and mortality in this population and made recommendations to improve their care. That report asserted that State Mental Health Authority (SMHA) stakeholders needed to embrace two guiding principles:

- ***Overall health is essential to mental health.***
- ***Recovery includes wellness.***

To these principles we now offer this Vision:

***Integrated Healthcare in the Mental Health System for People with Serious Mental Illnesses***

To accomplish this Vision will be a journey, with many initiatives and partners, to improve how the general healthcare and mental health systems collaborate to integrate care. ***This report, as a first step, focuses on creating systematic capacity to measure baseline data and the future impact of our initiatives through a standard set of health indicators that are gathered regularly and used to inform the clinical care of each person we serve, as well as aggregated to provide us with population health data. Also included in this measurement capacity is the adoption of proven population surveillance tools currently in use within the field of public health and the application of these tools to mental health surveillance (e.g., including standard health status questions within SMHA consumer-oriented surveys).***

This 16<sup>th</sup> technical report is a collaborative effort developed jointly by the National Association of State Mental Health Program Directors (NASMHPD) Medical Directors Council, the National Association of State Mental Health Program Directors Research Institute, Inc. (NRI, Inc.) and the Center for Mental Health Services (CMHS)/Substance Abuse and Mental Health Services Administration (SAMHSA). It is based on a relevant literature review, work-group meetings of the Medical Directors Council, and a two-day meeting of medical directors, consumers, NRI researchers, SAMHSA representatives, academic researchers, and other technical experts. This report aligns with earlier reports including *Morbidity and Mortality in People with Serious Mental Illness*, *Integrating Primary Care with Behavioral Health*, *Polypharmacy*, *Smoking Policies and Practices* and our recent report on *Obesity*.

We must prioritize and bring urgency to our work in order to fight this epidemic of premature death and its contributing causes.

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## II. Executive Summary

### *Why should mental health systems be concerned with physical health?*

Recent data indicates that, on average, *people with serious mental illnesses die 25 years earlier than the general population.*<sup>1</sup> Eighty-seven percent of years of life lost to premature death are due to medical illnesses. While suicide is a factor, premature mortality is predominantly due to chronic disease—especially infectious, pulmonary, and cardiovascular diseases—and diabetes.

*Cardiac events alone account for more deaths than suicide.*<sup>2</sup> *Our mental health system routinely screens for suicide risk and develops suicide response plans, but on the whole, it does relatively little to screen for or respond to more prevalent causes of early death.*

### **10 by 10—The Pledge to Reduce Early Mortality**

In September 2007, the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) convened more than 90 participants for a Wellness Summit at which the Pledge for Wellness was adopted.<sup>3</sup> Subsequently, CMHS/SAMHSA released the National Wellness Action Plan which incorporates recommendations from the Summit. The recommendations in this report align with the Action Plan's recommendations relating to data and surveillance, and are targeted at *creating systematic capacity to measure baseline data and the future impact of our initiatives.*

#### **The Pledge for Wellness**

##### *We envision*

a future in which people with mental illnesses pursue optimal health, happiness, recovery, and a full and satisfying life in the community via access to a range of effective services, supports, and resources.

##### *We pledge*

to promote wellness for people with mental illnesses by taking action to prevent and reduce early mortality by 10 years over the next 10 year time period.

### **Establishing Standard Health Indicators**

*What gets measured gets done*—we propose to pilot and implement a standard set of health indicators that will be gathered and used to inform the clinical care of each person we serve, as well as aggregated to provide population health data.

We also recommend adopting proven population surveillance tools currently in use within the field of public health and applying these tools to mental health surveillance (e.g., including standard health status questions within SMHA consumer-oriented surveys).

Finally, we must engage public health and healthcare leadership with mental health leadership to reduce the early mortality of people with serious mental illnesses (described throughout this report as consumers). Each of these areas are discussed in depth in the full report; this summary provides an overview of the underlying principles, recommended indicators and next steps.

### **Principles for Selecting and Implementing Health Indicators**

- The Vision is the long term focus: *Integrated Healthcare in the Mental Health System for People with Serious Mental Illnesses.* The immediate focus of this report is the development of health status measurement to improve individual care as well as to evaluate the population impact of future healthcare initiatives.

- The SAMHSA Fundamental Components of Recovery (Appendix B) and the Dimensions of Wellness (Appendix C) are foundational principles for all service models and interventions.
- Our intent is to:
  - Adopt one set of consumer oriented indicators for all parts of the mental health system. Health and process indicators will provide a roadmap for the future. This report proposes an initial set and sites for testing; these may be expanded over time.
  - Measure what is important for improving care at the person-level and aggregate that information for population-level data, quality improvement, and planning.
  - Have person-level indicators for all consumers and some indicators targeted to risk and a person's condition. Some indicators provide baseline information and others require ongoing monitoring.
  - Require all the functions of a person-centered healthcare home where ongoing, trusting relationships are developed to support the consumer.
  - Require transparent, shared access to person-level data to be used for individual consumer decision making. The decision making is shared and in the best interest of the consumer as defined by the consumer.

## **Health Indicators**

1. Personal History of Diabetes, Hypertension, Cardiovascular Disease
2. Family History of Diabetes, Hypertension, Cardiovascular Disease
3. Weight/Height/Body Mass Index (BMI)
4. Blood Pressure
5. Blood Glucose or HbA1C
6. Lipid Profile
7. Tobacco Use/History
8. Substance Use/History
9. Medication History/Current Medication List, with Dosages
10. Social Supports

## **Process Indicators**

1. Screening and monitoring of health risk and conditions in mental health settings
2. Access to and utilization of primary care services (medical and dental)

## **Recommendations for NASMHPD Action**

### **Pilot and Implement a Standard Set of Health Indicators**

- Provisionally adopt the proposed set of health and process indicators to test their feasibility.
- Authorize an Environmental Scan of all State Mental Health Agencies of their current activities and data in light of the proposed indicator set.
- Authorize a proposal to support pilot testing, based on states' interest and willingness to participate. The proposal will include detailed analysis of and recommendations for indicator measurement methods.

### **Adopt Proven Population Surveillance Tools**

- Revise the Mental Health Statistics Improvement Program (MHSIP) Consumer-Oriented Report Card to include selected indicators from the Behavioral Risk Factor Surveillance System (BRFSS) and other sources.
- Routinely incorporate the K6 and PHQ-9 (surveys to measure psychological distress and depression severity, found in Appendices E and F) and other validated mental health surveillance instruments into the Centers for Disease Control and Prevention (CDC) BRFSS annual survey.

### **Engage Public Health And Healthcare Leadership in Action**

- Involve the Association of State and Territorial Health Officers (ASTHO) and the National Association of County and City Health Officials (NACCHO) in planning and collaboration to address the needs of SMHA consumers.
- Involve the National Council for Community Behavioral Healthcare (NCCBH) and National Association of Community Health Centers (NACHC) in planning for implementation of the Health Indicators pilot.
- Continue to advocate with the CDC and the Health Resources and Services Administration (HRSA) to designate SMHA consumers as a health disparities population and to sponsor a Collaborative on Prevention and Management of Chronic Medical Conditions in People with Serious Mental Illnesses.
- Involve the National Association of State Medicaid Directors (NASMD) and the Centers for Medicare and Medicaid Services (CMS) to identify opportunities and barriers to improving access/utilization of Medicaid health quality initiatives for persons living with serious mental illness. Coordinate with CMS to address the co-morbidity of mental illness and chronic disease in its services research and in its policy and planning.
- Coordinate with the Agency for Healthcare Research and Quality (AHRQ) to develop standards of quality care for persons with co-morbid chronic health conditions and serious mental illnesses.
- Members of the NASMHPD Medical Directors Council are also leaders in their SMHAs and should engage medical leadership in their state Public Health and Medicaid authorities to promote integration of health and mental health issues in state level health policy, planning and reimbursement.
  - Assign senior leadership within the SMHA to link with healthcare and Public Health leadership.
  - Disseminate data at the state/local level on the association of mental health issues with health risk and chronic disease in the general population. Support small steps to integrate mental health screening and treatment into primary care and public health activities.
  - Working with the State Medicaid authority, leverage quality improvement programs that are being implemented at the state level, to assure inclusion of people living with serious mental illnesses.

## III. Context

### A. Overall Health Is Essential to Mental Health

*Why should mental health systems be concerned with physical health?*

Recent data indicates that, on average, ***persons with serious mental illnesses die 25 years earlier than the general population.***<sup>4</sup> Eighty-seven percent of years of life lost to premature death are due to medical illnesses. While suicide is a factor, premature mortality is predominantly due to chronic disease, especially infectious, pulmonary and cardiovascular diseases, and diabetes. ***Cardiac events alone account for more deaths than suicide.***<sup>5</sup> ***Our mental health system routinely screens for suicide risk and develops suicide response plans, but on the whole does relatively little to screen for or respond to these more prevalent causes of early death.***

A Maine study of Medicaid members, with and without serious mental illnesses, revealed that persons with serious mental illnesses, when compared to an age and gender matched Medicaid population, have significantly higher prevalence of major medical conditions that are in large part preventable, including diabetes, metabolic syndrome, lung and liver diseases, hypertension, cardiovascular disease, infectious diseases, and dental disorders. Seventy percent of Maine's population living with serious mental illnesses has at least one of these chronic health conditions, 45% have two, and almost 30% have three or more, making ***the co-occurrence of chronic medical disorders and complex health needs an expectation, not an exception, for this population.***<sup>6</sup>

The causes of the health disparities include:

- Medications, especially the atypical antipsychotic drugs, effect on weight gain, dyslipidemia and glucose metabolism
- High rates of smoking, lack of weight management/nutrition, and physical inactivity
- Lack of access to/utilization of preventive community healthcare, including health promotion services and resources
- Poverty
- Social isolation
- Separation of health and mental health into separate systems at the federal, state and local level with lack of coordinated infrastructure, policy, planning, quality improvement strategies, regulation or reimbursement

***These medical conditions adversely affect an individual's quality of life, relationships, employability, and integration into community life. Unless the mental health system addresses their root causes, these individuals will not be able to achieve the level of recovery that they may desire.***

In 2007, Maine included questions on physical health in the annual MHSIP Consumer-Oriented Report Card (see Appendix G.). Those consumers who reported a high number of physically unhealthy days were significantly more negative in their perceptions of access and social connectedness as well as their perception of outcomes or functioning. Persons with poor physical health were less likely to report feeling they belonged in their community, had the support of

family and friends, could control their lives and daily problems, including things that go wrong or they want to do such as school, work or housing. These consumers also were more likely to report that mental health staff or psychiatrists were not willing to see them as often as they felt necessary and that they were unable to get the services they thought they needed. Everyone responding to the survey was a consumer of mental health services; what distinguished this subgroup was their physical ill health. Physical ill health affected their recovery, quality of life and their satisfaction with the mental health system.<sup>7</sup>

***Additionally, failure to address medical and psychiatric co-morbidities significantly increases costs of both medical and psychiatric care.***

Activities by mental health systems to improve healthcare for these individuals should be aligned with current activities of the health and public health systems. ***It is essential that the mental health system not design healthcare activities in a vacuum.***

The American healthcare system is actively engaged in efforts to improve the delivery of healthcare and the health status of all citizens. Despite spending more than any other country on healthcare, the United States ranks 19<sup>th</sup> overall in health status among developed nations. Our poor ranking and ***strategies for transforming the quality of our healthcare system are well documented in the Institute of Medicine (IOM) Quality Chasm series.***<sup>8</sup> The IOM roadmap for improving quality includes six aims of quality healthcare, namely that it be:

- Safe
- Effective
- Patient-centered
- Timely
- Efficient
- Equitable.

Essential to achieving these aims are:

- Consumer-centered care
- Continuity of care
- Shared knowledge
- Free flow of information
- Evidence-based decision making
- Measurement and dissemination of data on safety, performance, outcomes, and waste

***Transformation of American healthcare depends on adopting these strategies.***

***The development and dissemination of the Chronic Care Model is another example of a strategy for improving health care that is congruent with the IOM principles and adapted particularly to the community care of persons living with chronic conditions.***

The Chronic Care Model<sup>9</sup> depends on a healthcare patient having ***continuous, planned care*** that includes electronic information systems to track health status, decision support tools, measurement of performance indicators, and monitoring evidence-based care protocols. Care management is provided to educate and support the individual to become a partner in healthcare

decision making, adopt self-management strategies for health promotion and living well with chronic disease, and access community resources. People who have received care management are less likely to have hospitalizations for preventable conditions and complications and are more likely to have a longer and better quality of life, and experience higher satisfaction with services.

***As the mental health system adopts strategies that reduce mortality and morbidity from chronic health conditions, they should be aligned with the healthcare delivery system.*** Implementation of the Chronic Care Model for individuals living with mental illness requires a healthcare home, which has been called a patient-centered medical home.

For a detailed discussion of the patient-centered medical home and its relationship to behavioral health services, see *Behavioral Health/Primary Care Integration and the Person-Centered Healthcare Home*, recently prepared by The National Council for Community Behavioral Healthcare.<sup>10</sup> A person-centered healthcare home for people living with serious mental illnesses would bring together a primary care physician, the bio/psychosocial/spiritual model of care, behavioral health services and disease management strategies based on the Chronic Care Model. Collaborative care could occur in a “virtual” healthcare home, rather than a single physical location, where everyone involved in a person’s care coordinates their services and specifies responsibility for care management activities.

Increasingly, ***reimbursement and regulatory systems are creating incentives and regulations that reward practitioners engaged in delivering medical home services.***<sup>11</sup> See Appendix D for a review of the principles of a patient-centered medical home. Patient-centered medical home certification standards developed by the National Committee for Quality Assurance (NCQA) are referenced in Appendix H.

***Alignment with public health activities designed to measure, respond to, and prevent health issues in the general population is also critical to improving the health status of consumers served by SMHAs.*** A major activity within public health is population surveillance. A major tool is the Behavioral Risk Factor Surveillance System (BRFSS). The recent inclusion of mental health questions in the BRFSS has shown that persons in the general population with serious psychological distress/depression (see Appendices E and F) have higher rates of health risk behaviors (smoking, obesity, physical inactivity) and chronic disease (diabetes, cardiovascular disease, asthma), as well as lower rates of utilization of preventive and self care. It is becoming evident to health policy makers that attention to mental health issues is critical to improving the health and outcomes of public health populations of interest. As these public health programs become more aware of the prevalence of mental illness in the general population and the association of these conditions with poor health outcomes, they will become increasingly engaged in adapting their programming to be more responsive to persons with mental illness.

The development of parallel ***surveillance systems that document morbidity and mortality of people living with serious mental illnesses*** is central to engaging public health agencies and measuring population-level changes over time.

All state public health authorities receive significant federal support for population-level activities such as: smoking cessation; promotion of physical activity and nutrition; obesity reduction; cardiovascular health; and diabetes prevention and control. Often these state level programs are linked to community level programs and coalitions that have specific programs

related to health and wellness. As an example, some states have Healthy Community Partnerships that have programs on nutrition education, sponsor health screenings, offer diabetes education classes or run smoking quit lines which are often at no cost to the public. These services are all available to SMHA consumers, but without linkage to state public health programs and the development of local resource guides, mental health providers and consumers are often unaware of the availability of these resources.

## B. Recovery Includes Wellness

There are multiple components to Recovery, as described in the Substance Abuse and Mental Health Services Administration’s *Consensus Statement on Recovery*.<sup>12</sup> The full text is in Appendix B.

- Self-Direction
- Individualized and Person-Centered
- Empowerment
- Holistic
- Non-Linear
- Strengths-Based
- Peer Support
- Respect
- Responsibility
- Hope

The Holistic component speaks to the issues in this report as well as unemployment and poverty, which have been identified as social determinants of health and contributors to health disparities.

<p style="text-align: center;"><b>Holistic</b></p> <p>Recovery encompasses an individual’s whole life, including mind, body, spirit, and community.</p> <p>Recovery embraces all aspects of life, including housing, employment, education, mental health and healthcare treatment and services, complementary and naturalistic services, addictions treatment, spirituality, creativity, social networks, community participation, and family supports as determined by the person.</p> <p>Families, providers, organizations, systems, communities, and society play crucial roles in creating and maintaining meaningful opportunities for consumer access to these supports.</p>
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The Six Dimension Wellness Model<sup>13</sup> aligns with the fundamental components of recovery. It articulates six dimensions of wellness and proposes tenets for each dimension, the full text of which can be found in Appendix C. For the purposes of this report, the focus is on physical wellness.

## C. 10 by 10—The Pledge to Reduce Early Mortality

In September 2007, the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration convened more than 90 participants for a Wellness Summit at which the Pledge for Wellness was adopted.<sup>14</sup>

## D. Vision

In order to achieve this pledge, NASMHPD offers this Vision: *Integrated Healthcare in the Mental Health*

<p style="text-align: center;"><b>The Pledge for Wellness</b></p> <p><i>We envision</i> a future in which people with mental illnesses pursue optimal health, happiness, recovery, and a full and satisfying life in the community via access to a range of effective services, supports, and resources.</p> <p><i>We pledge</i> to promote wellness for people with mental illnesses by taking action to prevent and reduce early mortality by 10 years over the next 10 year time period.</p>
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*System for Persons with Serious Mental Illnesses*. Our focus in this report is on *creating systematic capacity to measure baseline data and the impact of initiatives to integrate care*.

This report contains recommendations that will lead to an achievable capacity to measure initiatives to prevent and ameliorate morbidity and mortality from chronic medical conditions among SMHA consumers, thereby enhancing their well being, quality of life, and recovery from mental illness.

## **IV. Pilot and Implement a Standard Set of Health Indicators**

### **A. Principles and Criteria**

The September 2007 CMHS/SAMHSA Wellness Summit included background papers, presentations and work sessions addressing morbidity and mortality in the population with serious mental illnesses. Subsequently, CMHS/SAMHSA posted the Summit materials and released the National Wellness Action Plan incorporating recommendations from the Summit.<sup>15</sup> The recommendations in this report align with the Action Plan's recommendations on data and surveillance, and create the capacity to measure baseline data and track that data over time.

#### ***What gets measured gets done—***

We propose the implementation of a standard set of indicators that will be recorded and used for the clinical care of each person we serve, as well as aggregated to provide population health surveillance data. A standard set of indicators are needed by healthcare homes to make effective clinical decisions and inform the evaluation of future healthcare initiatives.

The participants in the development of this report and its associated recommendations were supplied an overview of data sets and health indicators in use in general healthcare and in public health (examples can be found in the Appendices). The group set principles and criteria for selecting and implementing health indicators.

### **Principles for Selecting and Implementing Health Indicators**

- The Vision is the long term focus: *Integrated Healthcare in the Mental Health System for People with Serious Mental Illnesses*. The immediate focus of this report is the development of health status measurement to improve individual care as well as to evaluate the population impact of future healthcare initiatives.
- The SAMHSA Fundamental Components of Recovery (Appendix B) and the Dimensions of Wellness (Appendix C) are foundational principles for all service models and interventions.
- Our intent is to:
  - Adopt one set of consumer oriented indicators for all parts of the mental health system. Health and process indicators will provide a roadmap for the future. This report proposes an initial set and sites for testing; these may be expanded over time.
  - Measure what is important for improving care at the person-level and aggregate that information for population-level data, quality improvement, and planning.

- Have person-level indicators for all consumers and some indicators targeted to risk and a person's condition. Some indicators provide baseline information and others require ongoing monitoring.
- Require all the functions of a person-centered healthcare home where ongoing, trusting relationships are developed to support the consumer.
- Require transparent, shared access to person-level data to be used for individual consumer decision making. The decision making is shared and in the best interest of the consumer as defined by the consumer.

## Priority Criteria for Indicators

- Indicators that identify untreated yet treatable conditions.
- Indicators that are already defined and in use in general healthcare.
- Indicators that are meaningful to consumers and culturally competent.
- Primary prevention indicators (e.g., risk factor screening).
- Secondary prevention indicators (e.g., screening for current conditions).
- Tertiary prevention indicators (e.g., monitoring of specific indicators related to a current condition like blood pressure).

The American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, and the North American Association for the Study of Obesity held a Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes in 2004 and issued guidelines for baseline screening and ongoing monitoring related to obesity and diabetes.<sup>16</sup> Despite having been available for four years, these ADA/APA guidelines are generally not followed. A recent study in California, using claims data from the Medi-Cal system, examined individuals with a newly prescribed second generation antipsychotic medication and found that 28% had glucose testing and 43% had lipid testing in the six months after the start of the antipsychotic medications.<sup>17</sup> Haupt has reported that “despite elevated prevalence of cardiovascular disease and diabetes...testing rates for plasma lipids and glucose remain low, with statistically significant but clinically small improvements post-guideline”.<sup>18</sup>

The ADA/APA recommendations are evidence-based guidelines for monitoring and identify monitoring periodicity. The recommended indicator set that follows aligns with these guidelines, with the exception of waist circumference. There is accumulating evidence that waist circumference is less useful among patients with BMI>25 and does not help in identification of additional individuals at risk because increased cardiovascular risk is already be identified by the BMI.<sup>19</sup>

We discuss below the logistical hurdles to full implementation of the guidelines. Indicator testing will collect information about barriers and lessons learned.

The recommended set of indicators reflects agreement by the participants after a vigorous discussion regarding the ADA/APA guidelines and indicator selection.

**ADA Consensus Conference on  
Antipsychotic Drugs and Obesity and  
Diabetes: Baseline Screening**

- Personal / family history of obesity, diabetes, dyslipidemia, hypertension, or cardiovascular disease
- Weight and height, to calculate BMI
- Waist circumference at umbilicus
- Blood pressure
- Fasting plasma glucose
- Fasting lipid profile

Diabetes Care. 2004;27:596-601.

## B. Basic Set of Indicators

The following indicators are recommended for use at the person-level for all *individuals 18 or older entering into or currently served in mental health systems*. These would also be aggregated and reported for the population receiving mental health services.

	Inpatient Settings	Outpatient Settings	Measurement Method
<b>Health Indicators</b>			
1. Personal History of Diabetes, Hypertension, Cardiovascular Disease	Yes	Yes	To be determined (TBD)
2. Family History of Diabetes, Hypertension, Cardiovascular Disease	Yes	Yes	TBD
3. Weight/Height/Body Mass Index (BMI)	Yes	Yes	Calculated value using weight and height
4. Blood Pressure	Yes	Yes	Systolic/diastolic reading
5. Blood Glucose or HbA1C	Yes	If on antipsychotic medications or BMI > 25	Lab value
6. Lipid Profile	Yes	If on antipsychotic medications or BMI > 25	Lab value
7. Tobacco Use/History	Yes	Yes	TBD
8. Substance Use/History	Yes	Yes	TBD
9. Medication History/Current Medication List, with Dosages	Yes	Yes	TBD
10. Social Supports	Yes	Yes	Recommend LOCUS/IV. Recovery Environment (Level of Stress, Level of Support) score
<b>Process Indicators</b>			
1. Screening and monitoring of risk and selected health conditions in MH settings	Yes	Yes	TBD
2. Access to and utilization	Yes	Yes	Identified primary

	<b>Inpatient Settings</b>	<b>Outpatient Settings</b>	<b>Measurement Method</b>
of primary care services			care clinician (with name and contact information) and physical examination within the last year  Identified dentist and dental examination within the last year

*We recommend convening a workgroup to finalize the indicator measurement methods and set up a process to test in the field the feasibility of the indicators and measures. Where appropriate, BRFSS measurement methods will be utilized, providing the opportunity for comparative analysis with the general population.*

Among the challenges associated with measurement of the indicators and clinical capabilities are:

- The availability of basic equipment in mental health settings such as an automatic scale that weighs, measures height, and calculates BMI; blood pressure cuff; and glucosometer
- Reliably obtaining fasting blood draws for lipid and glucose analysis
- Systems to link consumers to a welcoming, person-centered healthcare home
- Systems for ongoing communication and collaboration between mental health providers and primary care; integrated/coordinated treatment plans; and coordination among care managers and case managers
- Mechanisms within the mental health system for workforce and consumer education on health literacy and advocacy, self care for chronic health conditions, wellness activities, and other person-centered behavior change
- Peer directed activities for health and wellness
- Access to smoking cessation programs and treatment
- Environmental policies and strategies in hospital and residential settings (e.g., smoking rules, nutrition planning, facilities for physical activity)
- Access to dental care access for individuals on Medicaid or who are uninsured

After testing a final indicator set, additional indicators could be suggested as part of a blueprint for nationwide implementation, along with a toolkit of successful practices and methods for monitoring of efficacy and efficiency. The work should be part of an overall *strategic plan to address the integration of mental health and health issues in policy, regulation, reimbursement, data collection, workforce development, consumer engagement, and program redesign.*

### **C. Testing the Indicators**

There are two parallel components to the pilot testing phase. The first is to conduct an Environmental Scan in all states, asking the following questions:

- Do you use these indicators now?

- What methods of measurement are you using?
- What are the barriers to effective implementation?

The second component is to begin using the indicators and measures. Several states have indicated they are prepared to begin testing the indicators. Testing might proceed with increasingly intensive levels of activity: Level I would report indicators in hospital and community services to NRI; Level II would incorporate indicator and measurement information into the hospital discharge communication process (see Appendix H); and Level III would analyze Medicaid data to confirm what has been reported directly to NRI.

<b>Testing Activity</b>	<b>Level I</b>	<b>Level II</b>	<b>Level III</b>
Implementation and reporting of the indicators in hospitals and community services, with data reported to NRI	<b>X</b>	<b>X</b>	<b>X</b>
Description of the barriers identified and lessons learned	<b>X</b>	<b>X</b>	<b>X</b>
Description of the changes in work flow, clinical practice, and documentation	<b>X</b>	<b>X</b>	<b>X</b>
Evaluation of the indicators testing phase and report of findings	<b>X</b>	<b>X</b>	<b>X</b>
Incorporation of the indicators into the hospital discharge communication process per The Joint Commission ORYX® initiative, with communication to both the mental health provider and the primary care provider in the community		<b>X</b>	<b>X</b>
Description of the barriers identified and lessons learned		<b>X</b>	<b>X</b>
Description of the changes in work flow, clinical practice, and documentation		<b>X</b>	<b>X</b>
Analysis of Medicaid data for independent verification of provider encounters, lipid and glucose testing			<b>X</b>

Level I sites might include New York and Connecticut. New York is currently preparing for the following implementation:

- In 2008, 17 hospitals will initiate 3 indicators (lipid, glucose, BMI)
- In 2009, 40-60 clinics will initiate 3 indicators (blood pressure, BMI, smoking)

Level II sites might include Minnesota, Pennsylvania, Ohio, and Washington DC. Level III sites might include Missouri and Maine.

To go to scale on measuring, reporting, and communicating the indicators, as well as collaborating regarding improvement of health status, will require participation from state hospitals, community inpatient units, outpatient mental health providers, and primary care providers. State level partners over time would include the:

- State Mental Health Agency
- State Medicaid Agency
- State Mental Health Provider Association
- State Hospital Association
- State Primary Care Association
- State Department of Health
- State Consumer Associations

## V. Adopt Proven Population Surveillance Tools

In addition to using aggregate health indicator data in population planning, we recommend that SMHAs adopt additional population surveillance strategies. Currently, all but three states are using a version of the Adult MHSIP Consumer-Oriented Report Card for reporting to the CMHS Block Grant Program (30 states use the official version and the rest use modified versions); all states are using a version of the Youth MHSIP Survey (42 states use the official version). Additionally, 24 states are using the NRI MHSIP Inpatient Consumer Survey.

Maine piloted the addition of questions from the BRFSS to the MHSIP Consumer-Oriented Report Card; they were able to compare the data to the general population BRFSS data gathered by the public health system. Analysis demonstrated that while the Maine general population, in response to the BRFSS, reported a 7.8% rate of diabetes, mental health consumers reported a 24.5% rate; 48.6% of consumers smoked and 49.7% were obese, as compared to rates of 21.1% and 23.2% in the general population. Using the BRFSS questions to assess health status of SMHA consumers can thus provide comparisons with the general population as well as an overall assessment of how the mental health and health systems are doing in addressing these problems (See Appendix G).

Established in 1984 by the CDC, the BRFSS is a state-based system of telephone health surveys (not individual screening) that collects information on health risk behaviors, preventive health practices, and healthcare access primarily related to chronic disease and injury. For many states, the BRFSS is the only available source of timely, accurate data on health-related behaviors. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. More than 350,000 adults are interviewed each year, making the BRFSS the largest telephone health survey in the world. States use BRFSS data to identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs. Many states also use BRFSS data to support health-related legislative efforts.<sup>20</sup> Nationally, BRFSS data is used in a variety of health quality report cards and especially in monitoring Healthy People 2010 goals. It will be a major data source for planning for Healthy People 2020 which is now in development.

In 2006, with SAMHSA and CDC support, many states added a Depression and Anxiety Module and in 2007 some states included the K-6 assessment of Serious Psychological Distress in the BRFSS surveys. Analysis of these mental health modules integrated with existing modules has shown the association of mental health conditions with increased health risk and chronic physical illnesses as well as lower utilization of preventive health practices. Reporting of this data has increased interest on the part of the participating states and the CDC in integrating mental health issues into public health policy and planning and in the development of the nation's Healthy

People 2020 goals. However, ongoing support for the inclusion of mental health modules in the BRFSS has not yet been achieved.

In supporting the recommendation that states add selected BRFSS questions to the MHSIP Consumer-Oriented Report Card, participants identified the need to:

- Provide guidance to MHSIP users regarding fidelity and the recommended use of consumers to gather information. The inconsistent MHSIP processes used across the country result in data that is not readily comparable, because the varying methods of collection affect the return rate, responses, and subsequent data.
- Examine the burden of number of items added to the MHSIP.
- Work with the Association of State and Territorial Health Officers (ASTHO) and the National Association of County and City Health Officials (NACCHO) to understand their perspective on the recommendation to include mental health modules in routine public health surveillance, integrated analysis of general population data from public health surveillance, and analysis of mental health population data from mental health surveillance. This combined data could then be used for smoking, diabetes, and other state and local health initiatives, in partnership with public health authorities.

## VI. Engage Public Health And Healthcare Leadership in Action

The Centers for Disease Control and Prevention (CDC) and Health Resources and Services Administration (HRSA) have requirements for addressing populations with health disparities, sometimes including persons with behavioral disorders. For example, state tobacco control programs are developing strategic plans and are mandated to allocate resources to smoking cessation in populations with health disparities, including specifically persons with behavioral health disorders. It is critical that advocates for persons living with serious mental illnesses, mental health agencies, and SMHAs have a role in the strategic planning for public health at the state and local level. Additionally, many public health authorities have developed partnerships with academic centers, community stakeholders, and community coalitions that can provide additional supportive capacity (e.g., for strategic planning, research, workforce and consumer training, technical support and other programming). Area Health Education Centers (AHECs) and local Diabetes Patient Education courses are examples of public health resources. ***Thus, it is essential in addressing the morbidity and mortality from chronic medical conditions that the mental health system align with the public health system at the state and local levels—looking to partner and not duplicate services.***

The Office of Minority Health and Health Disparities of the CDC has the following mission: “To accelerate CDC's health impact in the U.S. population and to eliminate health disparities for vulnerable populations as defined by race/ethnicity, socio-economic status, geography, gender, age, disability status, risk status related to sex and gender, and among other populations identified to be at-risk for health disparities.” Specifically in regard to disability, “the CDC, through its various operating units, for example the National Center for Birth Defects and Developmental Disabilities and the National Center for Injury Prevention and Control aims to promote the health of people with disabilities, prevent secondary conditions, and eliminate disparities between people with and without disabilities in the U.S. population.”<sup>21</sup> ***Given the data on health disparities in people living with serious mental illnesses, the CDC should add a***

*focus on preventing secondary chronic medical illness in the population with serious mental illnesses.*

HRSA has sponsored the Health Disparities Collaborative in partnership with the Institute for Healthcare Improvement (IHI) based on this vision: reduce disparities in health outcomes for poor, minority, and other underserved people. Using the methodology of IHI's Breakthrough Series Model, The Model for Improvement and the Chronic Care Model (see Appendix D), healthcare providers are making a positive difference in the lives of hundreds of thousands of Americans. To date, these and other federal initiatives focused on health disparities have not identified people with serious mental illnesses as a target population. The research presented in NASMHPD's reports documents the considerable health disparity experienced by people with serious mental illnesses and should be the basis for HRSA attention. HRSA should add a new topic to their Health Disparities Collaborative, bringing their resources to bear on *Prevention and Management of Chronic Medical Conditions in Persons with Serious Mental Illnesses*.

## **VII. Recommendations for NASMHPD Action**

The sponsors of this report (NASMHPD Medical Directors Council, NRI, Inc. and CMHS/SAMHSA) will work with the organizations identified below to implement these recommendations, with the goal of initiating the testing and other activities outlined here by the end of 2009 and completing the evaluation and subsequent dissemination initiatives by the end of 2010.

### **Pilot and Implement a Standard Set of Health Indicators**

- Provisionally adopt the proposed set of health and process indicators to test their feasibility.
- Authorize an Environmental Scan of all State Mental Health Agencies of their current activities and data in light of the proposed indicator set.
- Authorize a proposal to support pilot testing, based on states' interest and willingness to participate. The proposal will include detailed analysis of and recommendations for indicator measurement methods.

### **Adopt Proven Population Surveillance Tools**

- Revise the Mental Health Statistics Improvement Program (MHSIP) Consumer-Oriented Report Card to include selected indicators from the Behavioral Risk Factor Surveillance System (BRFSS) and other sources.
- Routinely incorporate the K6 and PHQ-9 (surveys to measure psychological distress and depression severity, found in Appendices E and F) and other validated mental health surveillance instruments into the Centers for Disease Control and Prevention (CDC) BRFSS annual survey.

### **Engage Public Health And Healthcare Leadership in Action**

- Involve the Association of State and Territorial Health Officers (ASTHO) and the National Association of County and City Health Officials (NACCHO) in planning and collaboration to address the needs of SMHA consumers.
- Involve the National Council for Community Behavioral Healthcare (NCCBH) and National Association of Community Health Centers (NACHC) in planning for implementation of the Health Indicators pilot.

- Continue to advocate with the CDC and the Health Resources and Services Administration (HRSA) to designate SMHA consumers as a health disparities population and to sponsor a Collaborative on Prevention and Management of Chronic Medical Conditions in People with Serious Mental Illnesses.
- Involve the National Association of State Medicaid Directors (NASMD) and the Centers for Medicare and Medicaid Services (CMS) to identify opportunities and barriers to improving access/utilization of Medicaid health quality initiatives for persons living with serious mental illness. Coordinate with CMS to address the co-morbidity of mental illness and chronic disease in its services research and in its policy and planning.
- Coordinate with the Agency for Healthcare Research and Quality (AHRQ) to develop standards of quality care for persons with co-morbid chronic health conditions and serious mental illnesses.
- Members of the NASMHPD Medical Directors Council are also leaders in their SMHAs and should engage medical leadership in their state Public Health and Medicaid authorities to promote integration of health and mental health issues in state level health policy, planning and reimbursement.
  - Assign senior leadership within the SMHA to link with healthcare and Public Health leadership.
  - Disseminate data at the state/local level on the association of mental health issues with health risk and chronic disease in the general population. Support small steps to integrate mental health screening and treatment into primary care and public health activities.
  - Working with the State Medicaid authority, leverage quality improvement programs that are being implemented at the state level, to assure inclusion of people living with serious mental illnesses.

## VIII. Appendices

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## **B. Substance Abuse and Mental Health Services Administration's National Consensus Statement on Recovery**

### **The 10 Fundamental Components of Recovery**

#### **Self-Direction:**

Consumers lead, control, exercise choice over, and determine their own path of recovery by optimizing autonomy, independence, and control of resources to achieve a self-determined life. By definition, the recovery process must be self-directed by the individual, who defines his or her own life goals and designs a unique path towards those goals.

#### **Individualized and Person-Centered:**

There are multiple pathways to recovery based on an individual's unique strengths and resiliencies as well as his or her needs, preferences, experiences (including past trauma), and cultural background in all of its diverse representations. Individuals also identify recovery as being an ongoing journey and an end result as well as an overall paradigm for achieving wellness and optimal mental health.

#### **Empowerment:**

Consumers have the authority to choose from a range of options and to participate in all decisions—including the allocation of resources—that will affect their lives, and are educated and supported in so doing. They have the ability to join with other consumers to collectively and effectively speak for themselves about their needs, wants, desires, and aspirations. Through empowerment, an individual gains control of his or her own destiny and influences the organizational and societal structures in his or her life.

#### **Holistic:**

Recovery encompasses an individual's whole life, including mind, body, spirit, and community. Recovery embraces all aspects of life, including housing, employment, education, mental health and healthcare treatment and services, complementary and naturalistic services (such as recreational services, libraries, museums, etc.), addictions treatment, spirituality, creativity, social networks, community participation, and family supports as determined by the person. Families, providers, organizations, systems, communities, and society play crucial roles in creating and maintaining meaningful opportunities for consumer access to these supports.

#### **Non-Linear:**

Recovery is not a step-by step process but one based on continual growth, occasional setbacks, and learning from experience. Recovery begins with an initial stage of awareness in which a person recognizes that positive change is possible. This awareness enables the consumer to move on to fully engage in the work of recovery.

**Strengths-Based:**

Recovery focuses on valuing and building on the multiple capacities, resiliencies, talents, coping abilities, and inherent worth of individuals. By building on these strengths, consumers leave stymied life roles behind and engage in new life roles (e.g., partner, caregiver, friend, student, employee). The process of recovery moves forward through interaction with others in supportive, trust-based relationships.

**Peer Support:**

Mutual support—including the sharing of experiential knowledge and skills and social learning—plays an invaluable role in recovery. Consumers encourage and engage other consumers in recovery and provide each other with a sense of belonging, supportive relationships, valued roles, and community.

**Respect:**

Community, systems, and societal acceptance and appreciation of consumers—including protecting their rights and eliminating discrimination and stigma—are crucial in achieving recovery. Self-acceptance and regaining belief in one's self are particularly vital. Respect ensures the inclusion and full participation of consumers in all aspects of their lives.

**Responsibility:**

Consumers have a personal responsibility for their own self-care and journeys of recovery. Taking steps towards their goals may require great courage. Consumers must strive to understand and give meaning to their experiences and identify coping strategies and healing processes to promote their own wellness.

**Hope:**

Recovery provides the essential and motivating message of a better future—that people can and do overcome the barriers and obstacles that confront them. Hope is internalized; but can be fostered by peers, families, friends, providers, and others. Hope is the catalyst of the recovery process.

<http://mentalhealth.samhsa.gov/publications/allpubs/sma05-4129/>

## C. Six Dimensions of Wellness

Developed by Dr. Bill Hettler, Cofounder and President of the Board of Directors of the National Wellness Institute, this interdependent model, commonly referred to as the 6 Dimensions of Wellness, provides context for overall wellness.

### **Social:**

The social dimension encourages contributing to one's environment and community. It emphasizes the interdependence between others and nature. As you travel a wellness path, you'll become more aware of your importance in society as well as the impact you have on multiple environments. You'll take an active part in improving our world by encouraging healthier living and initiating better communication with those around you. You'll actively seek ways to preserve the beauty and balance of nature along the pathway as you discover the power to make willful choices to enhance personal relationships, important friendships, and build a better living space and community. Social wellness follows these tenets:

- It is better to contribute to the common welfare of our community than to think only of ourselves.
- It is better to live in harmony with others and our environment than to live in conflict with them.

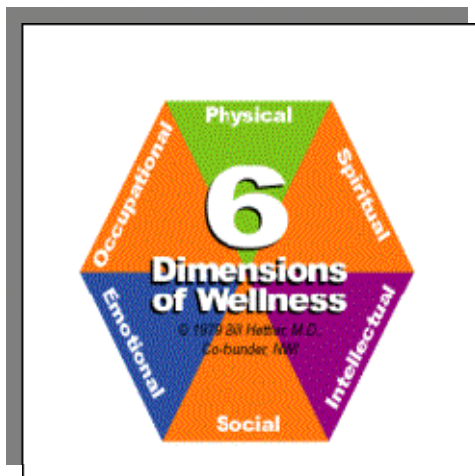
### **Occupational:**

The occupational dimension recognizes personal satisfaction and enrichment in one's life through work. At the center of occupational wellness is the premise that occupational development is related to one's attitude about one's work. Traveling a path toward your occupational wellness, you'll contribute your unique gifts, skills and talents to work that is both personally meaningful and rewarding. You'll convey your values through your involvement in activities that are gratifying for you. The choice of profession, job satisfaction, career ambitions, and personal performance are all important components of your path's terrain. Occupational wellness follows these tenets:

- It is better to choose a career which is consistent with our personal values interests and beliefs than to select one that is unrewarding to us.
- It is better to develop functional, transferable skills through structured involvement opportunities than to remain inactive and uninvolved.

### **Spiritual:**

The spiritual dimension recognizes our search for meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life and natural forces that exist in the universe. Your search will be characterized by a peaceful harmony between internal personal feelings and emotions and the rough and rugged stretches of your path. While traveling the path, you may experience many feelings of doubt, despair, fear, disappointment and dislocation as well as feelings of pleasure, joy, happiness and discovery—these are all important experiences and components to your search and will be displayed in the



value system you will adapt to bring meaning to your existence. You'll know you're becoming spiritually well when your actions become more consistent with your beliefs and values, resulting in a "world view." Spiritual wellness follows these tenets:

- It is better to ponder the meaning of life for ourselves and to be tolerant of the beliefs of others than to close our minds and become intolerant.
- It is better to live each day in a way that is consistent with our values and beliefs than to do otherwise and feel untrue to ourselves.

### **Physical:**

The physical dimension recognizes the need for regular physical activity. Physical development encourages learning about diet and nutrition while discouraging the use of tobacco, drugs and excessive alcohol consumption. Optimal wellness is met through the combination of good exercise and eating habits. As you travel the wellness path, you'll strive to spend time building physical strength, flexibility and endurance while also taking safety precautions so you may travel your path successfully, including medical self-care and appropriate use of a medical system. The physical dimension of wellness entails personal responsibility and care for minor illnesses and also knowing when professional medical attention is needed. By traveling the wellness path, you'll be able to monitor your own vital signs and understand your body's warning signs. You'll understand and appreciate the relationship between sound nutrition and how your body performs. The physical benefits of looking good and feeling terrific most often lead to the psychological benefits of enhanced self-esteem, self-control, determination and a sense of direction. Physical wellness follows these tenets:

- It is better to consume foods and beverages that enhance good health rather than those which impair it.
- It is better to be physically fit than out of shape.

### **Intellectual:**

The intellectual dimension recognizes one's creative, stimulating mental activities. A well person expands their knowledge and skills while discovering the potential for sharing their gifts with others. Using intellectual and cultural activities in the classroom and beyond the classroom combined with the human resources and learning resources available within the university community and the larger community, a well person cherishes intellectual growth and stimulation. Traveling a wellness path, you'll explore issues related to problem solving, creativity, and learning. You'll spend more time pursuing personal interests, reading books, magazines, and newspapers, while keeping abreast of current issues and ideas. As you develop your intellectual curiosity, you'll actively strive to expand and challenge your mind with creative endeavors. Intellectual wellness follows these tenets:

- It is better to stretch and challenge our minds with intellectual and creative pursuits than to become self-satisfied and unproductive.
- It is better to identify potential problems and choose appropriate courses of action based on available information than to wait, worry and contend with major concerns later.

### **Emotional:**

The emotional dimension recognizes awareness and acceptance of one's feelings. Emotional wellness includes the degree to which one feels positive and enthusiastic about oneself and life. It includes the capacity to manage one's feelings and related behaviors including the realistic

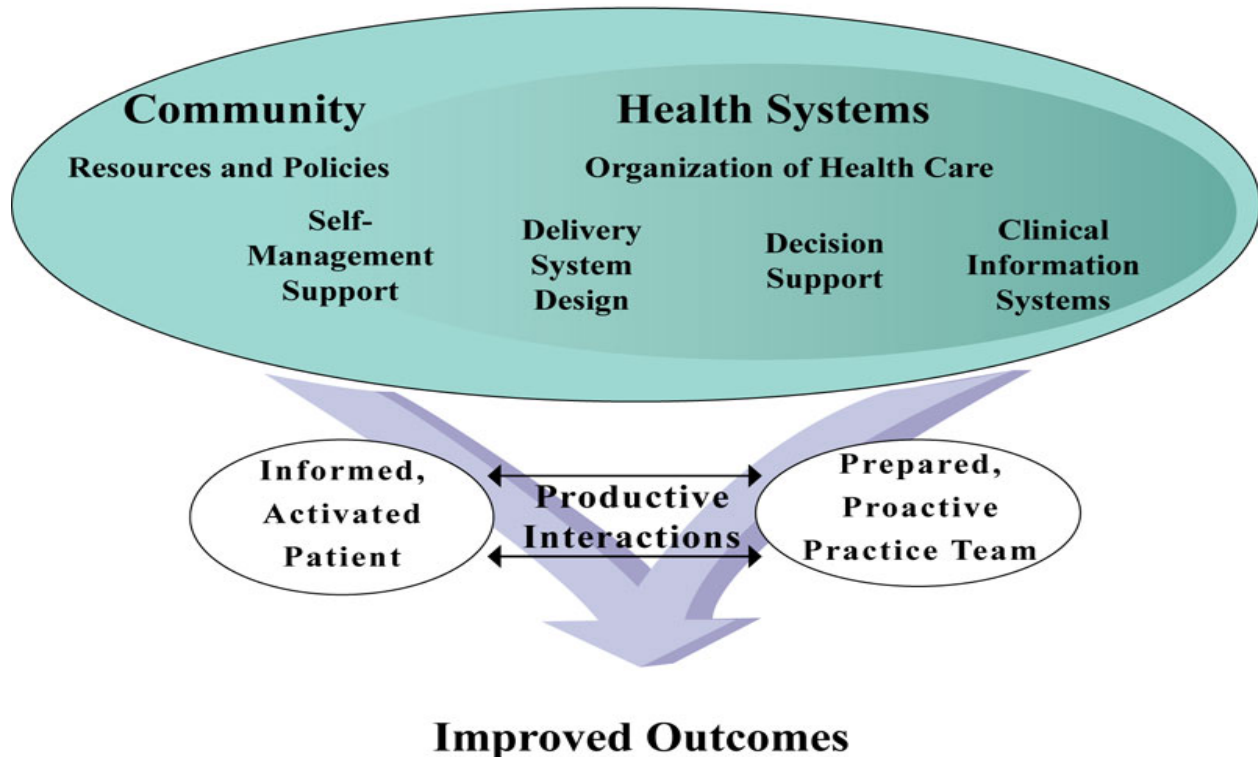
assessment of one's limitations, development of autonomy, and ability to cope effectively with stress. The well person maintains satisfying relationships with others. Awareness of, and accepting a wide range of feelings in yourself and others is essential to wellness. On the wellness path, you'll be able to express feelings freely and manage feelings effectively. You'll be able to arrive at personal choices and decisions based upon the synthesis of feelings, thoughts, philosophies, and behavior. You'll live and work independently while realizing the importance of seeking and appreciating the support and assistance of others. You'll be able to form interdependent relationships with others based upon a foundation of mutual commitment, trust and respect. You'll take on challenges, take risks, and recognize conflict as being potentially healthy. Managing your life in personally rewarding ways, and taking responsibility for your actions, will help you see life as an exciting, hopeful adventure. Emotional wellness follows these tenets:

- It is better to be aware of and accept our feelings than to deny them.
- It is better to be optimistic in our approach to life than pessimistic.

<http://www.nationalwellness.org/index.php>

## D. The Chronic Care Model and the Patient-Centered Medical Home

### The Chronic Care Model



Developed by The MacColl Institute  
© ACP-ASIM Journals and Books

The Chronic Care Model was developed by Ed Wagner and his colleagues under the Improving Chronic Illness Care Program.

<http://www.improvingchroniccare.org/>.

#### Joint Principles of the Patient-Centered Medical Home

American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, American Osteopathic Association. Released February 2007.

- **Personal physician**—each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.
- **Physician directed medical practice**—the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.
- **Whole person orientation**—the personal physician is responsible for providing for all the patient's healthcare needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life: acute care; chronic care; preventive services; and end of life care.
- **Care is coordinated and/or integrated** across all elements of the complex healthcare system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the

patient's community (e.g., family, public, and private community based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

- **Quality and safety** are hallmarks of the medical home:
  - Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are defined by a care planning process driven by a compassionate, robust partnership between physicians, patients, and the patient's family.
  - Evidence-based medicine and clinical decision-support tools guide decision making.
  - Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement.
  - Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met.
  - Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication.
  - Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
  - Patients and families participate in quality improvement activities at the practice level.
- **Enhanced access** to care is available through systems such as open scheduling, expanded hours, and new options for communication between patients, their personal physician, and practice staff.
- **Payment** appropriately recognizes the added value provided to patients who have a patient-centered medical home. The payment structure should be based on the following framework:
  - It should reflect the value of physician and non-physician staff patient-centered care management work that falls outside of the face-to-face visit.
  - It should pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
  - It should support adoption and use of health information technology for quality improvement.
  - It should support provision of enhanced communication access such as secure e-mail and telephone consultation.
  - It should recognize the value of physician work associated with remote monitoring of clinical data using technology.
  - It should allow for separate fee-for-service payments for face-to-face visits. (Payments for care management services that fall outside of the face-to-face visit, as described above, should not result in a reduction in the payments for face-to-face visits).
  - It should recognize case mix differences in the patient population being treated within the practice.
  - It should allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting.
  - It should allow for additional payments for achieving measurable and continuous quality improvements.

## **E. Serious Psychological Distress Scale (K6)**

The serious psychological distress scale (K6) is a six-item scale developed to measure serious mental illnesses. The K6 was asked of adults 18 years of age and older. The answers were self-reported and no proxies were allowed. The K6 is designed to identify persons with serious psychological distress using as few questions as possible. The six items included in the K6 are:

During the past 30 days, how often did you feel so sad that nothing could cheer you up?

—nervous?

—restless or fidgety?

—hopeless?

—that everything was an effort?

—worthless?

Possible answers are all of the time (4 points), most of the time (3 points), some of the time (2 points), a little of the time (1 point), and none of the time (0 points). To score the K6, the points are added together yielding a possible total of 0 to 24 points. A threshold of 13 or more is used to define serious mental illnesses. Persons answering “some of the time” to all six questions would not reach the threshold for serious mental illnesses, since to achieve a score of 13 they would need to answer “most of the time” to at least one item.

<http://www.cdc.gov/nchs/datawh/nchsdefs/seriouspsydistress.htm>

## F. Patient Health Questionnaire (PHQ-9)

### PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

Over the last 2 weeks, how often have you been bothered by any of the following problems?  
(use "✓" to indicate your answer)

	Not at all	Somewhat	More than half	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

add columns:  +  +

*(healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).* TOTAL:

10. If you checked off <i>any</i> problems, how <i>difficult</i> have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

Fold back this page before administering this questionnaire

## INSTRUCTIONS FOR USE

*for doctor or healthcare professional use only*

### PHQ-9 QUICK DEPRESSION ASSESSMENT

#### For initial diagnosis:

1. Patient completes PHQ-9 Quick Depression Assessment on accompanying tear-off pad.
2. If there are at least 4 ✓s in the blue highlighted section (including Questions #1 and #2), consider a depressive disorder. Add score to determine severity.
3. **Consider Major Depressive Disorder**  
—if there are at least 5 ✓s in the blue highlighted section (one of which corresponds to Question #1 or #2)  
**Consider Other Depressive Disorder**  
—if there are 2 to 4 ✓s in the blue highlighted section (one of which corresponds to Question #1 or #2)

**Note:** Since the questionnaire relies on patient self-report, all responses should be verified by the clinician and a definitive diagnosis made on clinical grounds, taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient. Diagnoses of Major Depressive Disorder or Other Depressive Disorder also require impairment of social, occupational, or other important areas of functioning (Question #10) and ruling out normal bereavement, a history of a Manic Episode (Bipolar Disorder), and a physical disorder, medication, or other drug as the biological cause of the depressive symptoms.

#### To monitor severity over time for newly diagnosed patients or patients in current treatment for depression:

1. Patients may complete questionnaires at baseline and at regular intervals (eg, every 2 weeks) at home and bring them in at their next appointment for scoring or they may complete the questionnaire during each scheduled appointment.
2. Add up ✓s by column. For every ✓: Several days = 1    More than half the days = 2    Nearly every day = 3
3. Add together column scores to get a TOTAL score.
4. Refer to the accompanying PHQ-9 Scoring Card to interpret the TOTAL score.
5. Results may be included in patients' files to assist you in setting up a treatment goal, determining degree of response, as well as guiding treatment intervention.

#### PHQ-9 SCORING CARD FOR SEVERITY DETERMINATION

*for healthcare professional use only*

##### Scoring—add up all checked boxes on PHQ-9

For every ✓: Not at all = 0; Several days = 1;  
More than half the days = 2; Nearly every day = 3

##### Interpretation of Total Score

Total Score	Depression Severity
1-4	Minimal depression
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

[http://www.cqaimh.org/tool\\_depSCREEN.html](http://www.cqaimh.org/tool_depSCREEN.html)

## G. Maine Data Collection and Analysis Examples

### HEALTH AND WELL-BEING Questions from BRFSS for 2008 Maine MHSIP Survey

41. Height \_\_\_\_\_ Weight \_\_\_\_\_

42. Have you ever been told by your doctor or health professional that you have? (*check all that apply*)

\_\_\_\_\_ angina or coronary heart disease

\_\_\_\_\_ heart attack or myocardial infarction

\_\_\_\_\_ blood cholesterol is high

\_\_\_\_\_ high blood pressure

\_\_\_\_\_ Diabetes

43. Do you smoke cigarettes?

\_\_\_\_\_ Everyday

\_\_\_\_\_ Some Days

\_\_\_\_\_ Does not smoke

44. Would you say that your general health is:

\_\_\_\_\_ Excellent

\_\_\_\_\_ Very Good

\_\_\_\_\_ Good

\_\_\_\_\_ Fair

\_\_\_\_\_ Poor

45. Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?

\_\_\_\_\_ Number of Days

46. Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?

\_\_\_\_\_ Number of Days

47. During the past 30 days, about how many days did poor physical or mental health keep you from doing usual activities, such as self-care, school, or recreation?

\_\_\_\_\_ Number of Days

**BRFSS Questions added to 2007 Maine  
Mental Health Consumer Satisfaction  
Survey**

- Height and Weight (translated into Body Mass Index)
- Have you ever been told by a doctor or health professional that you have.....(coronary artery disease, heart attack, diabetes, high blood pressure, high cholesterol)
- Do you smoke
- How many days during the last month was your physical health not good?

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**Health Risk**  
Maine BRFSS and MH Consumer  
Satisfaction Survey

	<b>MH Consumer Survey</b>	<b>BRFSS Maine Rate</b>
<b>Smoking</b>	<b>48.6%</b>	<b>20.1%</b>
<b>Obese</b>	<b>49.7%</b>	<b>23.2%</b>
<b>Coronary Artery Disease</b>	<b>9.9%</b>	<b>5.7%</b>
<b>Diabetes</b>	<b>7.8%</b>	<b>24.5%</b>

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## Physical Ill Health

14 or more days poor physical health

Mental Health Consumer: 21.5%

All Mainers (BRFSS): 11.6%

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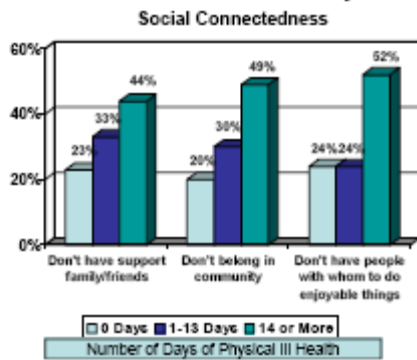
## Satisfaction Related to Health Status



- Significant differences were found (marked with red asterisks) between those who reported 0 sick days in the last month and those who reported being sick more than 14 days in four domain areas.
- The significant differences were found in Perception of Access (86.4% vs. 77.0%), Social Connectedness (71.2% vs. 47.7%), Perception of Outcomes (85.3% vs. 39.1%), and Functioning (71.4% vs. 50.6%).

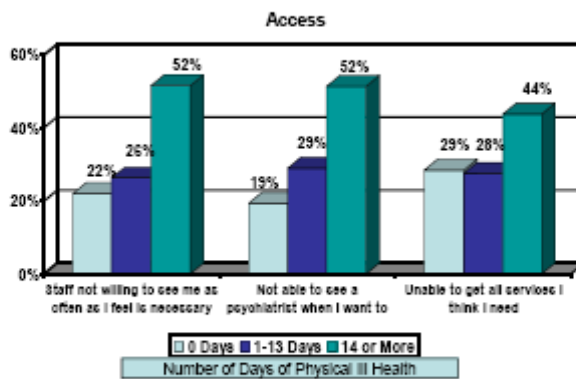
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### Satisfaction Results Consumers with and without Physical Ill Health

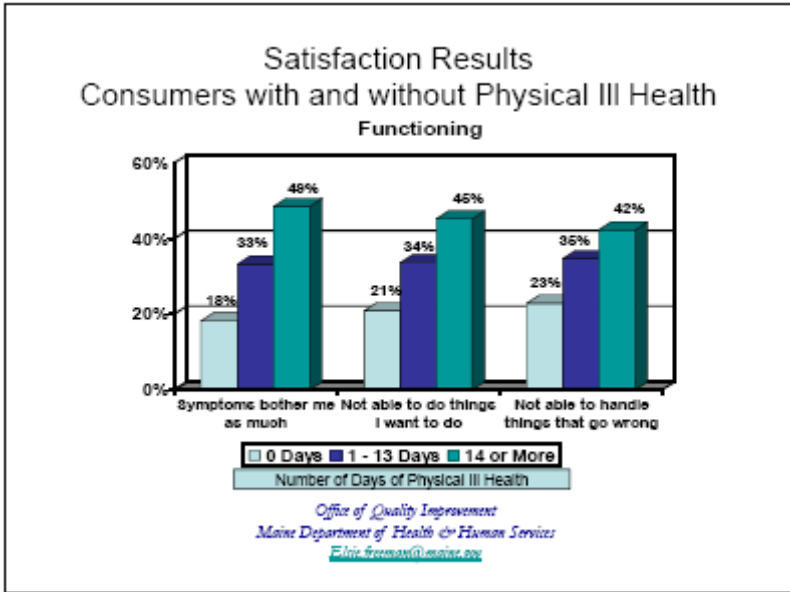
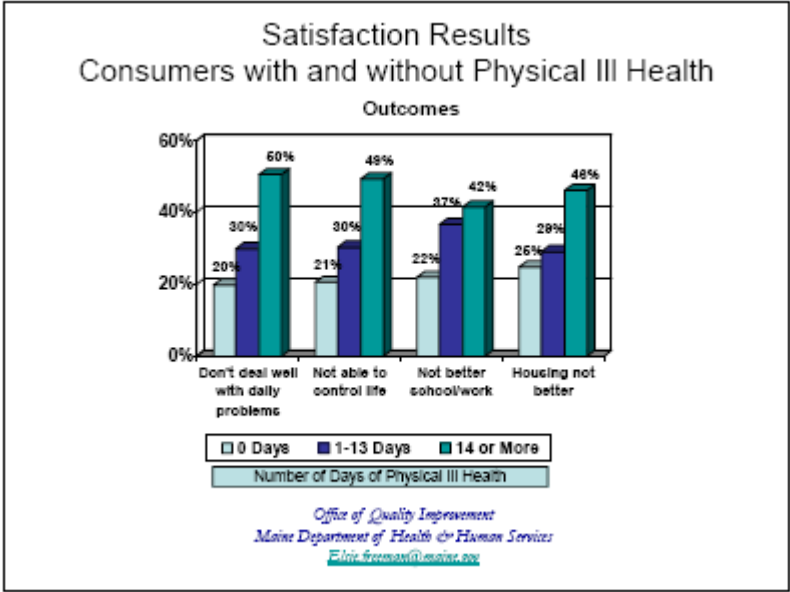


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### Satisfaction Results Consumers with and without Physical Ill Health



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## H. Additional References

- For additional information on measurement in primary care, see the Recommended Starter Set of Clinical Performance Measures for Ambulatory Care.  
<http://www.ahrq.gov/qual/aqastart.htm>
- The Uniform Data System (UDS), Bureau of Primary Health Care, Health Resources and Services Administration, has quality of care, health outcomes and disparities indicators reported by Section 330 grantees (See Table 6B and Table 7)  
<ftp://ftp.hrsa.gov/bphc/pdf/uds/2008udsmanual.pdf>
- NCQA has initiated the development of standards for practices that wish to be certified as a patient centered medical home: NCQA Physician Practice Connections (PPC) and Patient-Centered Medical Home (PCMH).  
<http://www.ncqa.org/tabid/631/Default.aspx>
- The Joint Commission ORYX® initiative includes a measure on communication between inpatient mental health settings and aftercare providers (*HBIPS-7 Post discharge continuing care plan transmitted to next level of care provider upon discharge*). Two continuing care plan measures (6 and 7) address the connection between the inpatient system and the next level of care provider. For purposes of these measures, the continuing care plan is assessed for inclusion for the following four components: discharge diagnosis, discharge medications, reason for hospitalization, and recommendation for next level of care. Measure 7 then examines the rate to which this information is relayed to the primary next care provider by five days post discharge. The primary next care provider is defined as the prescribing inpatient clinician, prescribing inpatient entity, or treating inpatient clinician or entity (in the absence of medications) chiefly responsible for managing the client's care after discharge.

Reporting on this measure could be extended to include information on health status to both mental health and primary care providers.

<http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/Hospital+Based+Inpatient+Psychiatric+Services.htm>

## I. Endnotes

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- <sup>2</sup> Parks J, Svendsen D, Singer P, Foti M, Mauer B. *Morbidity and mortality in people with serious mental illness*. National Association of State Mental Health Program Directors, 2006. [www.nasmhpd.org](http://www.nasmhpd.org)
- <sup>3</sup> [www.bu.edu/cpr/resources/wellness-summit](http://www.bu.edu/cpr/resources/wellness-summit)
- <sup>4</sup> Lutterman T, Ganju V, Schacht L, Shaw R, Monihan K, et.al. Sixteen State Study on Mental Health Performance Measures. DHHS Publication No. (SMA) 03-3835. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2003
- <sup>5</sup> Parks J, Svendsen D, Singer P, Foti M, Mauer B. *Morbidity and mortality in people with serious mental illness*. National Association of State Mental Health Program Directors, 2006. [www.nasmhpd.org](http://www.nasmhpd.org)
- <sup>6</sup> Freeman, E., Yoe, J.T. *The Poor Health Status of Consumers of Mental Healthcare: Behavioral Disorders and Chronic Disease*, Presentation to NASMHPD Medical Directors Work Group, May 2006.
- <sup>7</sup> Freeman, E. Medical Director, Behavioral Health, Maine Department of Health and Human Services. Personal communication.
- <sup>8</sup> Crossing the quality chasm: A new health system for the 21<sup>st</sup> century. Institute of Medicine, 2001. Improving the quality of health care for mental and substance-use conditions, Institute of Medicine, 2005
- <sup>9</sup> <http://www.improvingchroniccare.org>
- <sup>10</sup> [http://www.thenationalcouncil.org/cs/business\\_practice\\_areas/primary\\_care](http://www.thenationalcouncil.org/cs/business_practice_areas/primary_care)
- <sup>11</sup> Berenson, R et al. A house is not a home: Keeping patients at the center of practice redesign. Health Affairs. Sept-Oct 2008, Vol.27, Number 5.
- <sup>12</sup> *National Consensus Statement on Mental Health Recovery*. Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. February 2006
- <sup>13</sup> <http://www.nationalwellness.org/index.php>
- <sup>14</sup> [www.bu.edu/cpr/resources/wellness-summit](http://www.bu.edu/cpr/resources/wellness-summit)
- <sup>15</sup> [www.bu.edu/cpr/resources/wellness-summit](http://www.bu.edu/cpr/resources/wellness-summit)
- <sup>16</sup> *Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes*, American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, and the North American Association for the Study of Obesity, 2004.
- <sup>17</sup> Barnett M, et al. *Assessment of monitoring for glucose dysregulation and dyslipidemia in adult Medi-Cal patients newly started on antipsychotics*. Under review.
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- <sup>19</sup> Chwastiak, L. Yale New Haven Psychiatric Hospital. Personal communication 2008.
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- <sup>21</sup> <http://www.cdc.gov/omhd/Populations/Disability/Disability.htm>