Managing Physical and Mental Illness

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Overview

- The problem
- Contributory factors
- Barriers to effective management
- Options

The Problem

- People with serious mental illness die approximately 25 years earlier than the general population.
- Medical co-morbidity is common in this population
- Surveillance and treatment are uncommon

Increased Mortality From Medical Causes in Mental Illness

- Increased risk of death from medical causes in schizophrenia and 20% (10-15 yrs) shorter lifespan[1]
- Bipolar and unipolar affective disorders also associated with higher SMRs from medical causes[2]
  - 1.9 males/2.1 females in bipolar disorder
  - 1.5 males/1.6 females in unipolar disorder
- Cardiovascular mortality in schizophrenia increased from 1976-1995, with greatest increase in SMRs in men from 1991-1995[3]

SMR = standardized mortality ratio (observed/expected deaths).

1. Harris et al. *Br J Psychiatry*. 1998;173:11. Newman SC, Bland RC. *Can J Psych.* 1991;36:239-245.
2. Osby et al. *Arch Gen Psychiatry*. 2001;58:844-850.
3. Osby et al. *BMJ*. 2000;321:483-484.

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

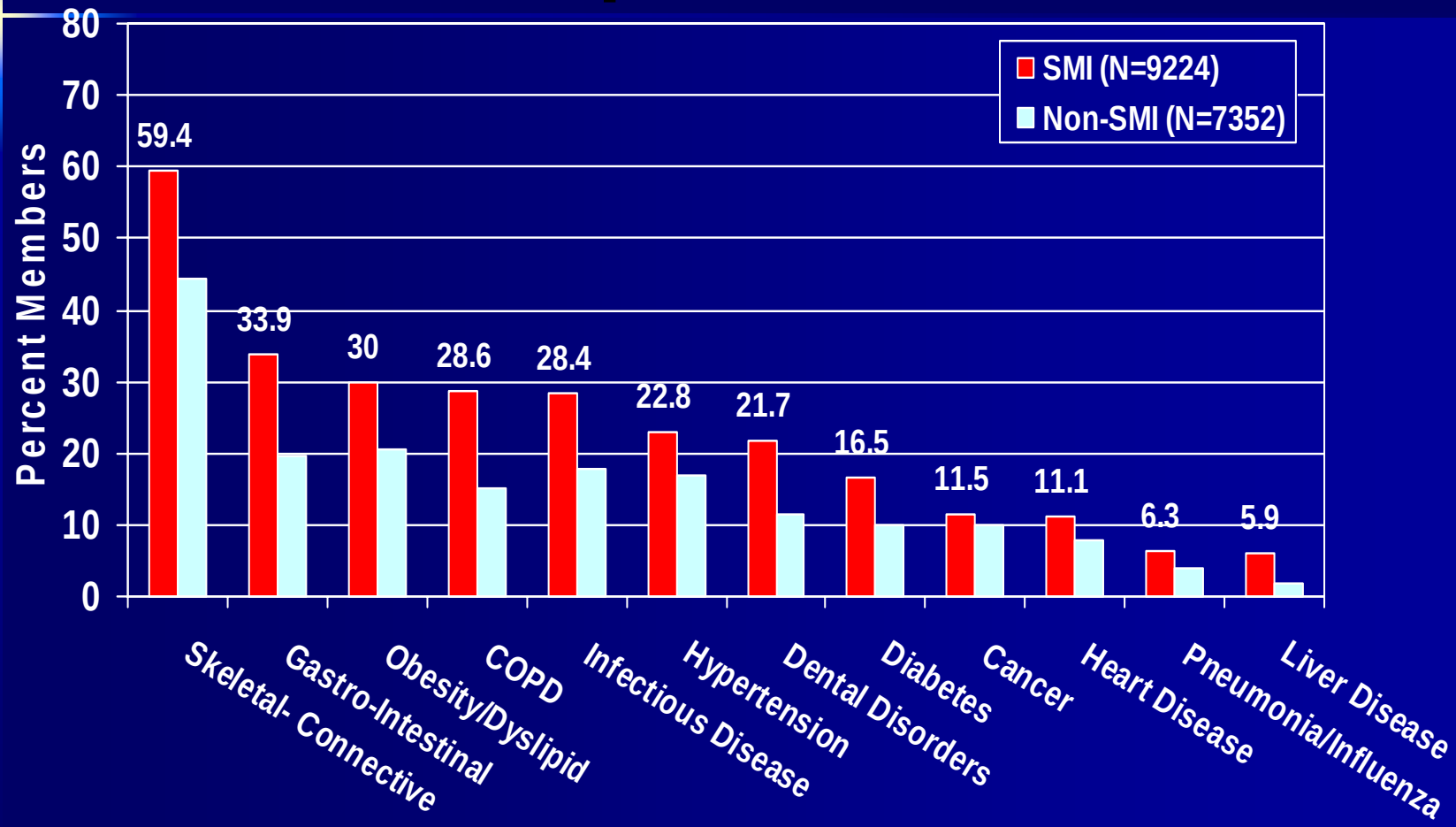
Colton CW, Manderscheid RW. Prev Chronic Dis [serial online] 2006 Apr [date cited]. Available from: URL:http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm

Schizophrenia: Natural Causes of Death

- Higher standardized mortality rates than the general population from:
  - Diabetes 2.7x
  - Cardiovascular disease 2.3x
  - Respiratory disease 3.2x
  - Infectious diseases 3.4x
- Cardiovascular disease associated with the largest number of deaths
  - 2.3 X the largest cause of death in the general population

Osby U et al. *Schizophr Res*. 2000;45:21-28.

Maine Study Results: Comparison of Health Disorders Between SMI & Non-SMI Groups



Contributory Factors

- Lifestyle
- Medications
- Surveillance

Cardiovascular Disease (CVD) 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]	

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. Ucok 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.

Mental Disorders and Smoking

- Higher prevalence (56-88% for patients with schizophrenia) of cigarette smoking (overall U.S. prevalence 25%)
- More toxic exposure for patients who smoke (more cigarettes, larger portion consumed)
- Similar prevalence in bipolar disorder

George TP et al. Nicotine and tobacco use in schizophrenia. In: Meyer JM, Nasrallah HA, eds. Medical Illness and Schizophrenia. American Psychiatric Publishing, Inc. 2003; Ziedonis D, Williams JM, Smelson D. Am J Med Sci. 2003(Oct);326(4):223-330

Psychiatric Medications Associated With Increased Metabolic Risk

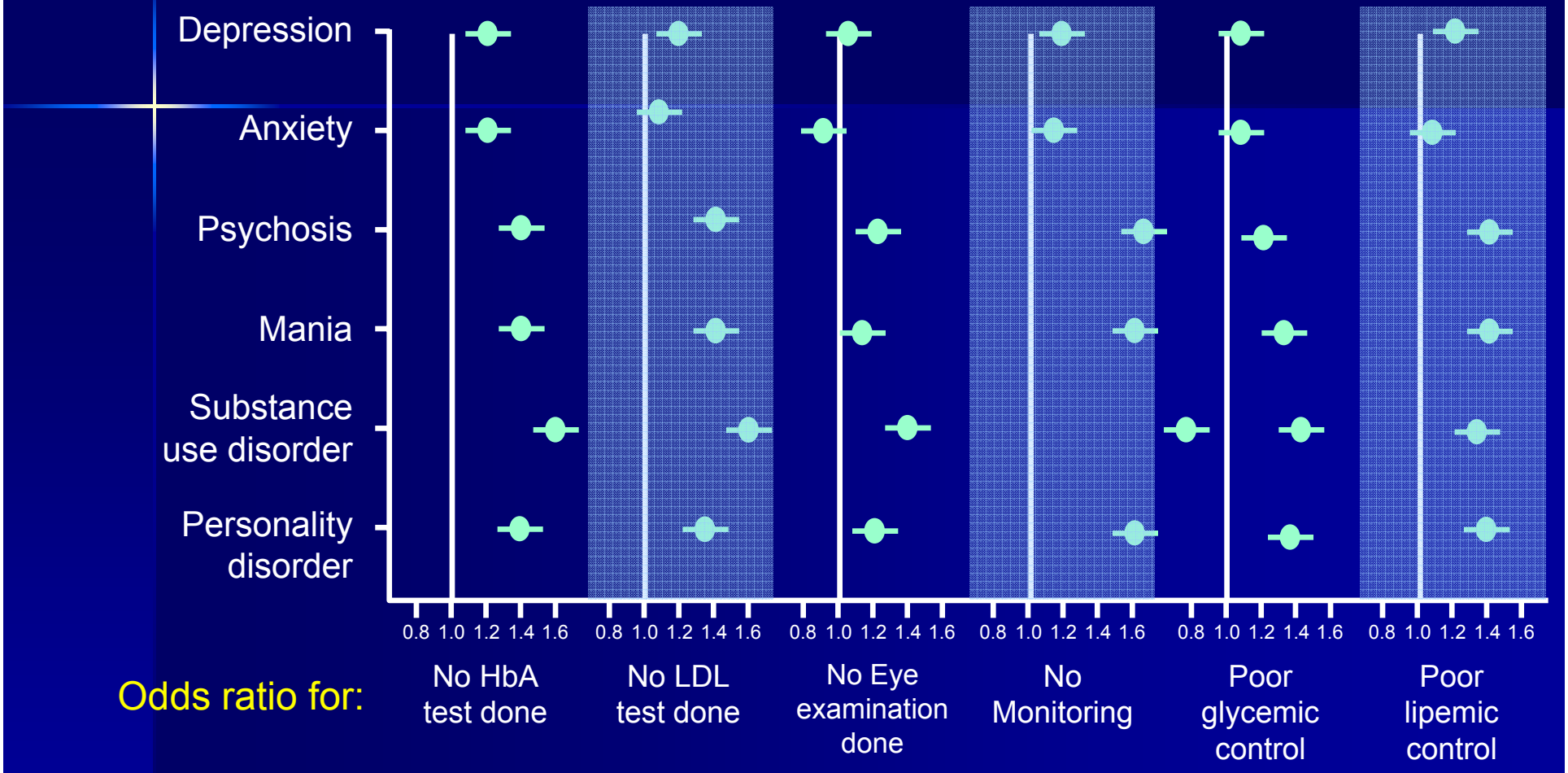
- Drug classes associated with increased metabolic risk include:[1]
  - Antidepressants
  - Antipsychotics
  - Mood stabilizers
- Metabolic abnormalities associated with psychotropic medications include:[2]
  - Weight gain
  - Dyslipidemia
  - Diabetes

1. Kulkarni SK, Kaur G. *Drugs Today*. 2001;37:559-571.
2. Marder SR et al *Am J Psychiatry.* 2004;161:1334-1349.

Reduced Use of Medical Services

- Fewer routine preventive services (Druss 2002)
- Worse diabetes care (Desai 2002, Frayne 2006)
- Lower rates of cardiovascular procedures (Druss 2000)

Impact of mental illness on diabetes management



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

Frayne et al. *Arch Intern Med*. 2005;165:2631-2638

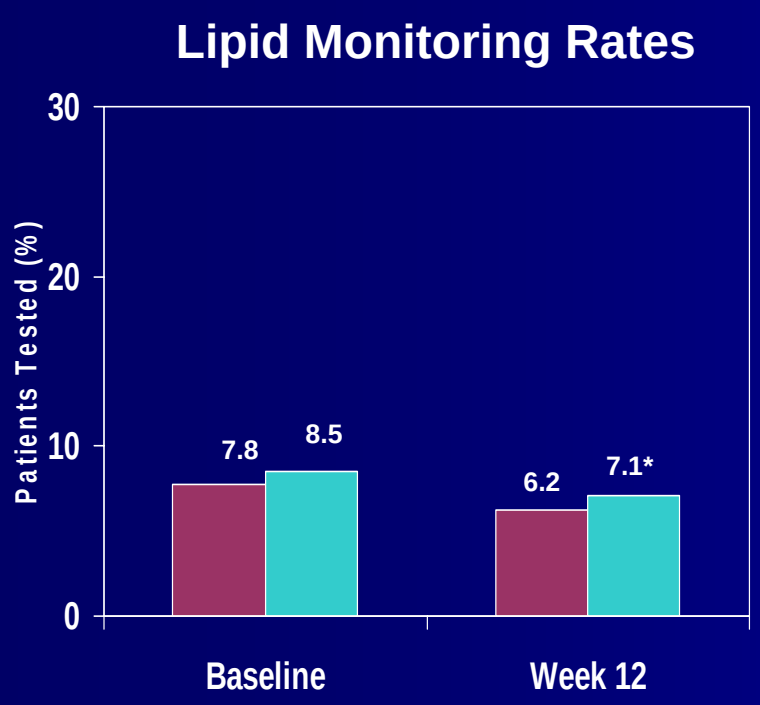
ADA/APA Consensus Guidelines on Antipsychotic Drugs and Obesity and Diabetes: Monitoring Protocol*

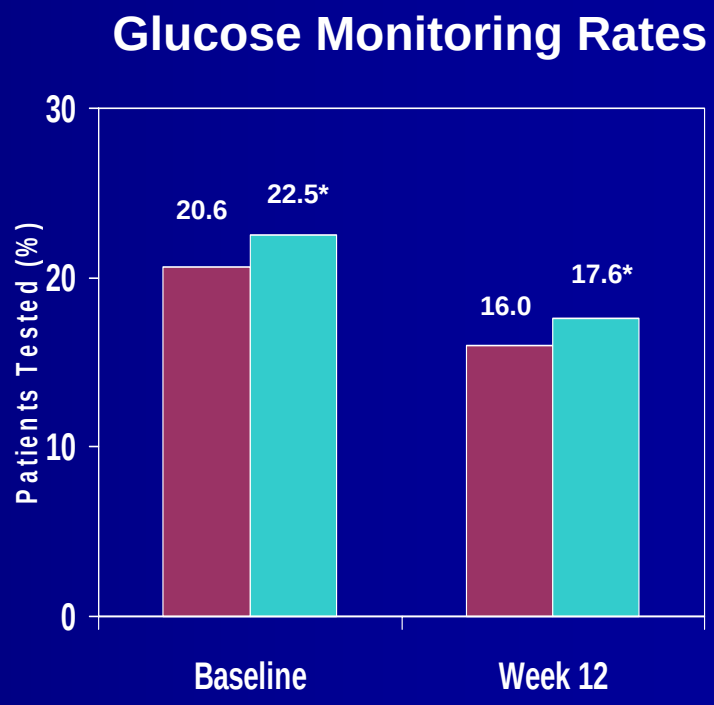
	Start	4 wks	8 wks	12 wk	qtrly	12 mos.	5 yrs.
Personal/family Hx	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting glucose	X			X		X	
Fasting lipid profile	X			X		X ←	X

*More frequent assessments may be warranted based on clinical status

***Diabetes Care.* 27:596-601, 2004**

Limited Impact on Practice





Pre-guideline Cohort (n=21,848)

Post-guideline Cohort (n=8,166)

* P < 0.01 vs. pre-guideline cohort

Cuffel et al : Lipid and Glucose Monitoring During Atypical Antipsychotic Treatment: Effects of the 2004 ADA/APA Consensus. Presented at IPS Oct 2006

Summary

- SPMI population is at high risk for medical morbidity and mortality
- Management is suboptimal

Barriers to Effective Management

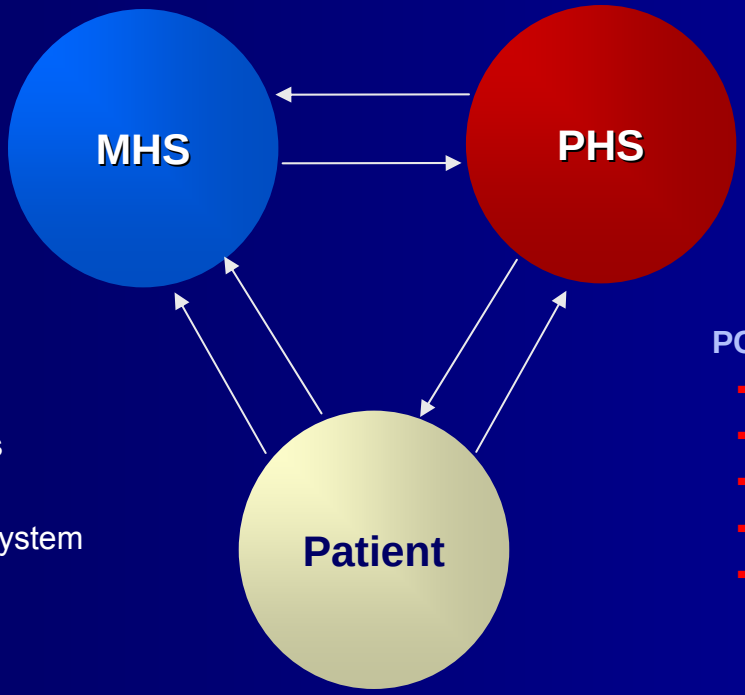
- Healthcare System
- Provider
- Patient

System Level Barriers

MHS-PHS Communication

- HIPAA
- Geographic/temporal separation
- Role definition
- Organizational culture

Structural and functional differences between MH and PH systems reduce effectiveness and quality of clinical management



MHP-Patient Interactions

- Awareness of needs
- Role definition
- Patient cognitive barriers
- MHP health literacy
- MHP knowledge of PH system

PCP-Patient Interactions

- PCP Awareness of needs
- Patient cognitive barriers
- Patient health literacy
- Stigma
- PCP knowledge of MH system

Access to Medical Care of People with SPMI

- SPMI clients have difficulties accessing primary care providers
  - Less likely to report symptoms
  - Cognitive impairment, social isolation reduce help-seeking behaviors
  - Cognitive, social impairment impedes effective navigation of health care system difficult
- Accessing and using primary care is more difficult

Jeste DV, Gladsjo JA, Landamer LA, Lacro JP. Medical comorbidity in schizophrenia. Schizophrenia Bull 1996;22:413-427

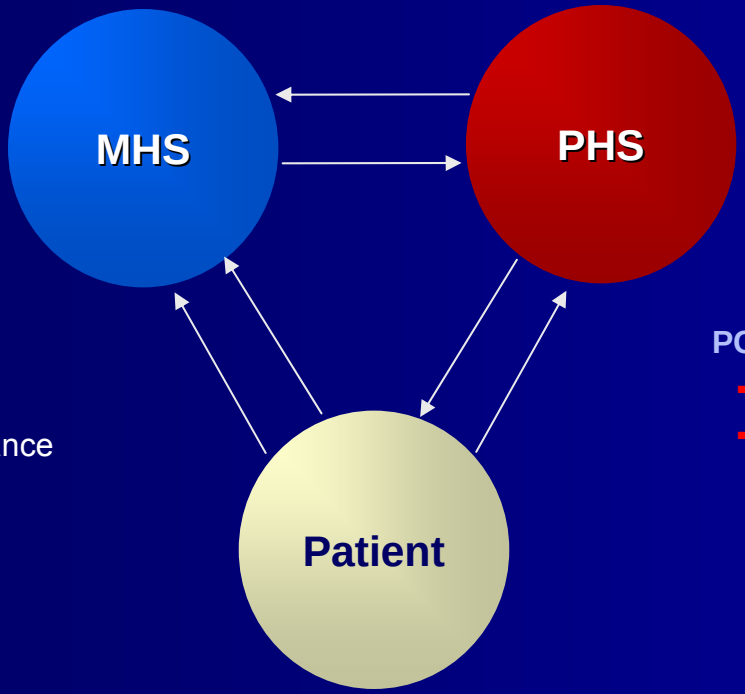
Goldman LS. Medical illness in patients with schizophrenia. J Clin Psych 1999;60 (suppl 21):10-15

Example – Metabolic Monitoring

MHS-PHS Communication

- Awareness of shared treatment
- Request labs
- Obtain results
- Discuss tx implications

Multiple interactions and data elements must coincide and be top of mind during 5-15 minute visits every 1-3 months



MHP-Patient Interactions

- Awareness of guidelines
- Competing priorities
- Impact on treatment alliance

PCP-Patient Interactions

- Awareness of lab request/results
- Competing priorities

Management Strategies

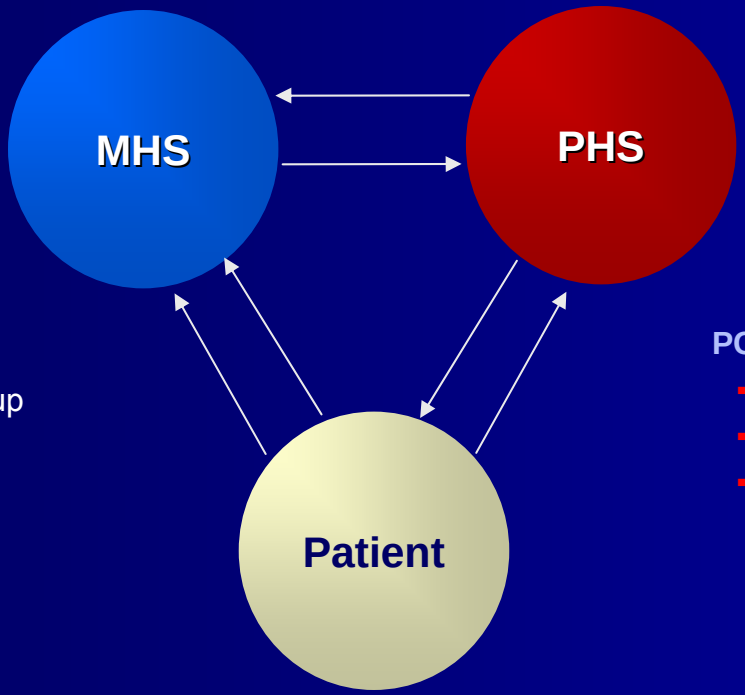
- Care Coordination
- Integrated Care

Care Coordination – Metabolic Monitoring

MHS-PHS Communication

- ID shared patients – alert MHP and PCP
- Lab reminders
- Distribute results
- Decision support prompts

CM bridges asynchronous parties within system through to facilitate decision support and functional integration of care



MHP-Patient Interactions

- Patient education
- Coordinate MHP follow-up

PCP-Patient Interactions

- Patient education
- Coordinate lab draw
- Coordinate PCP follow-up

Integrated Care Models

- MH treatment in Primary Care settings
  - Depression
  - Anxiety
  - Substance abuse
- Primary Care in MH settings
  - Few examples

Collaborative Care Model

- Level 1 – Preventive/screening
- Level 2 – PCP/extenders provide care
- Level 3 – Specialist consultation
- Level 4 – Specialist referral

Katon et al (2001) Gen Hosp Psychiatry 23:138-144

Conclusions

- Co-morbidity and increased mortality are the norm
- Multiple barriers prevent effective care
- Prioritization at national, state, local level is necessary