

The Indiana Division of Mental Health and Addiction (DMHA) in collaboration with its integration stakeholder cross agency partners submitted a Technical Transfer Initiative (TTI) grant proposal and was awarded funding from the Substance Abuse and Mental Health Services Administration (SAMHSA) through the National Association of State Mental Health Program Directors (NASMHPD). That grant is supporting today's training activities.

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Introduction to Primary and Behavioral Healthcare Integration

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Disclosures

Consultant, National Council

Modules

- **Module 1:** Introduction to Primary and Behavioral Health Integration
- **Module 2:** Overview of the Behavioral Health Environment
- **Module 3:** Approach to the Physical Exam and Health Behavior Change
- **Module 4:** Psychopharmacology and Working with Psychiatric Providers
- **Module 5:** Roles for PCPs in the Behavioral Health Environment

Module 1

Introduction to Primary Behavioral Healthcare Integration

- Learning Objectives:
- Appreciate the reasons for premature mortality
- Know SMI and GAF definitions
- Recognize diagnostic features of the major disorders
- List the current models of care for providing primary care in behavioral health settings
- Know the Core Principles of Integrated Care

Pre Test Questions

1. The premature mortality seen in the SMI population is:
 1. 25 – 30 years
 2. 20 – 25 years
 3. 15 – 20 years
 4. 10 – 15 years
2. What percent of illness contributing to this early mortality is preventable?
 1. 20%
 2. 40%
 3. 60%
 4. 80%
3. What are the leading illnesses that contribute?
 1. Cardiovascular
 2. Infectious disease
 3. Cancers
 4. All the Above

Overview

- What is the problem?
- Why is this a problem?
- Define the target population
- Specific diagnosis included
- Barriers to treatment
- Cost issues
- What models are out there?
- Spectrum of collaborative care

Why primary care services in mental health populations?



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

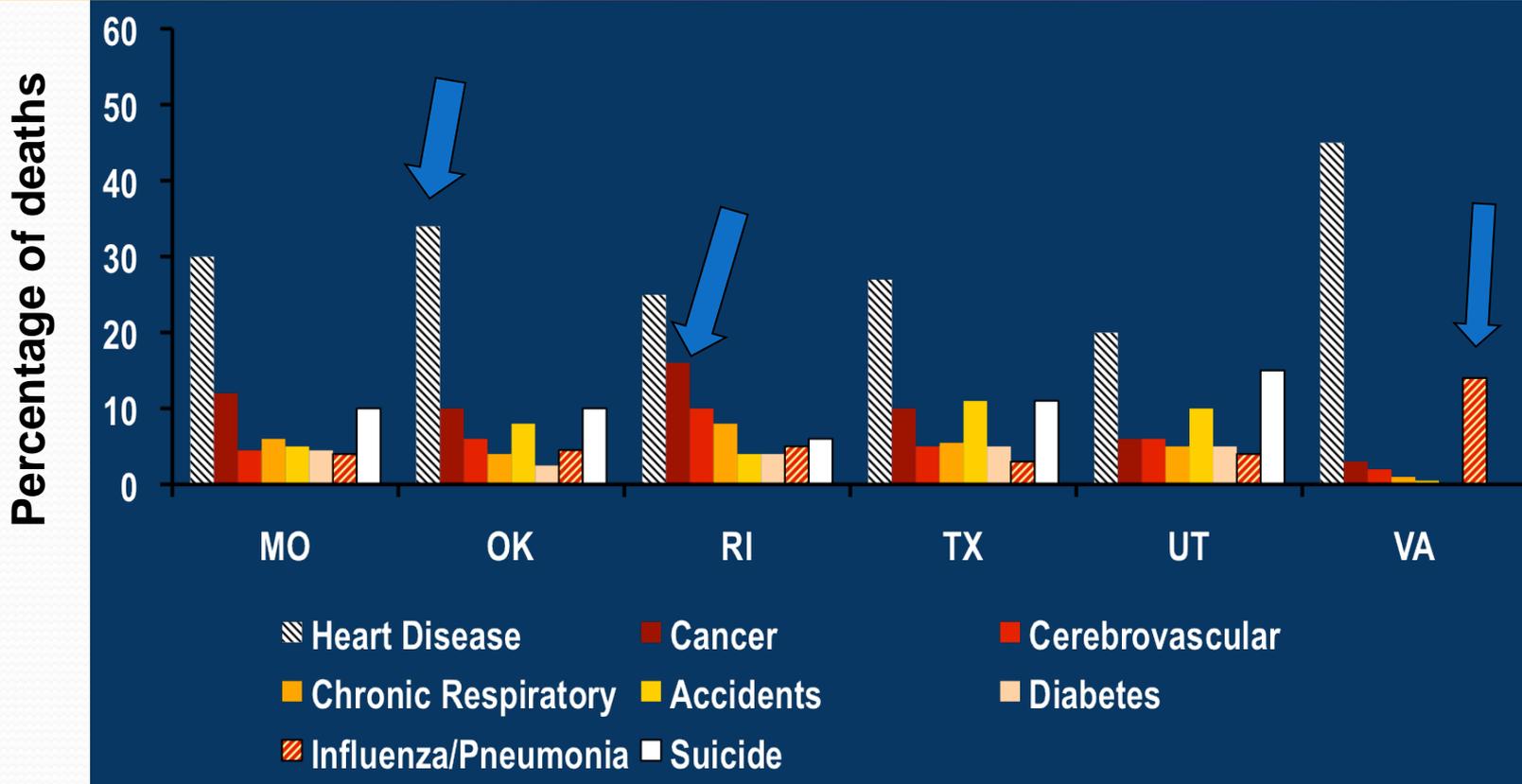
Multi-State Study Mortality Data: Years of Potential Life Lost

Year	AZ	MO	OK	RI	TX	UT	VA (IP only)
1997		26.3	25.1		28.5		
1998		27.3	25.1		28.8	29.3	15.5
1999	32.2	26.8	26.3		29.3	26.9	14.0
2000	31.8	27.9		24.9			13.5

Compared to the general population, persons with major mental illness typically lose more than 25 years of normal life span

Colton CW, Manderscheid RW. Prev Chronic Dis [serial online] 2006 Apr

Cardiovascular Disease Is Primary Cause of Death in Persons with Mental Illness



*Average data from 1996-2000. Colton CW, Manderscheid RW. Prev Chronic Dis [serial online] 2006 Apr [date cited].

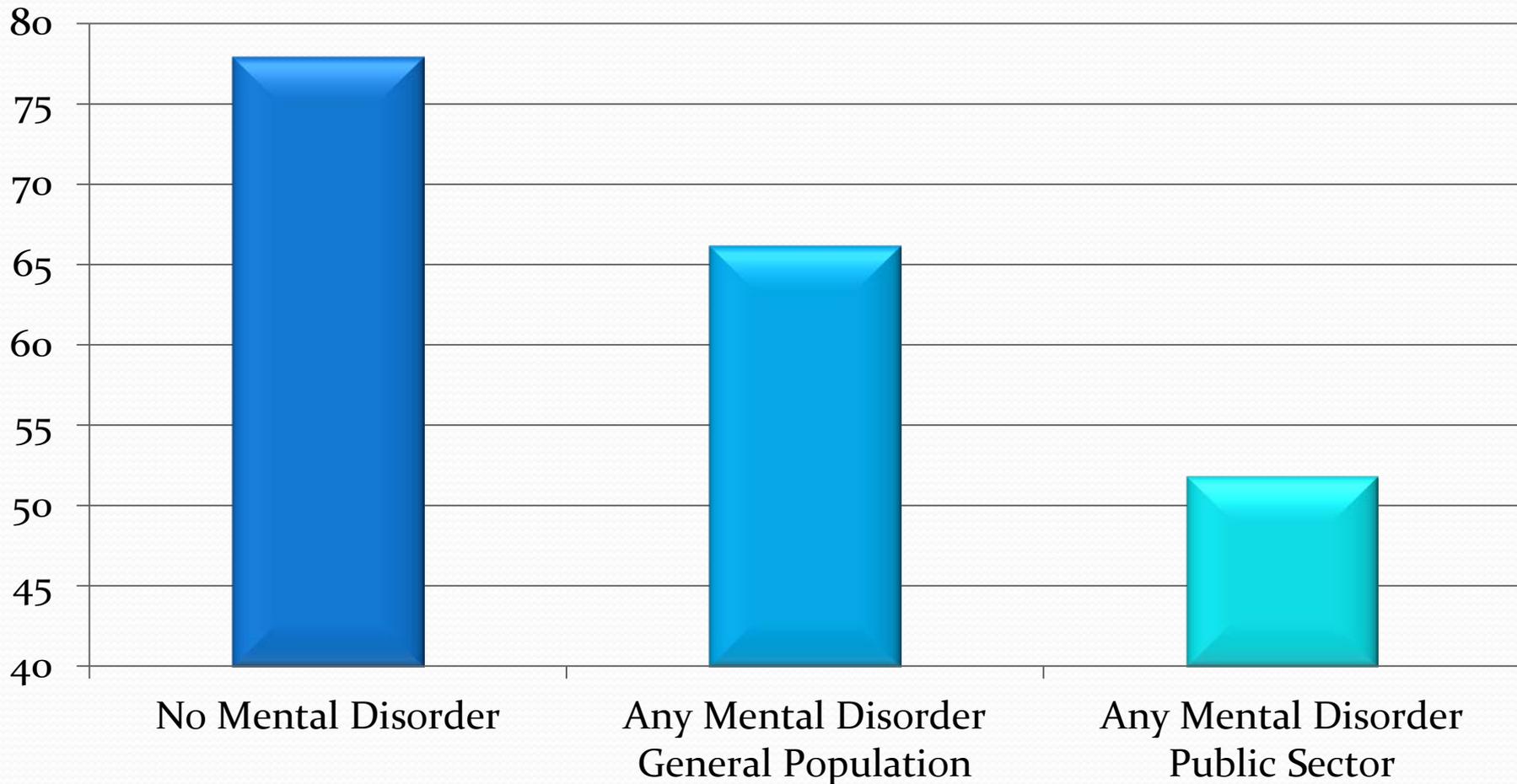
Decreased Life Span – 15-20 Years

- It is well established that persons with mental illness have a shorter lifespan mortality compared with the general population -
 - Compared to the general population, persons with major mental illness typically lose more than 25 years of normal life span. (Lutterman , 2003)
 - Men with Schizophrenia 15 years earlier, Women 12 years (Crump, 2013, AJP)
 - Persons with mental disorder die on average of 8.2 years earlier than the rest of the population (Druss, 2011)

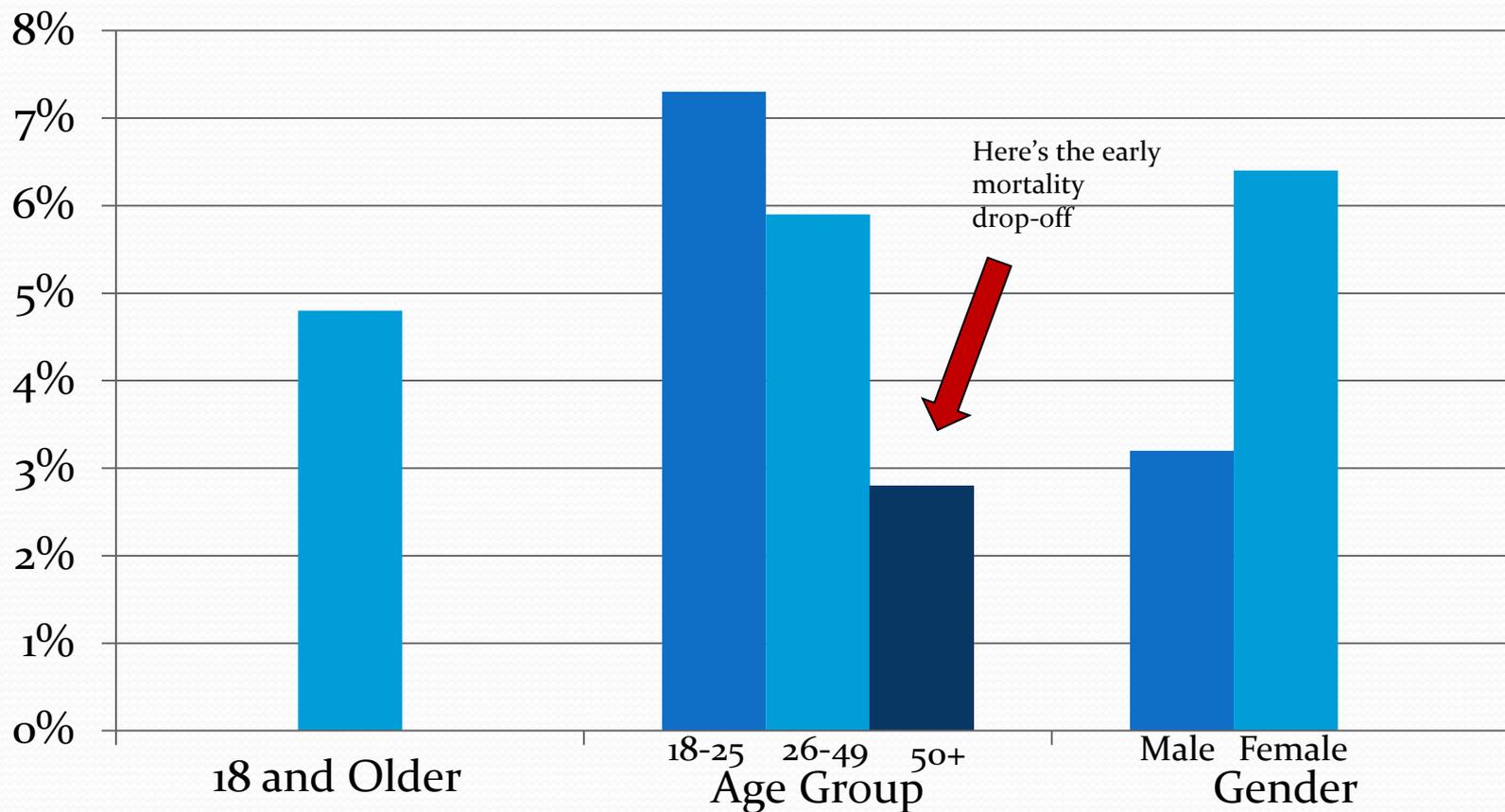
*** Bottom line: the mortality gap has progressively increased from 10-15 years to 15-20 in the past ~30 years*

- While suicide and injury account for about 30-40% of excess mortality, **60%** of premature deaths in persons with schizophrenia are due to medical conditions such as cardiovascular, pulmonary and infectious diseases. (Parks, 2006)

Life Span with and Without Mental Disorders

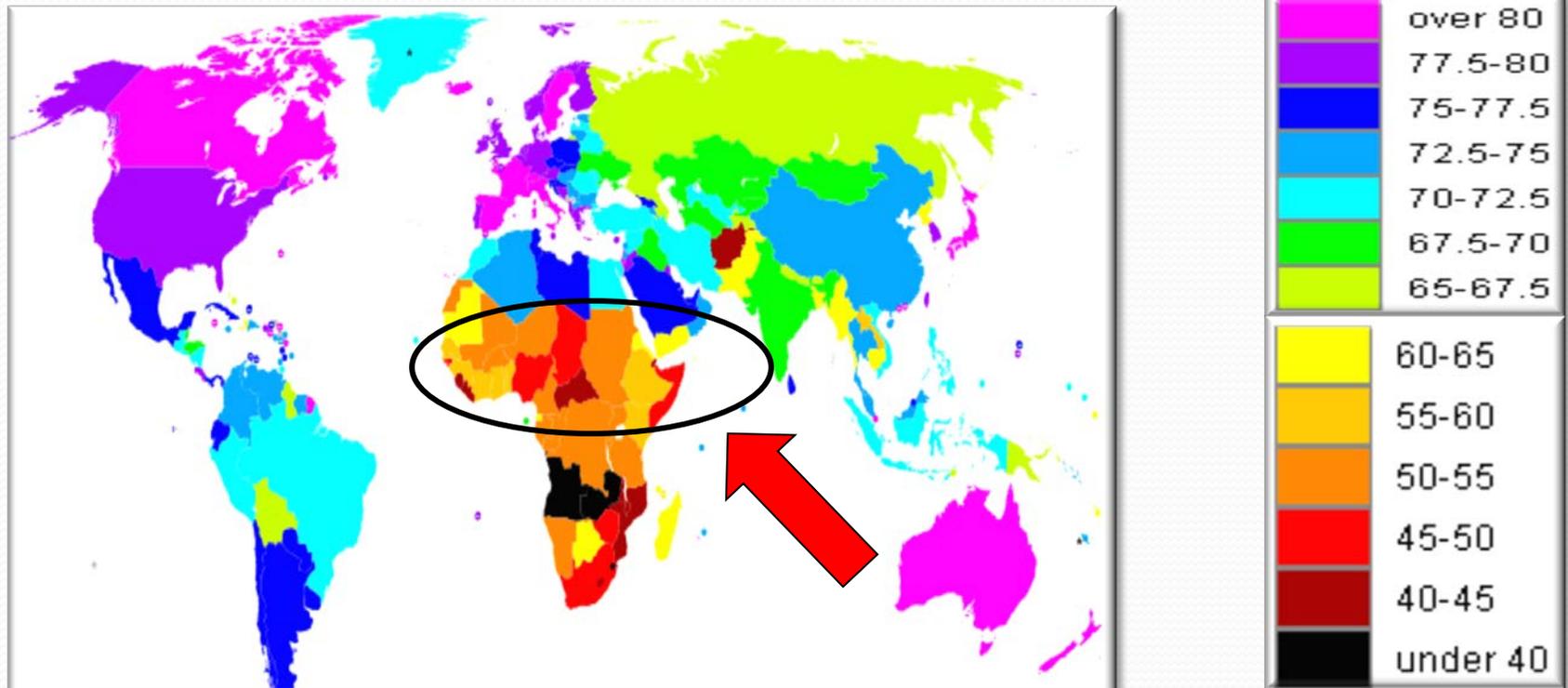


Serious Mental Illness in the Past Year Among Adults, 18 and Over



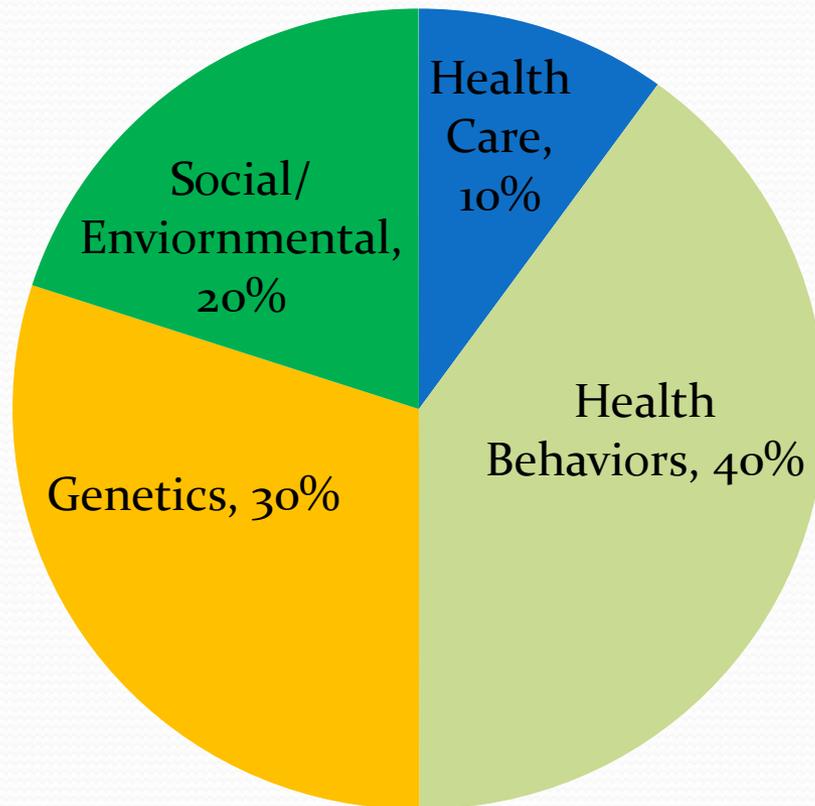
Data courtesy of SAMHSA

How This Looks World-Wide – Life Span



NASMHPD 2006 Study: *Morbidity and Mortality in People with Serious Mental Illness*

Preventable Causes of Death



N Engl J Med. 2007 Sep 20;357(12):1221-8.

Cardiovascular Disease Risk Factors

Modifiable Risk Factors	Estimated Prevalence and Relative Risk (RR)	
	Schizophrenia	Bipolar Disorder
Obesity	45–55%, 1.5-2X RR ¹	26% ⁵
Smoking	50–80%, 2-3X RR ²	55% ⁶
Diabetes	10–14%, 2X RR ³	10% ⁷
Hypertension	≥18% ⁴	15% ⁵
Dyslipidemia	Up to 5X RR ⁸	42%
Metabolic Syndrome	43%	37%

1. Davidson S, et al. *Aust N Z J Psychiatry*. 2001;35:196-202. 2. Allison DB, et al. *J Clin Psychiatry*. 1999; 60:215-220.
3. Dixon L, et al. *J Nerv Ment Dis*. 1999;187:496-502. 4. Herran A, et al. *Schizophr Res*. 2000;41:373-381.
5. MeElroy SL, et al. *J Clin Psychiatry*. 2002;63:207-213. 6. Uçok A, et al. *Psychiatry Clin Neurosci*. 2004;58:434-437.
7. Cassidy F, et al. *Am J Psychiatry*. 1999;156:1417-1420. 8. Allebeck. *Schizophr Bull*. 1999;15(1)81-89. 9. VanCampfort, *AJP*, 2013

Cumulative Effect of Many Problems



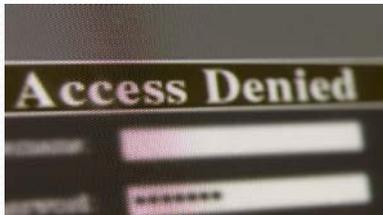
Modifiable Risk Factors:
Smoking, Weight
and Inactivity



Social isolation/Vulnerability
Violence



Unemployment/
Poverty



Lack of access
to care



Medication/
Polypharmacy



Separate Silos of care

Non-Treatment of Medical Comorbidity: Discovered prior to start of CATIE trial

Rates of non-treatment

30.2% for diabetes

62.4% for hypertension

88.0% for dyslipidemia

Nasrallah HA et al, 2006

From: Cigarette Smoking Among Persons With Schizophrenia or Bipolar Disorder in Routine Clinical Settings, 1999–2011

Psychiatric Services. 2013;64(1):44-50. doi:10.1176/appi.ps.201200143

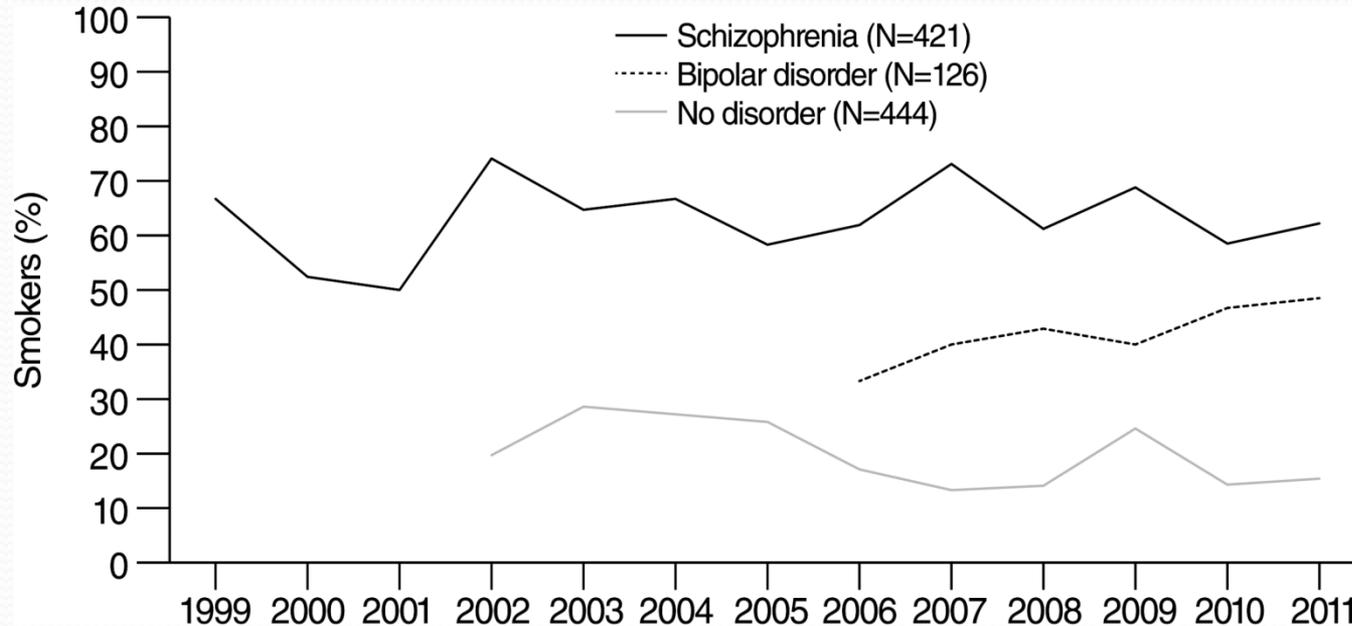


Figure Legend:

Percentage of smokers by diagnostic group and year of enrollment^{aa}Data are not shown for the bipolar disorder sample prior to 2007 or for the control group (no psychiatric illness) for 2004 because N<10 for each of these years for these groups. Number of persons in each of the other groups, by year, follows. For schizophrenia: 1999, 15; 2000, 21; 2001, 10; 2002, 27; 2003, 34; 2004, 15; 2005, 48; 2006, 21; 2007, 26; 2008, 49; 2009, 77; 2010, 41; 2011, 37. For bipolar disorder: 2007, 15; 2008, 14; 2009, 20; 2010, 30; 2011, 33. For the no-disorder control group: 2002, 71; 2003, 28; 2005, 66; 2006, 35; 2007, 45; 2008, 64; 2009, 61; 2010, 35; 2011, 39

History of “SMI” Nomenclature

- Severe mental disorders were enumerated and operationalized in 1993 by the National Advisory MH Council at the request of the Senate. They were published in the *American Journal of Psychiatry* 150: pp 1457 ff. They include schizophrenia, schizoaffective disorders, Bipolar DO, Autism, and severe forms of Depression, Panic disorder, and OCD.

Fuller Torrey, MD

Definition: Severe Mental Illness (SMI)

- A **mental, behavioral or emotional disorder** (excluding substance & developmental disorders)
- **Functional disability** in areas of social and occupational functioning.
- **Serious functional impairment**, which substantially interferes with or limits one or more major life activities – GAF <50-60
- ** 1:20 of population with SMI (vs 1:5 for all mental illnesses)

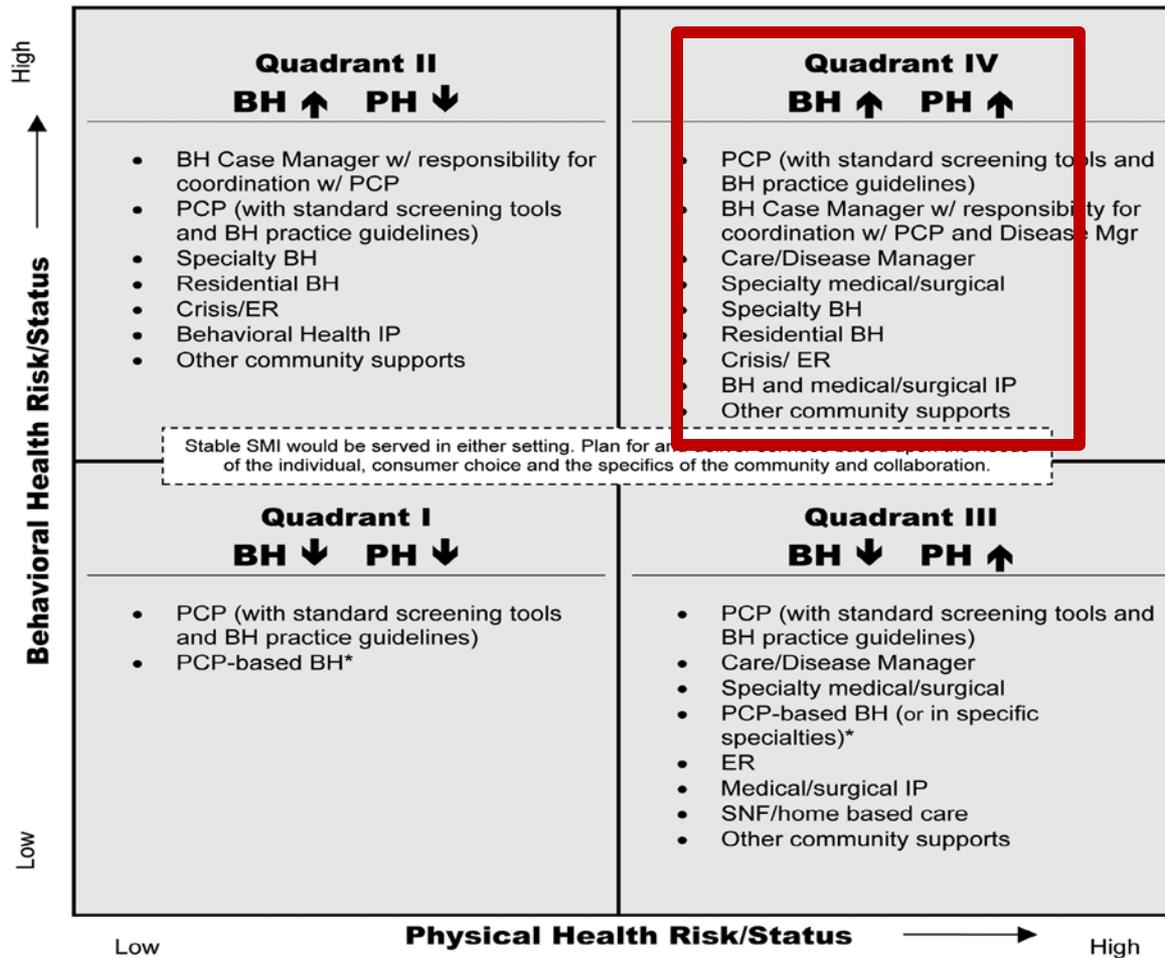
Spollen JJ. Perspectives in Serious Mental Illness. www.medscape.com

Global Assessment of Functioning (GAF) Score

- **61 – 100 No symptoms.** Superior functioning in a wide range of activities - Mild symptoms (e.g., depressed mood and mild insomnia) OR some difficulty in social, occupational, or school.
- **51 - 60 Moderate symptoms** (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning
- **41 - 50 Serious symptoms** (e.g., suicidal ideation, severe obsessional rituals,) OR any serious impairment in social, occupational, or school functioning
- **31 - 40 Some impairment in reality testing or communication** (e.g., speech is at times illogical, or irrelevant) OR major impairment in several areas,
- **21 - 30 Behavior is considerably influenced by delusions or hallucinations OR serious impairment**, in communication or judgment (e.g., sometimes incoherent, acts inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g., stays in bed , no job)
- **11 - 20 Some danger of hurting self or others** (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain hygiene , OR gross impairment in communication (e.g., largely incoherent or mute).
- **1 - 10 Persistent danger of severely hurting self or others** (e.g., recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.

DSM-IV TR

The Four Quadrant Clinical Integration Model



*PCP-based BH provider might work for the PCP organization, a specialty BH provider, or as an individual practitioner, is competent in both MH and SA assessment and treatment

Most Common Diagnosis in SMI Patients

56-70% Schizophrenia

20-34% Bipolar Disorder

10% Major depression, OCD or Borderline Personality disorder

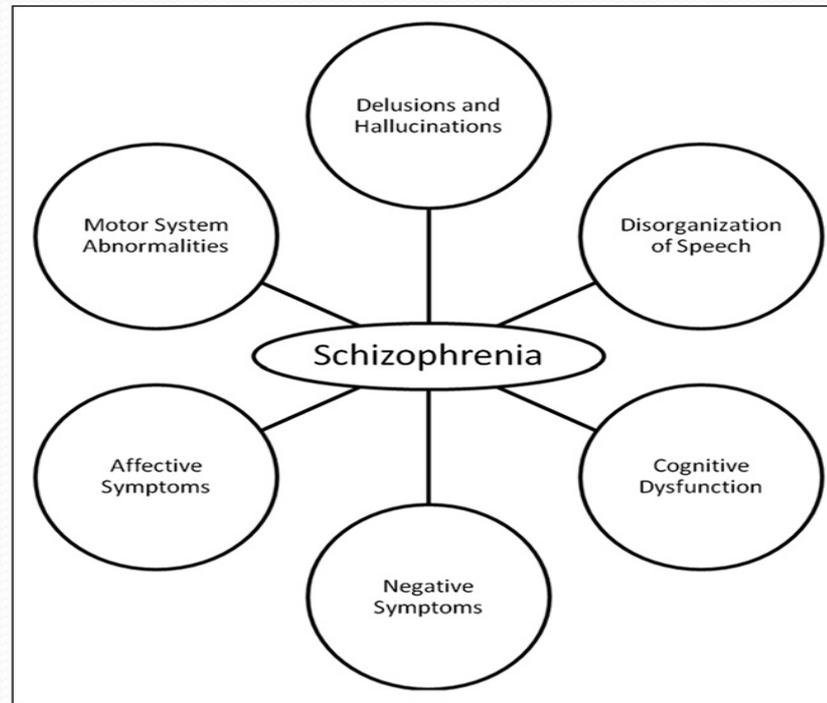
McDevitt J et al. Clinical practice recommendations-Evidenced-based guidelines for integrated care.2002

Schizophrenia -Diagnostic Criteria

- Two or more of the following:
 - **Positive** Symptoms – must have at least 2 and at least one must be hallucinations, delusions or disorganized speech
 - Hallucinations – auditory most common
 - Delusions – paranoid, somatic, grandiose
 - Disorganized Speech
 - Grossly Disorganized or Catatonic Behavior
 - **Negative** Symptoms
 - Flat affect – blank look, lack of expression
 - Lack of motivation/drive/desire to pursue goals
 - Lack of additional, unprompted content seen in normal speech patterns – monotone, monosyllabic
- **Social/Occupational Dysfunction**

DSM V 2013

Six Common Symptom Clusters



Freudenreich, et al Current Psychiatri. 2009;8:74

Bipolar DO

- **Bipolar I Disorder** is mainly defined by
 - **manic** or mixed episodes that last at least seven days
 - manic symptoms that are so severe that the person needs immediate hospital care
 - Usually, the person also has episodes of **depression**, typically lasting at least two weeks. change from the person's normal behavior.
- **Bipolar II Disorder** is defined by a pattern of
 - Episodes of depression shifting back and forth with
 - **hypomanic** episodes, but no full-blown manic or mixed episodes.
- **Mania:** high energy, reduced sleep, euphoria, risk taking, irritable, talkative, racing thoughts, grandiose, increased activity

DSM V

Schizoaffective DO

- Schizophrenia + Bipolar DO
- An uninterrupted period of illness where at some point there is either a manic, depressed or mixed episode for the majority of the disorder's duration after Criteria A for Schizophrenia has been met

DSM V 2013

Borderline Personality Disorder

- *Personality disorder*: A lifelong pattern in the way a person thinks, feels and behaves that is exceptionally rigid, extreme, maladaptive, damaging to self or others and leads to social and/or occupational impairment.

Depression and Anxiety Disorders

Meet criteria for SMI when:

Depression complicated by treatment resistant
psychosis

Anxiety -treatment resistant
co-morbid with personality disorder

Barriers to Providing Primary Health Care to Psychiatric Populations

Cultural

- Mental health staff and patients not used to incorporating primary care as part of job.

Financial

- Very rarely funded.
- Billing medical services challenging
- High no show rate, take extra time

Motivational

- Lack of perceived need for care

Organizational

- Devoting space, time, and money.
- Specialists do not cross boundaries
- Different languages

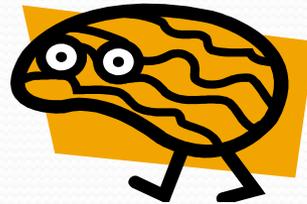
Clinic Location

- Proximity is crucial.
- Same building is best.

Patient Level Factors



Lack of motivation,
apathy



Cognitive
Impairment



Lack of perceived
need for health care



Comorbidity



Fear and Distrust



Poor social,
communication
skills

Provider Level Factors

Why bother?
“Just treat the
Schizophrenia
and leave the
rest”.



Lack of Knowledge
about specific disorders



Attribute physical sx to
mental illness and miss the
problems



Fear and Distrust



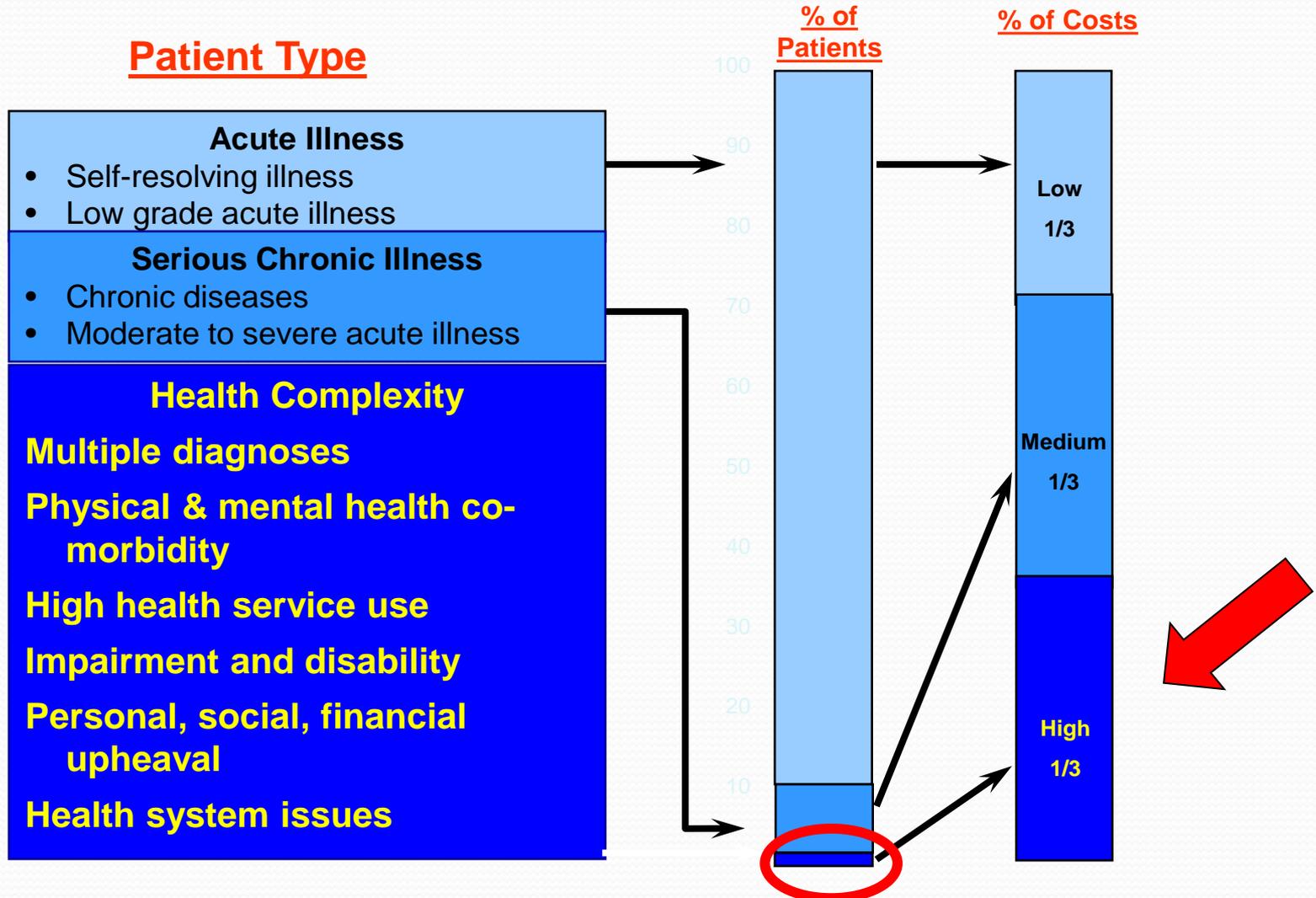
Discomfort



Take too long,
high no-show,
impacts
bottom line

Lester HE. BMJ, doi.1136/bmj.38440.418426.8F 2005

Cost of Health Complexity



---adapted from Meier DE, J Pall Med, 7:119-134, 2004

Typical Days

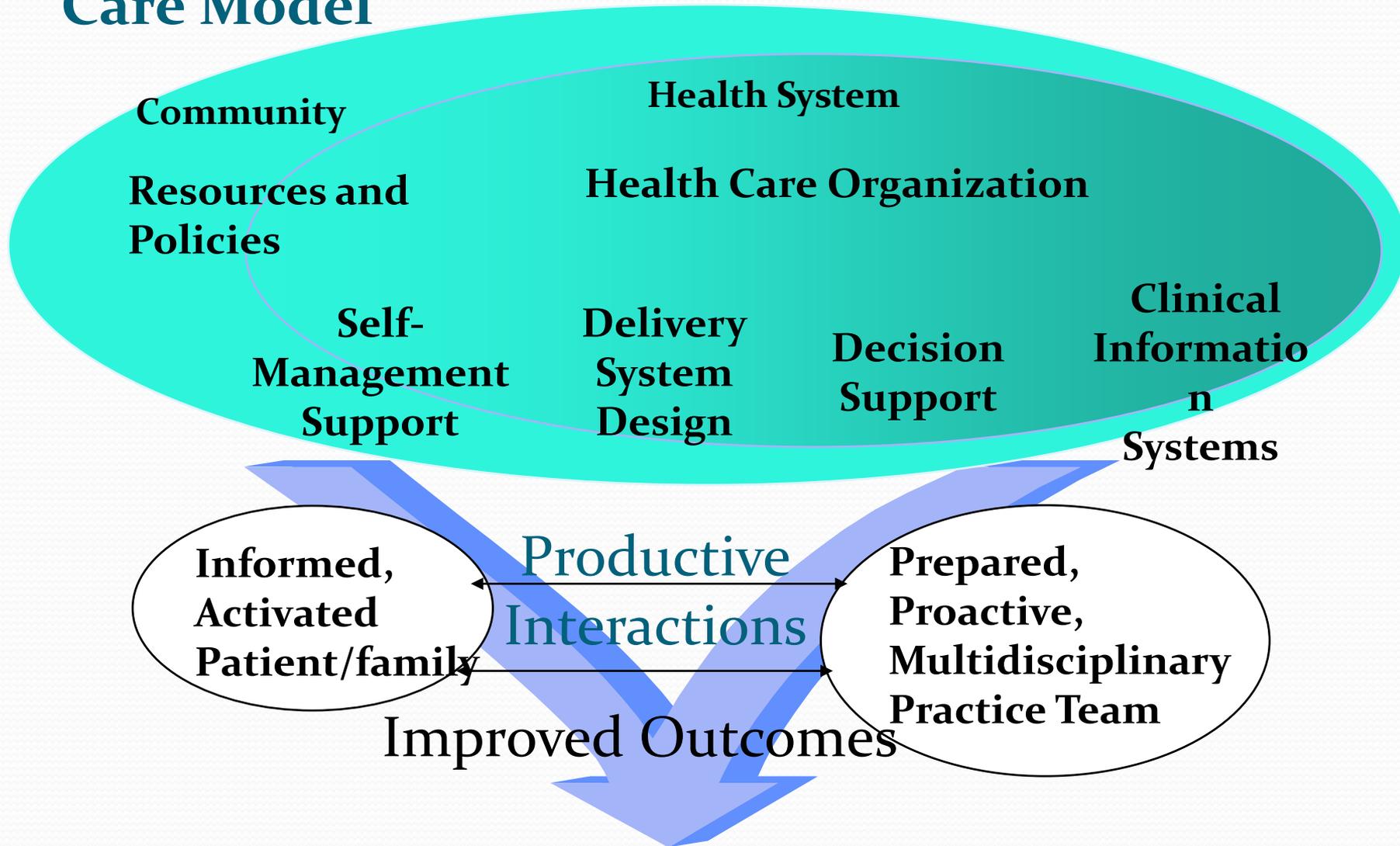
PRIMARY CARE

- A** - A1c
- B** - Blood Pressure
- C** - Cholesterol
- +
- D** - Depression

MENTAL HEALTH

- SMI**
- +
- C** CHOLESTEROL
- H** HYPERTENSION
- O** OBESITY
- D** DIABETES
- S** SMOKING

Wagner Chronic Care Model



Experimenting: Some Developing Models

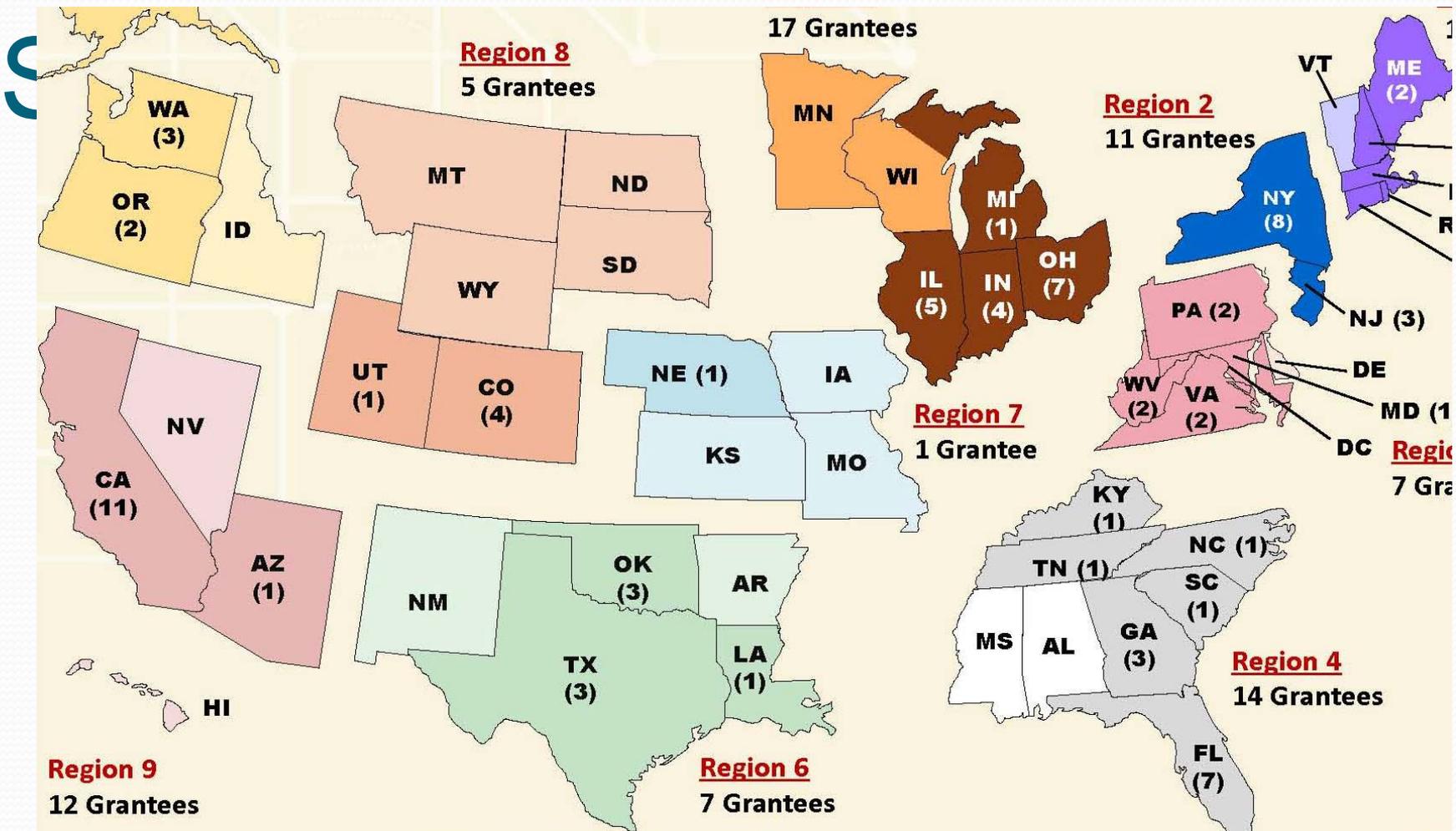
- PCARE study (Druss et al, 2010)
- SAMHSA/HRSA PBHCI 93 Grantees
- Medicaid State Plan Amendments (SPA)
 - Allow for enhanced Medicaid funding (usually case rate) for Health Home if dx with SMI
 - May be located in a community mental health center so sometimes called “behavioral health home”

PCARE

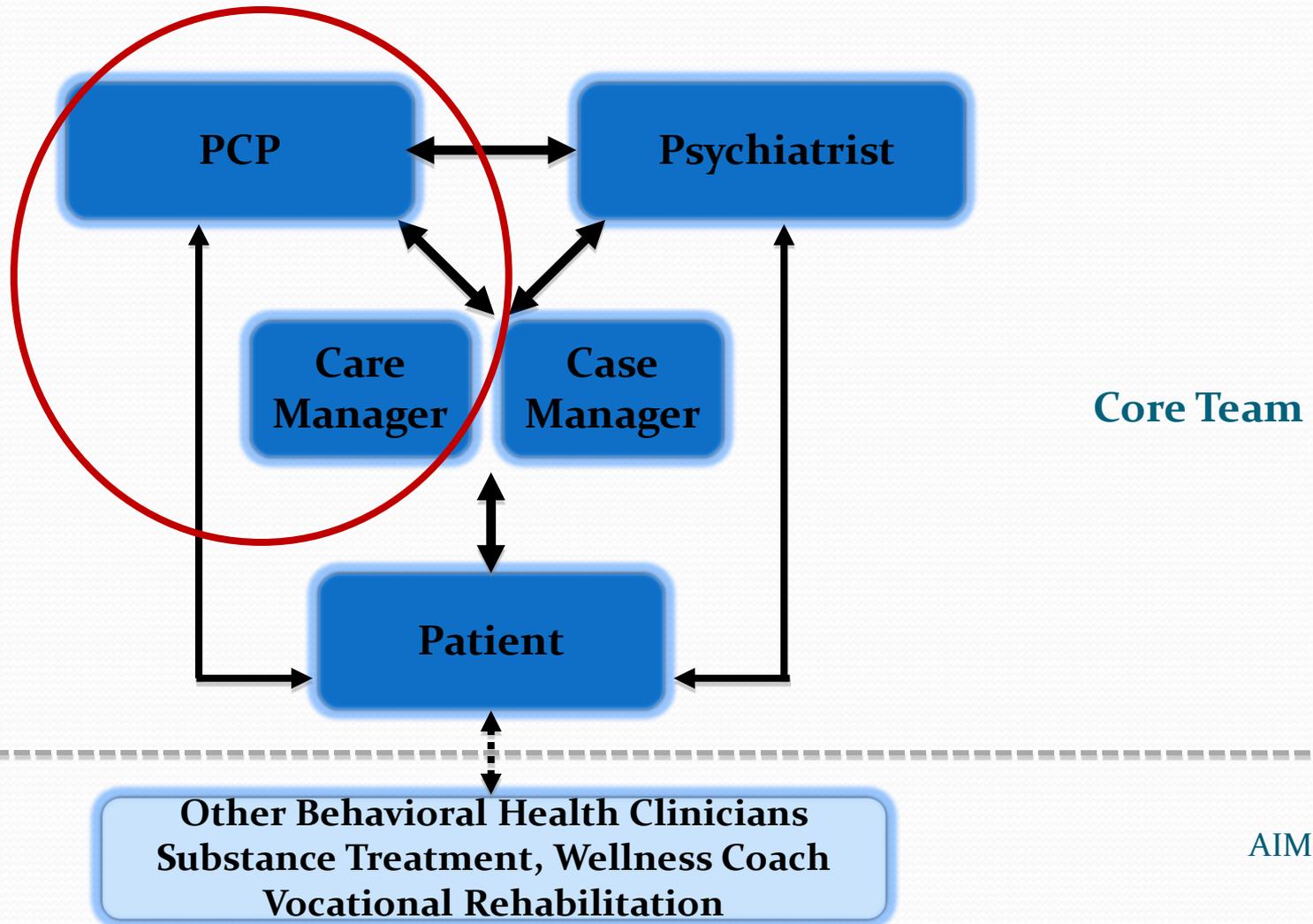
Primary Care Access, Referral and Evaluation

- PCARE study: Nurse care managers provided communication and advocacy to overcome barriers to primary medical care. (Druss, 2010)
 - Intervention group received more
 - recommended preventive services,
 - higher proportion of evidence-based services for cardiometabolic conditions,
 - more likely to have a primary care provider (71.2% versus 51.9%).
 - *Reduction in Framingham Cardiovascular Risk Index score in intervention group 6.9% compared to usual care 9.8%*

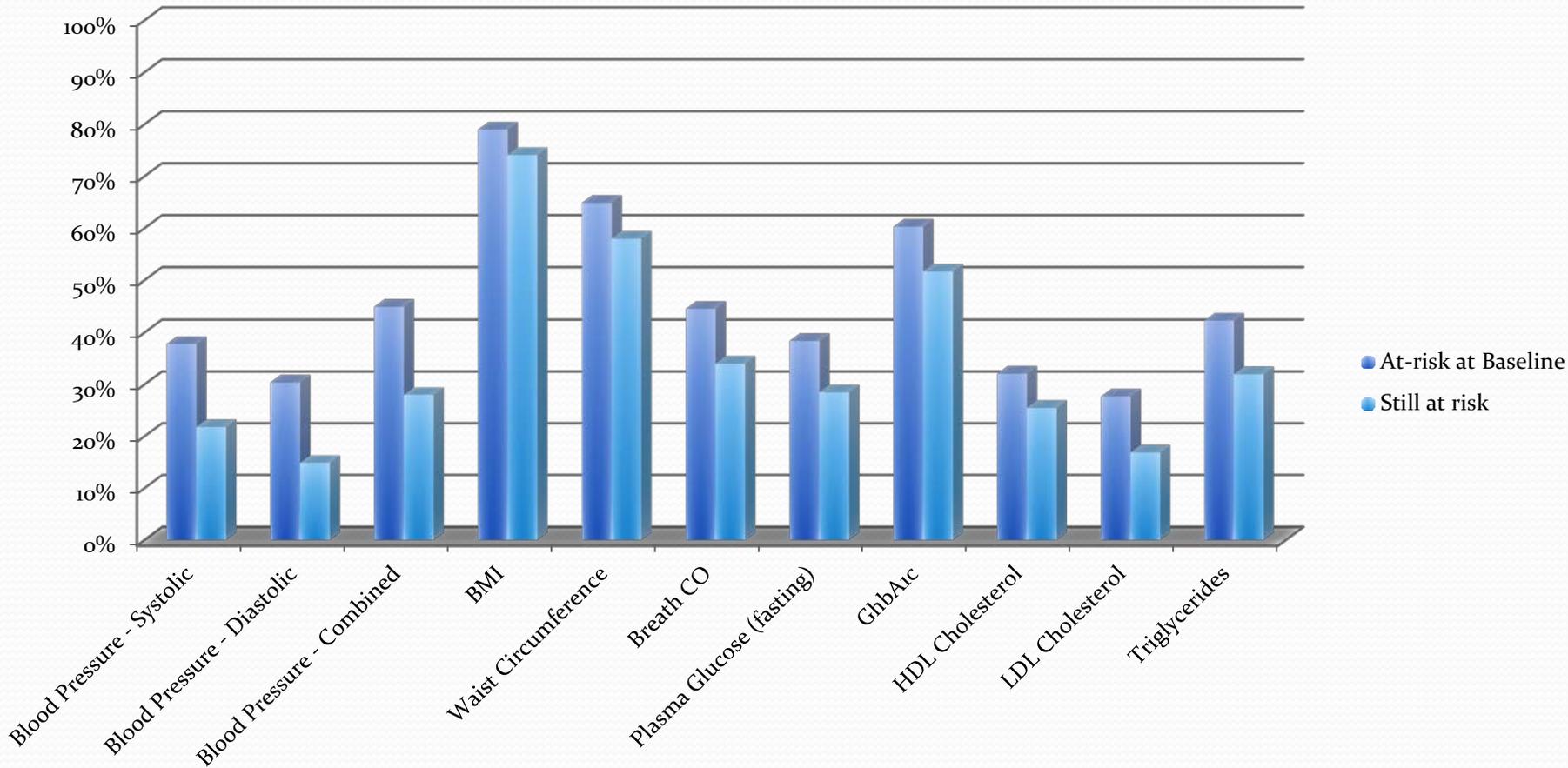
The PBHCI Program



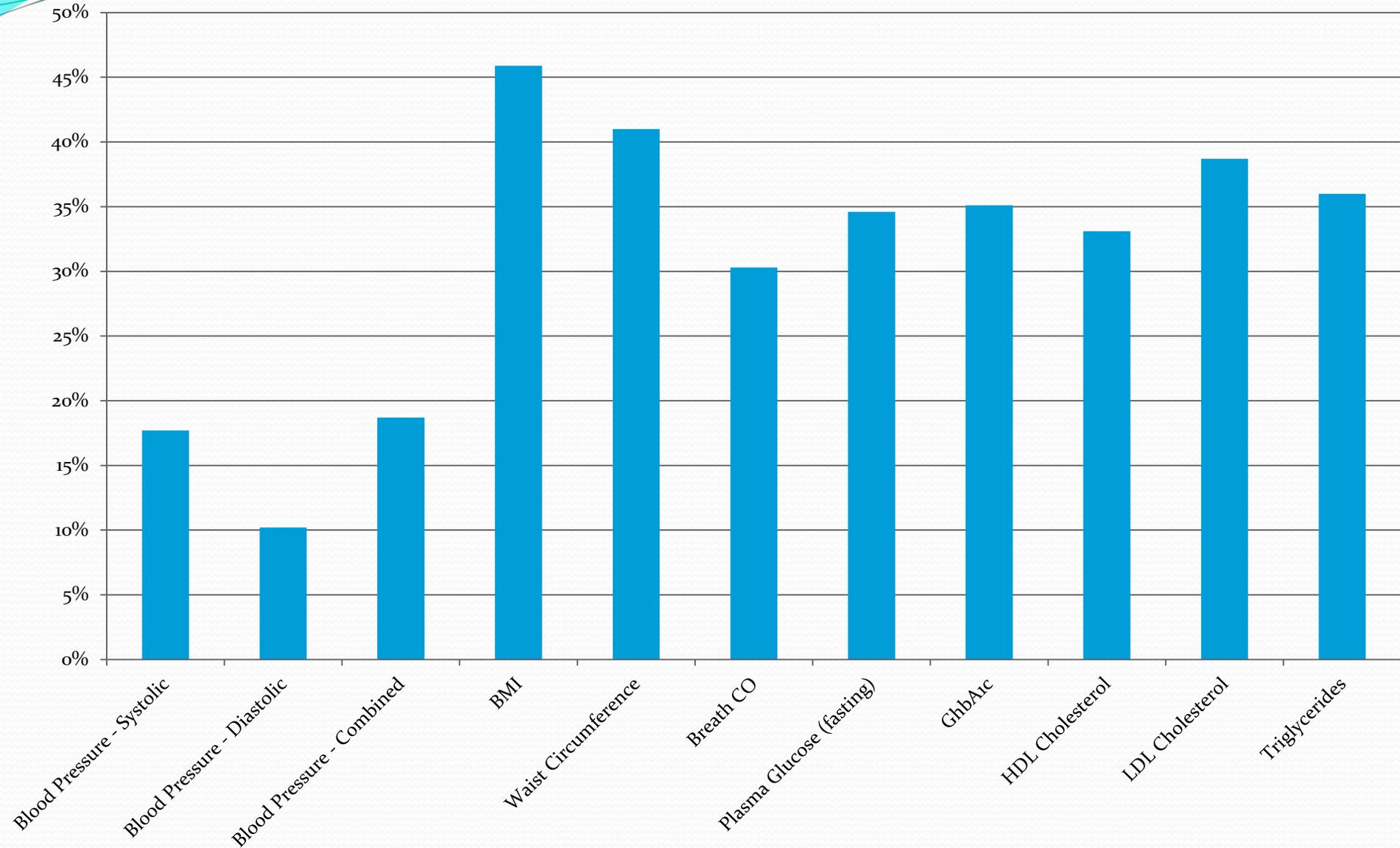
PBHCI Approach



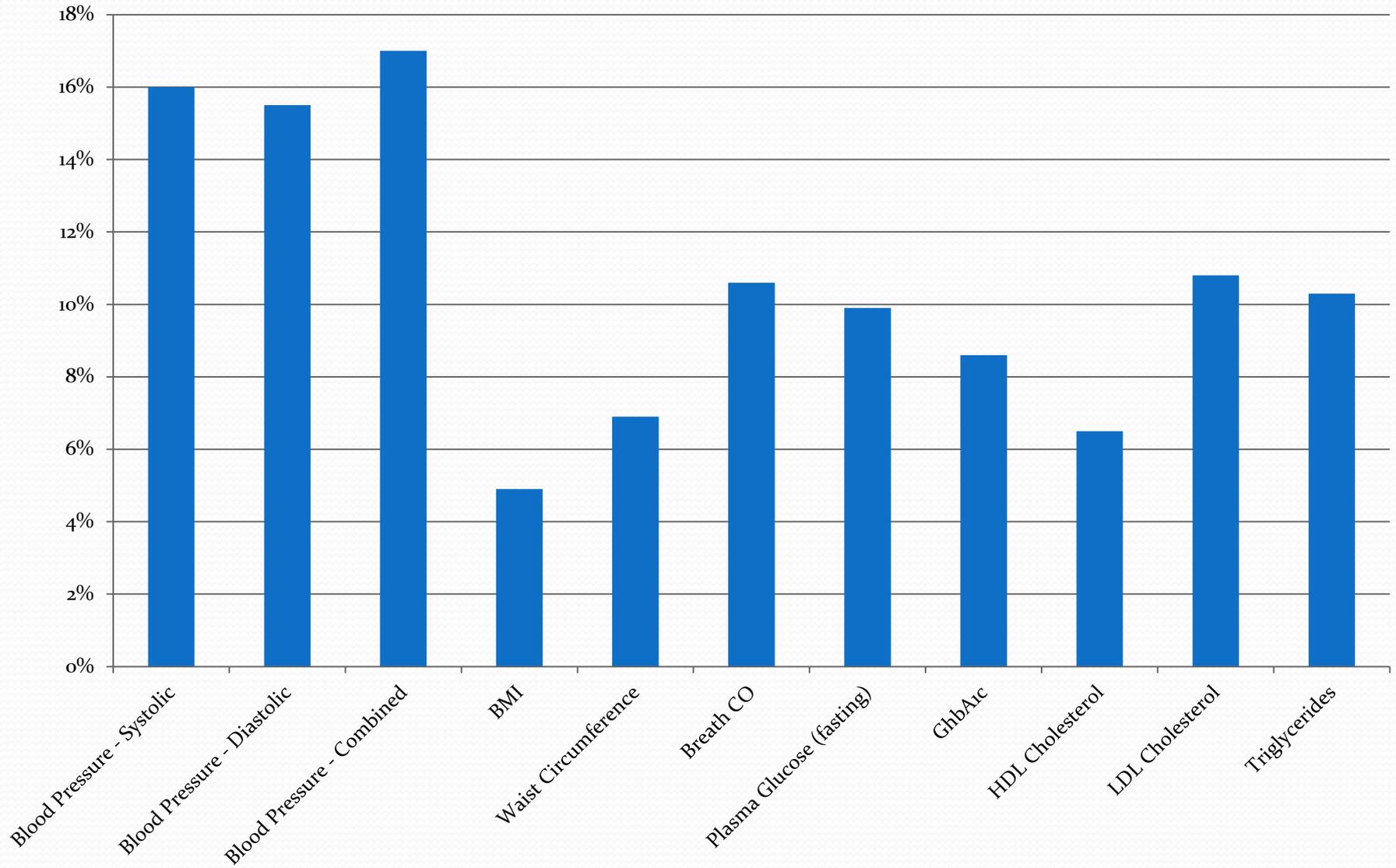
Change in PBHCI Physical Health Indicators from Baseline to Most Recent Recording - Oct 11, 2012



PBHCI Baseline to Oct 11, 2012: Outcome Improved



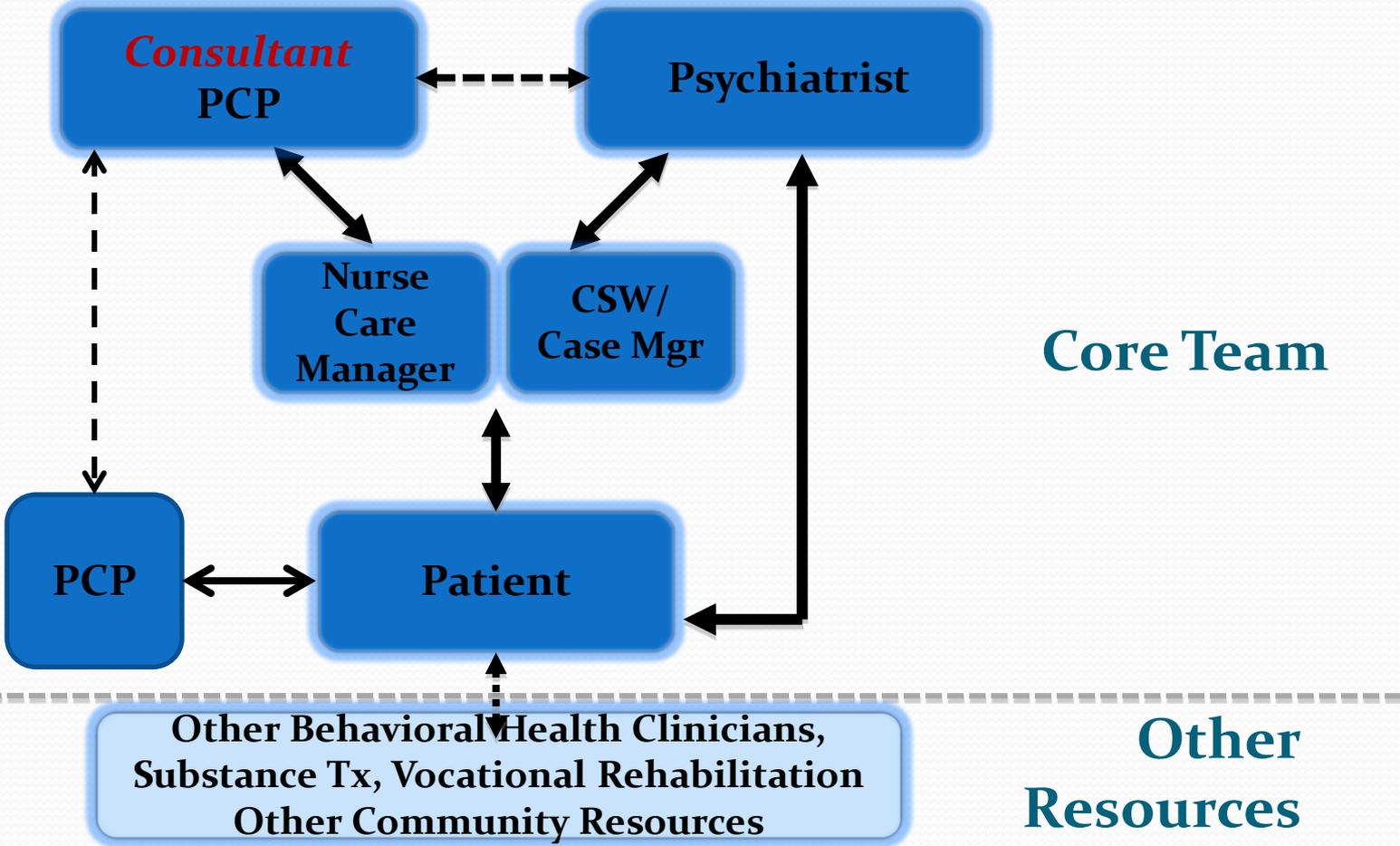
PBHCI Baseline to Oct 11, 2012: No longer at risk



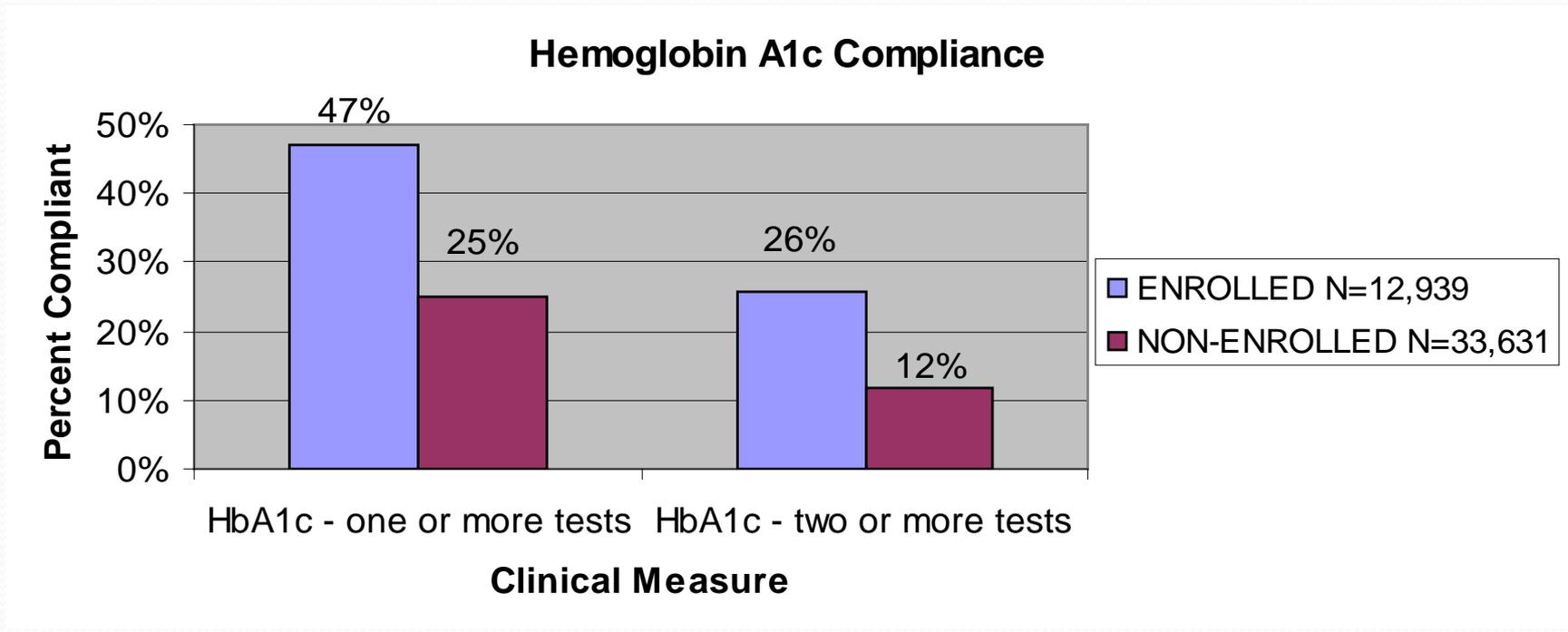


State Medicaid Health Home Amendments

Health Home Team Approach – Missouri and Ohio

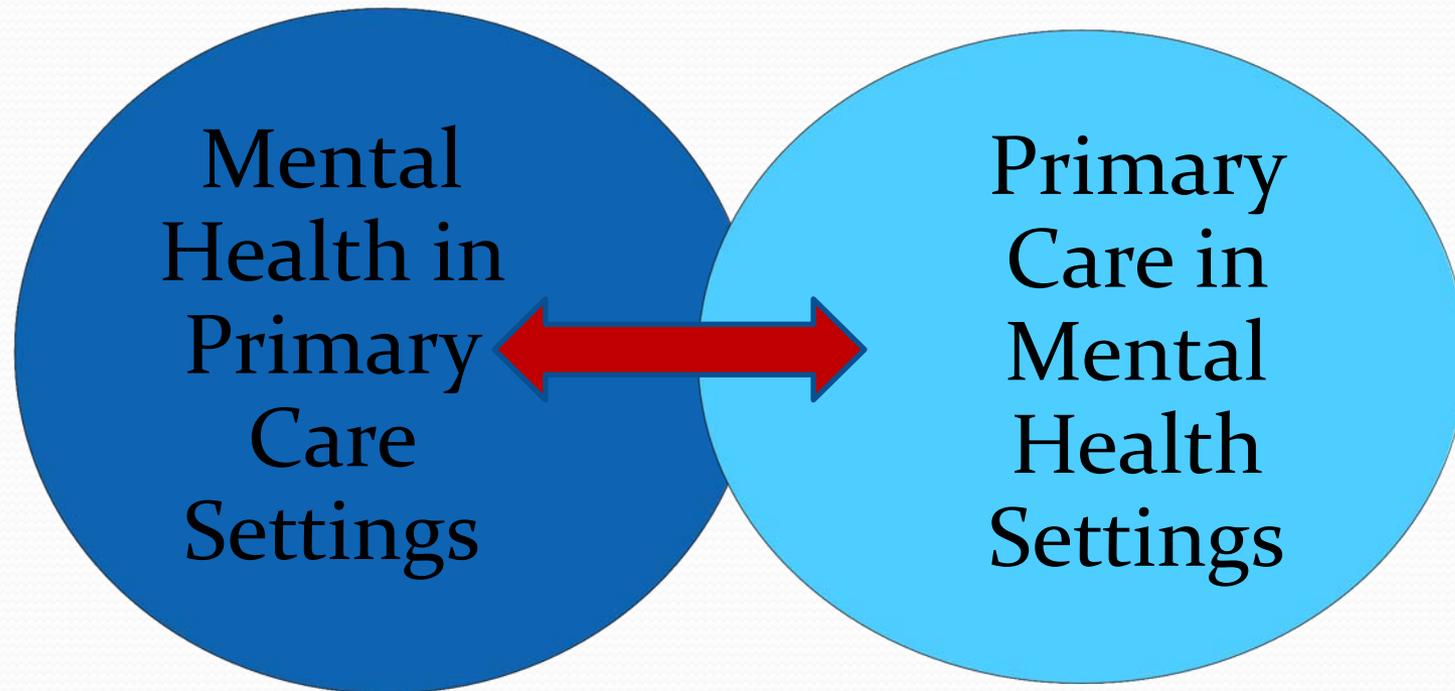


Missouri CCIP Diabetes Outcomes

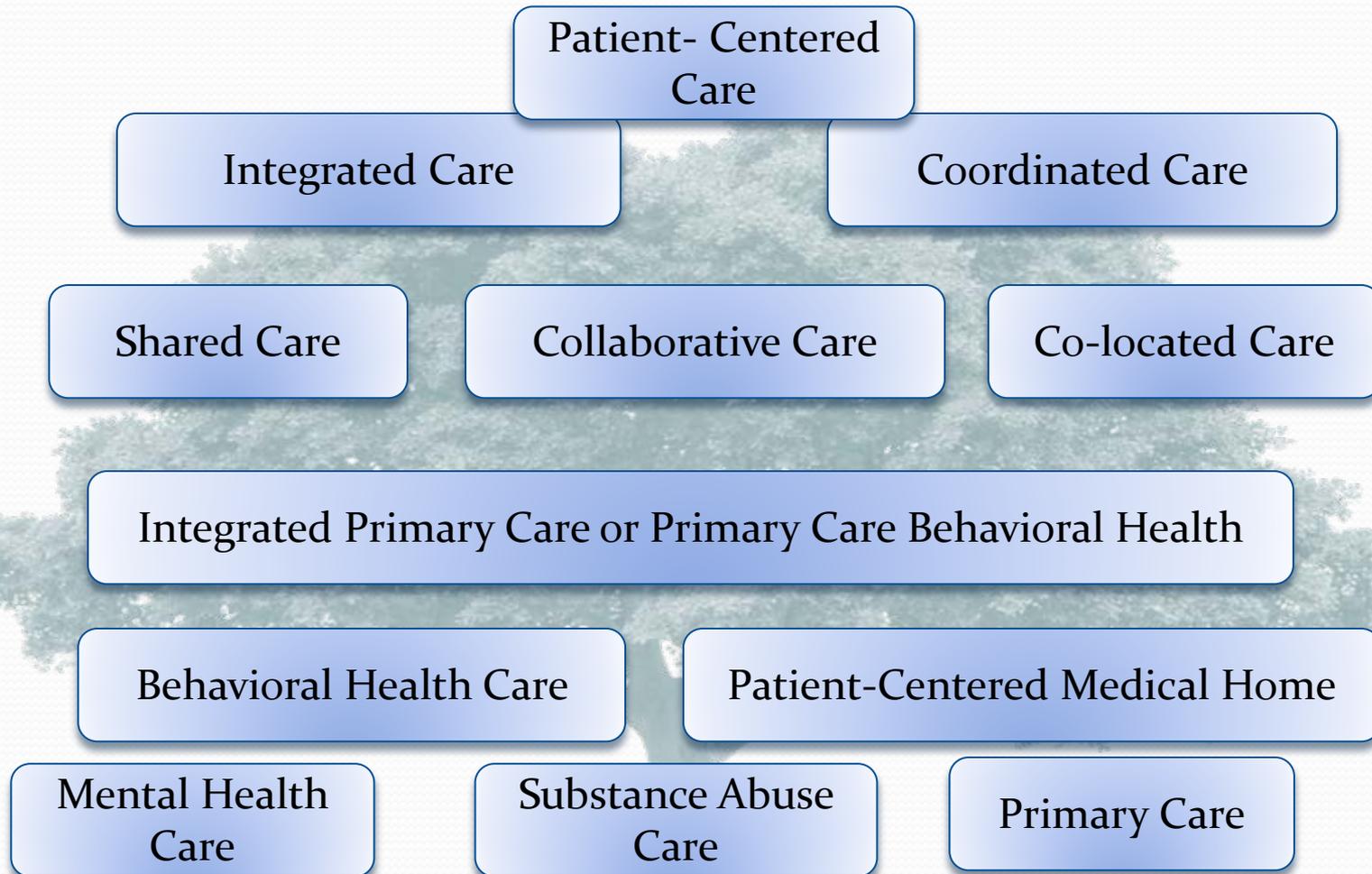


HbA_{1c} testing provides an estimation of average blood glucose values in people with diabetes. Enrollees in the CCIP program received substantially more HbA_{1c} testing than those not enrolled.

Spectrum of Patient Centered Collaborative Care

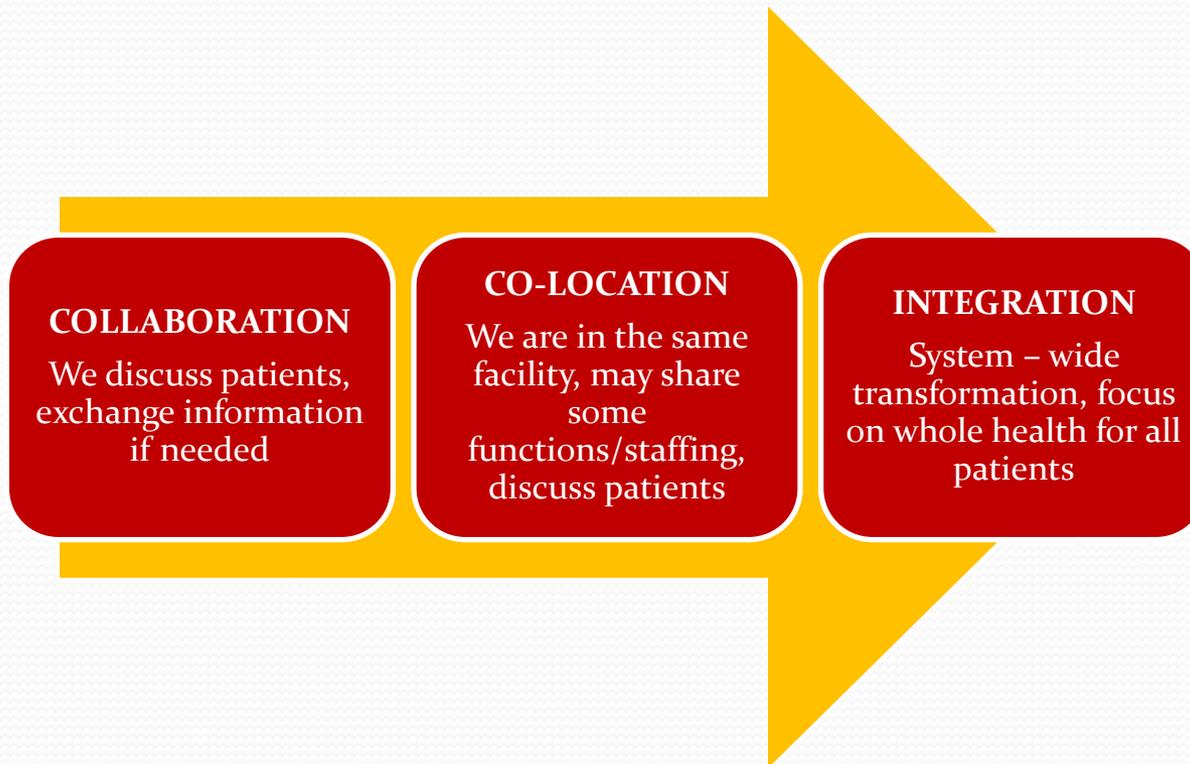


Lexicon of Integrated Care Terms



Adapted from: Peek, CJ - A family tree of related terms used in behavioral health and primary care integration (<http://integrationacademy.ahrq.gov/lexicon>)

Levels of Integration



Doherty, 1996, Update 2013

Core Principles of Collaborative Care

Patient-Centered Care Teams

- Team-based care: effective collaboration between PCPs and Behavioral Health Providers.
- Nurses, social workers, psychologists, psychiatrists, licensed counselors, pharmacists, and medical assistants can all play an important role.

Population-Based Care

- Behavioral health patients tracked in a registry: no one 'falls through the cracks'.

Measurement-Based Treatment to Target

- Measurable treatment goals clearly defined and tracked for each patient
- Treatments are actively changed until the clinical goals are achieved

Evidence-Based Care

- Treatments used are 'evidence-based'

AIMS 2010

Tasks Related to Principles

Find Patients:

Screening, identification and determination of medical diagnoses

Track Patients:

Systematic follow-up and use of registry

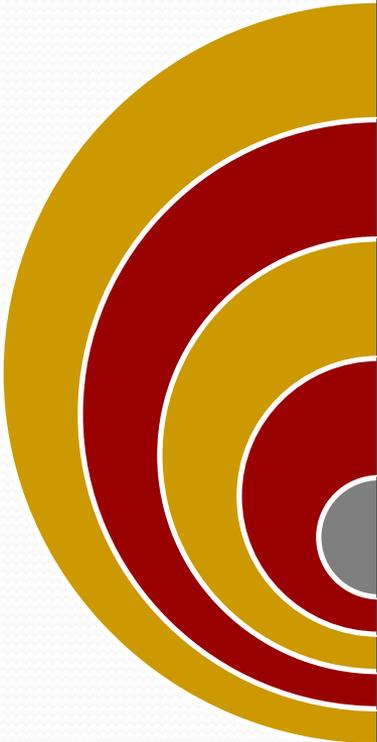
Treat Patients:

- Evidence based treatment of medical and mental health conditions
- Health behavior change
- Timely treatment adjust

Program Oversight and Quality Improvement:

Review outcomes, determine priorities, make adjustments

Roles for PCPs in Behavioral Health Settings



Direct Care	<ul style="list-style-type: none"> • Chronic Medical Conditions • Preventive Care
Collaboration	<ul style="list-style-type: none"> • Psychiatric Providers • Care Managers, Case Managers,
Population Based Care	<ul style="list-style-type: none"> • Establishing Priorities • Track Outcomes, Adjust Care
Education	<ul style="list-style-type: none"> • Non Medical Staff • Patients
Leader	<ul style="list-style-type: none"> • Champion Health Care Change • Help Shape System of Care

Post Test Questions

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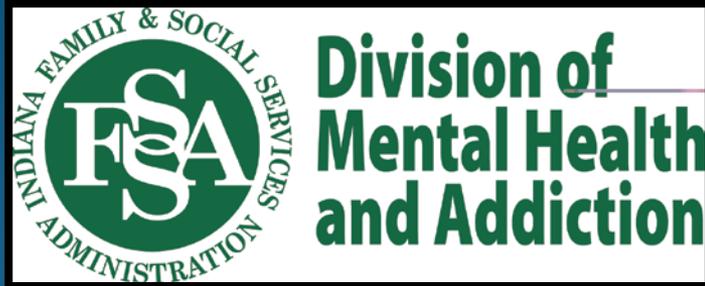
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 1. Cardiovascular
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 4. **All the Above**



“Different models must be tested -
the cost and suffering of doing
nothing is unacceptable.”

Vieweg, et al., *American Journal of Medicine*. March 2012



Resources and additional training tools will be available on an elearning system at:

www.indianaintegration.org