

**DEPRESSION AND ANXIETY  
IN THE ELDERLY AND MEDICALLY ILL:  
New Data, New Concepts, New Tools, New Models**

*Steven Cole, MD  
Professor of Clinical Psychiatry  
S.U.N.Y. Stony Brook Health Sciences Center*

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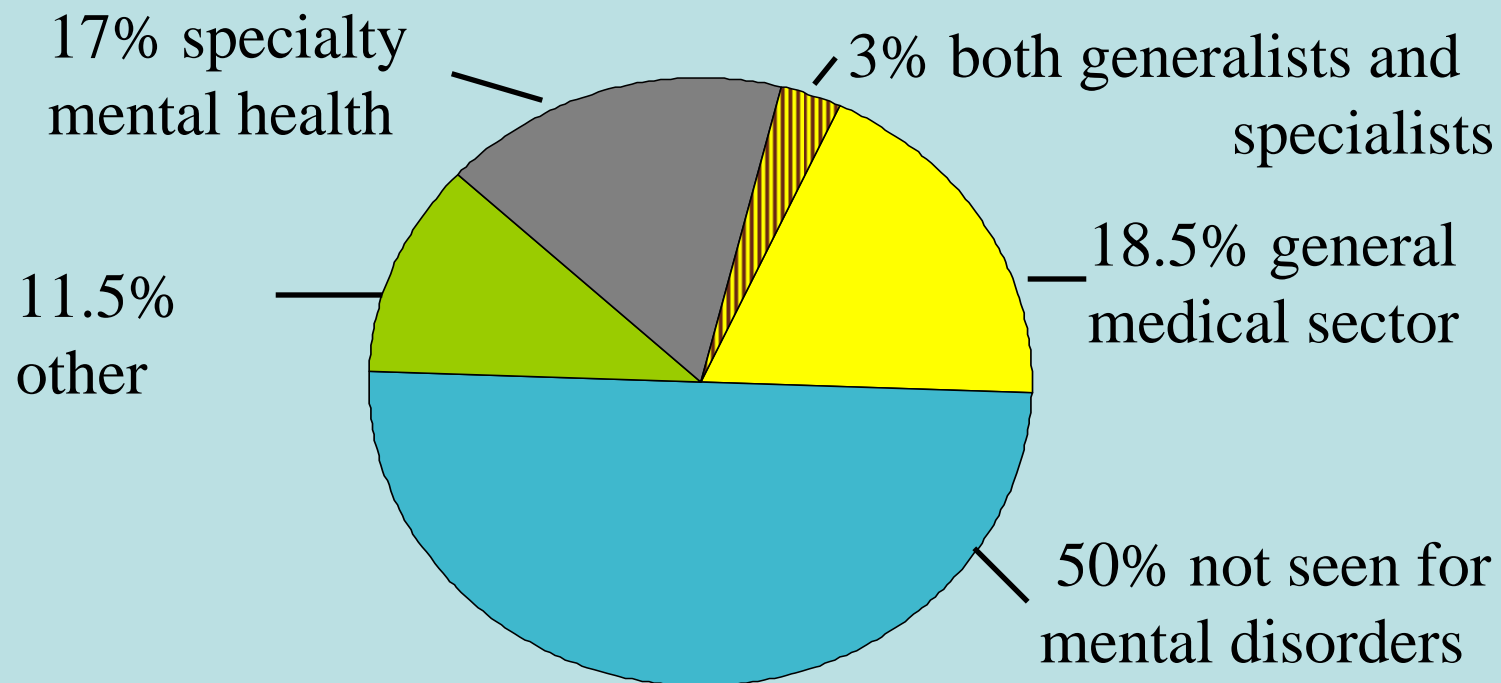
- Dr. Christopher Dennis, CME Scientific Chair & V.P, Medical/Clinical Director
- Sabrina Houser, Ph.D., V.P, Provider Relations
- Tracy Hubbard, Comm. Mgr, Provider Relations

# **NEW DATA, NEW CONCEPTS, NEW TOOLS, NEW MODELS**

- **Health Services Issues**
- **Complexities of Assessment**
- **Selected Disorders**
- **Mechanisms/Relationships**
- **Treatments**
- **New Concepts/New Disorders**
- **New Tools**
- **New Treatment Models**

# MANAGEMENT OF MENTAL DISORDERS IN PRIMARY CARE

## “De Facto” Mental Health Care System



Prevalence of significant mental disorders: 28.1%

*Regier, Arch Gen Psych, 1993*

# PREVALENCE

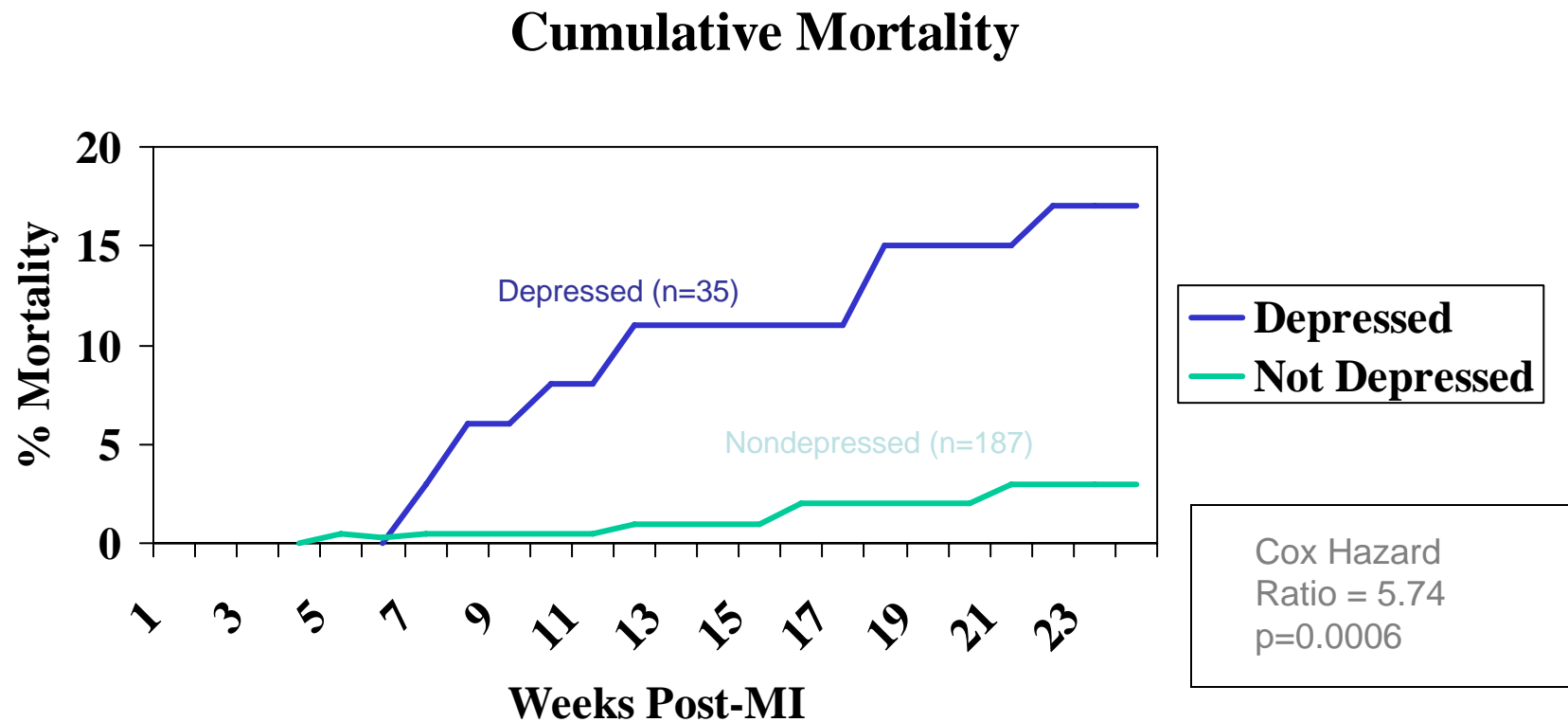
(adult data -- very little data on the elderly)

	<u>12 Months (%)</u>	<u>Lifetime (%)</u>
• Major depression	10	17.1
• Social anxiety disorder	7.9	13.3
• PTSD	5.0	8.0
• Agoraphobia without PD	2.8	5.3
• Panic disorder	2.3	3.5
• Generalized anxiety disorder	3.1	5.1
• OCD	1.6	2.5

# DEPRESSION IN MEDICAL PATIENTS IS COMMON

- 20-50% of patients with diabetes, CAD, PD, MS, CVA, asthma, cancer... (etc) have MD
  - *Evans et al, Biological Psychiatry 2005 (review)*
- Prevalence varies by illness, pathophysiology, severity, and research methodology
- Depressed patients visit PCPs 3x more often than patients not depressed

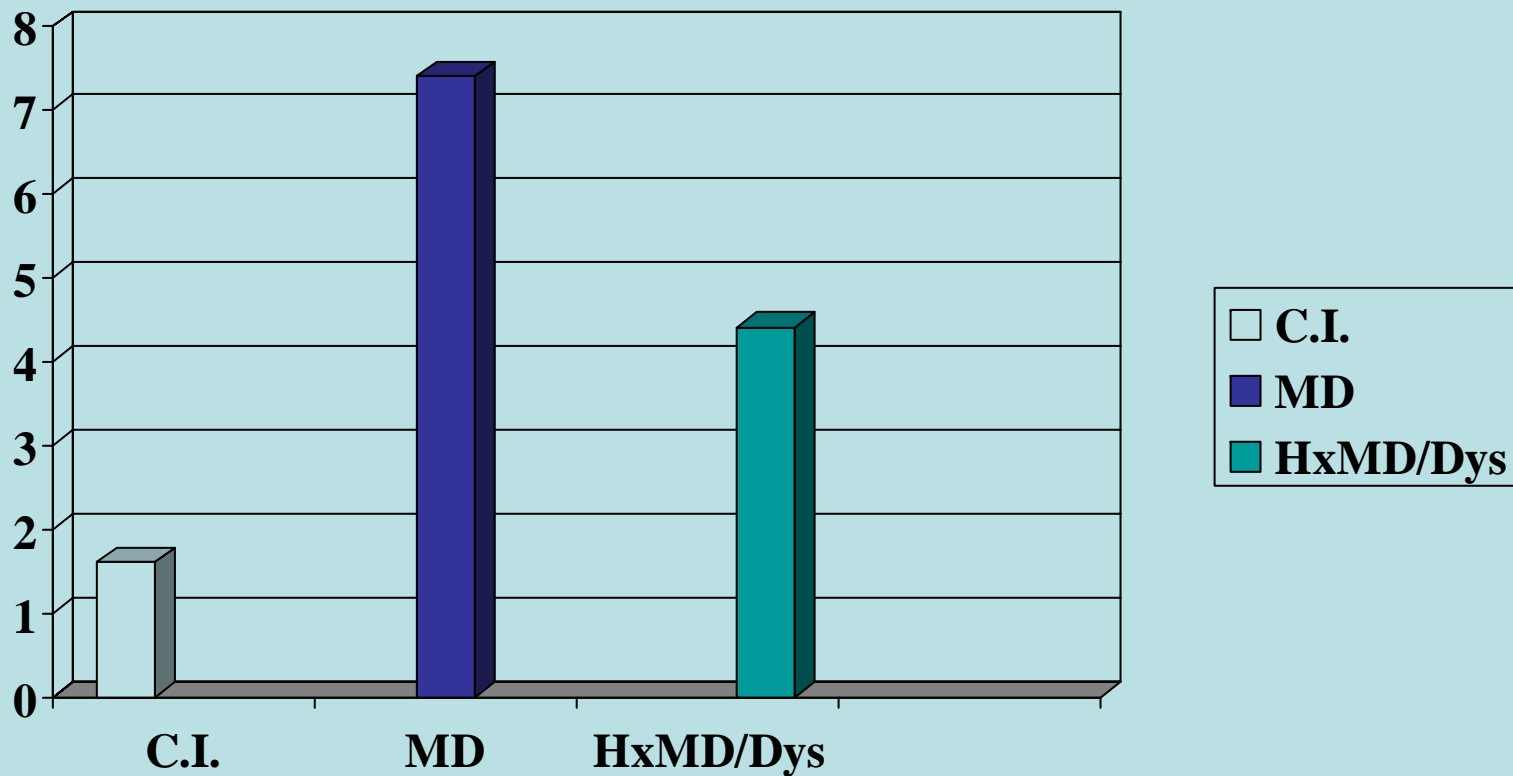
# CUMULATIVE MORTALITY FOR DEPRESSED AND NONDEPRESSED PATIENTS AFTER MI



*Frazure-Smith, JAMA 1993;270:1819-1825*

# DEPRESSION PREDICTS IN-HOSPITAL MORTALITY

ODDS ratios



Cavenaugh et al, Am J Psychiatry, 2001

# IMPACT OF COMORBID DEPRESSION IN MEDICAL PATIENTS

- ↑↑ mortality
  - MI (OD=2-3) (*Sheps et al Psychosom Med, 2005*)
  - RA (OR=2.2) (*Ang et al, J Rheumatology 2005*)
  - Valve surgery (OD=1.9) (*Ho , Ann Thor Surg 2005*)
- ↑↑ disability; ↑↑ morbidity
- ↑↑ healthcare utilization
- ↓↓ adherence; ↓↓ productivity at work
- ↓↓ recognition
  - MDs, RNs assessment of depression has no relation to results of Beck Depression Inventory (*Ziegelstein et al, Psychol Med 2005*)

# GLOBAL BURDEN OF DISEASE: WORLD HEALTH ORGANIZATION

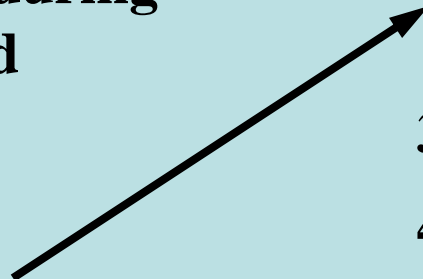
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**1990**

- 1 Lower respiratory infection**
- 2 Conditions arising during the perinatal period**
- 3 Diarrheal diseases**
- 4 Unipolar major depression**
- 5 Ischemic heart disease**
- 6 Vaccine-preventable disease**

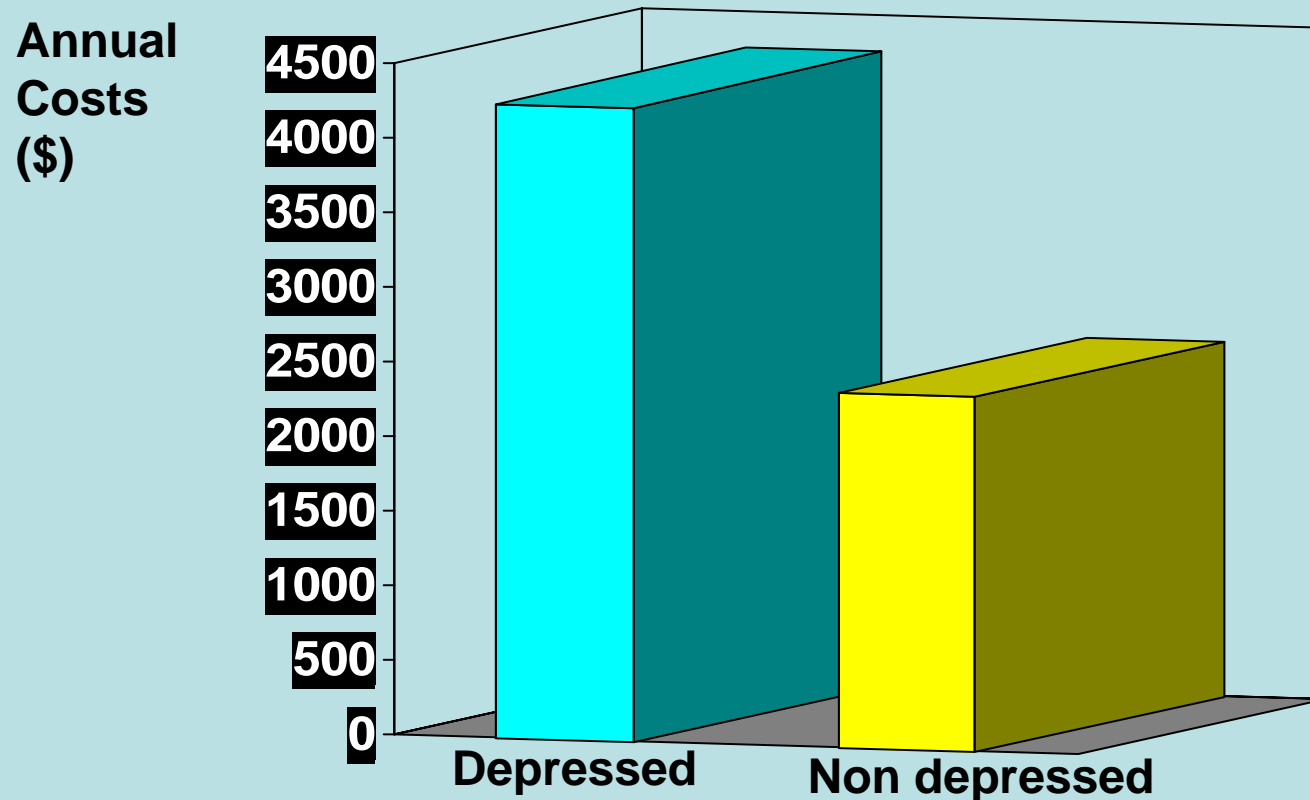
**2020**

- 1 Ischemic heart disease**
- 2 Unipolar major depression**
- 3 Road traffic accidents**
- 4 Cerebrovascular disease**
- 5 Chronic obstructive pulmonary disease**
- 6 Lower respiratory infections**



*Murray & Lopez, WHO: Global Burden of Disease, 1996; Michaud, JAMA, 2001*

# IMPACT OF MENTAL DISORDERS: COSTS OF DEPRESSION



*Simon G, Am J Psychiatry. 1995*

# UNDER-RECOGNITION/ UNDERTREATMENT

- 30%-70% of depression missed
- 50% stop medication within 3 months
- 50% of treated patients in primary care remain depressed after 1 year

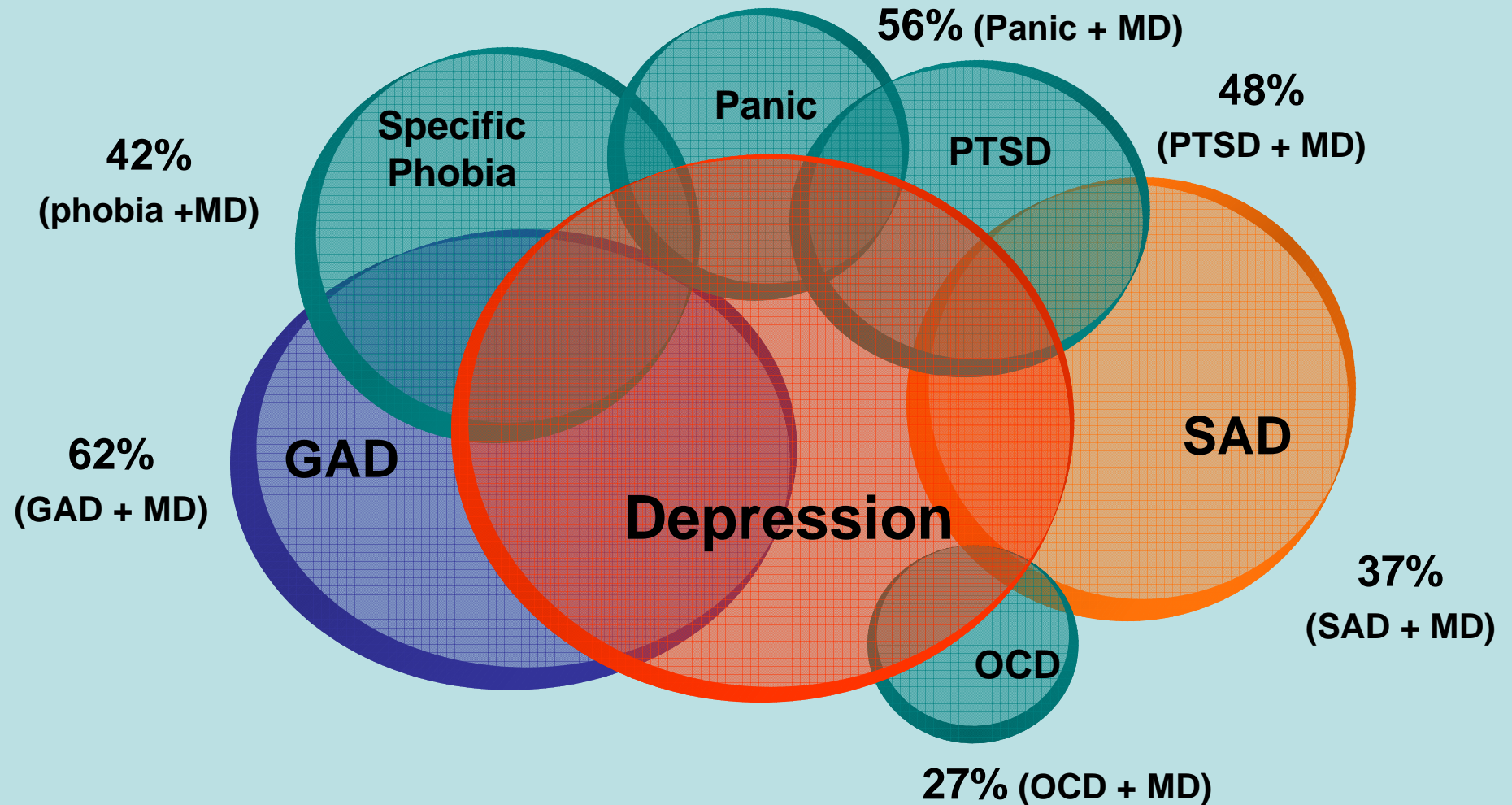
# ANXIETY IN MAJOR DEPRESSION

- 58% have an anxiety disorder
- >70% have anxiety symptoms

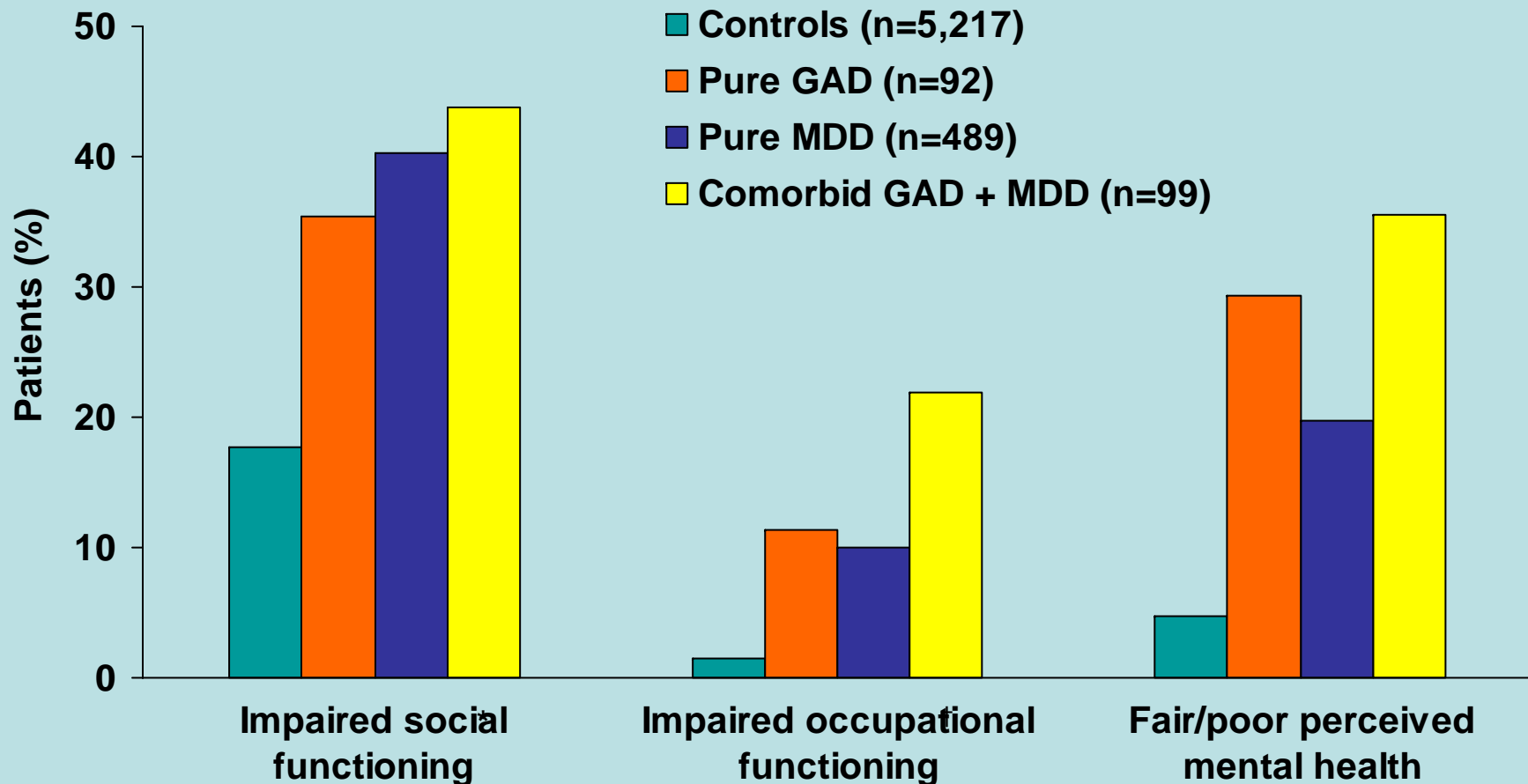
*Kessler RC et al. Br J Psychiatry Suppl. 1996;30:17-30.*

**CO-MORBIDITY  
IS THE RULE**

# PREVALENCE OF MAJOR DEPRESSION IN PATIENTS WITH ANXIETY



# COMORBIDITY IS ASSOCIATED WITH INCREASED IMPAIRMENT



\*. Kessler RC, et al. *Am J Psychiatry*. 1999;156:1915-1923.

# COMPLEXITIES OF ASSESSMENT

## #1 “Fallacy of good reasons” (stigma)

- “I have good reasons to be depressed... (patient)
- “Who wouldn’t be depressed?...I would be too” (physician)

## #2 “Confound of overlapping etiology” (multi-determination of Sx.)

- 4/9 signs/sx. may be ‘caused’ by either or both depression or co-morbid physical illness
  - low energy/fatigue
  - loss of appetite
  - trouble sleeping
  - slowing of motor movements

# **“Fallacy of Good Reasons”**

## **False Propositions**

- (1) Everyone with significant medical illness/stress has major depression (actual prevalence <50%)**
- (2) depression associated with medical illness is not treatable**

## **Correct Assertions**

- (1) There may be ‘good reasons’ for depressed affect, but the syndrome of major depression is a treatable illness**

# CONFOUND OF OVERLAPPING ETIOLOGY: DIAGNOSTIC MODELS

Model		Projected Pos/Neg
Inclusive	Count all symptoms regardless of etiology	High sensitivity Low specificity
Etiologic (DSM)	If 'etiology' is physical, do not count	High face validity ? Inter-rater reliability
Substitutive	Substitute physical sx. with psychological sx.	?
Exclusive	Exclude common physical symptoms	High specificity Low sensitivity

*Cohen-Cole and Stoudemire: Psych Clinics North America, 1987*

# CONFOUND OF OVERLAPPING ETIOLOGY: DOES THE MODEL MATTER?

- 460 geriatric medical inpatients assessed
- Prevalence of Major Depression ranged widely
  - 21% (inclusive) (N=95)...most sensitive
  - 16% (etiologic) (N=76)...low reliability\*
  - 15% (substitutive) (N=68)
  - 10% (exclusive) (N=46)...most specific
- Concurrent validity = all four models
- Predictive validity = most stability in exclusive model
- Of 68 'inclusive' patients having "significant impairment"
  - 10 (15%) were "missed" by etiologic approach
  - 31 (45%) were "missed" by exclusive approach

\* IRR is low for etiologic approach without structured interview and decision rules

*Koenig, Am J Psychiatry. 1997*

*Koenig, J Am Ger Soc, 1995*

# EVIDENCE TABLE: TOWARDS CLINICAL UTILITY

Model	Sensitivity	Specificity	Positive Pred Value	Concurrent Validity	Predictive Validity
Inclusive	100%	80-95% (1-4) +++ (5-7)	54-80% (1-4)	+++ (1) +++ (3)	++ (1,2)
Etiologic	100% (g.standard)	NA	NA	+++ (1) +++ (3)	++ (1) +++ (2)
Substitutive	+ (1)				- (1)
Exclusive	- (1)	+++ (1)		+++ (1)	+++ (1)

- = low  
+ = moderate  
++ = mod high  
+++ = very high

1. Koenig, AJP, 1997
2. Cavanaugh, AJP, 2001
3. Wilson, Pain, 2000
4. Hoogendijk, Psychosom, 1998
5. Paradiso, IntJPsychMed 1997
6. Chochinov, AJP, 1994
7. Federoff, AJP, 1991

*Cole and Delucia-Deranja, unpublished review*

# CLINICAL APPROACH (UTILITY)

Use inclusive approach (clinically informed)

- Highest Sensitivity
- High Specificity (80-95%)
- Mod. High Pos Predictive Value (54-80%)
  - *63% and 80% in the two best studies*

# DMS IV TR: MODIFIED INCLUSIVE APPROACH

“Count all physical symptoms...

- *unless they are clearly and fully accounted for by the physical illness”*

# ILLNESSES/MEDICATIONS THOUGHT TO 'CAUSE' MOOD DISORDERS THROUGH DIRECT PHYSIOLOGY

## Illnesses

- Neurological illnesses (AD, HD, PD, CVA, MS)
- Endocrine disorders (thyroid, cortisol, calcium)
- Cancer (?pancreatic)

## Medications

- Chemotherapeutic agents (interferon, others)
  - *Beratis et al, J Psychosom Res 2005*
- Antihypertensive medications (reserpine, propranolol)
- Corticosteroids

# MAJOR DEPRESSION IN THE MEDICALLY ILL: SELECTIVE REVIEW

- **Coronary artery disease**
- **Stroke**
- **Cancer**
- **Diabetes**

# DEPRESSION IN CAD

- Dep is risk factor for future CAD, MI
- 15-23% of MI patients have major depression
- ↑↑ risk (3-5x) of death after MI
- ↑↑ HPA axis; ↑↑ sympatho-medullary axis
- ↑↑ cytokines, other immunological markers
- ↑↑ platelet aggregation
- ↓↓ HR variability
- Genetics (5-HTTLPR serotonin-transporter region)
  - short allele -- ↑↑ depression ↑↑ death
    - *Lenze et al, Am J Ger Psych 2005, Nakatani et al, Am Heart Journal 2005*

*Jiang et al, Am Heart Journal 2005*

*Shimbo et al Am Journal of Cardiology 2005*

*Carney et al Arch Int Med 2005*

# DEPRESSION AND STROKE

- Depression predicts future CVA
- 14-23% major depression after CVA
- Anatomy (pathophysiology)
  - “Robinson hypothesis”
    - left anterior (anterior cingulate)
    - left basal ganglia
- PSD predicts ↑↑ morbidity, ↑↑ mortality

# DEPRESSION IN DIABETES

- 11-15% major depression (OR 2:1)
- ↑↑ non-adherence
- ↑↑ GHb (physiological relationships)
  - *Lustman et al, J Diabetes Complications 2005*
  - *Lustman et al, Psychosom Med 2005*
- ↑↑ retinopathy; ↑↑ neuropathy; ↑↑ nephropathy
- ↑↑ macrovascular complications (CAD, etc)

*Katon, Biological Psychiatry, 2003*

*Groot et al Psychosom Med 2001*

*Van Tilburg et al Psychosom Med 2001*

# DEPRESSION IN CANCER

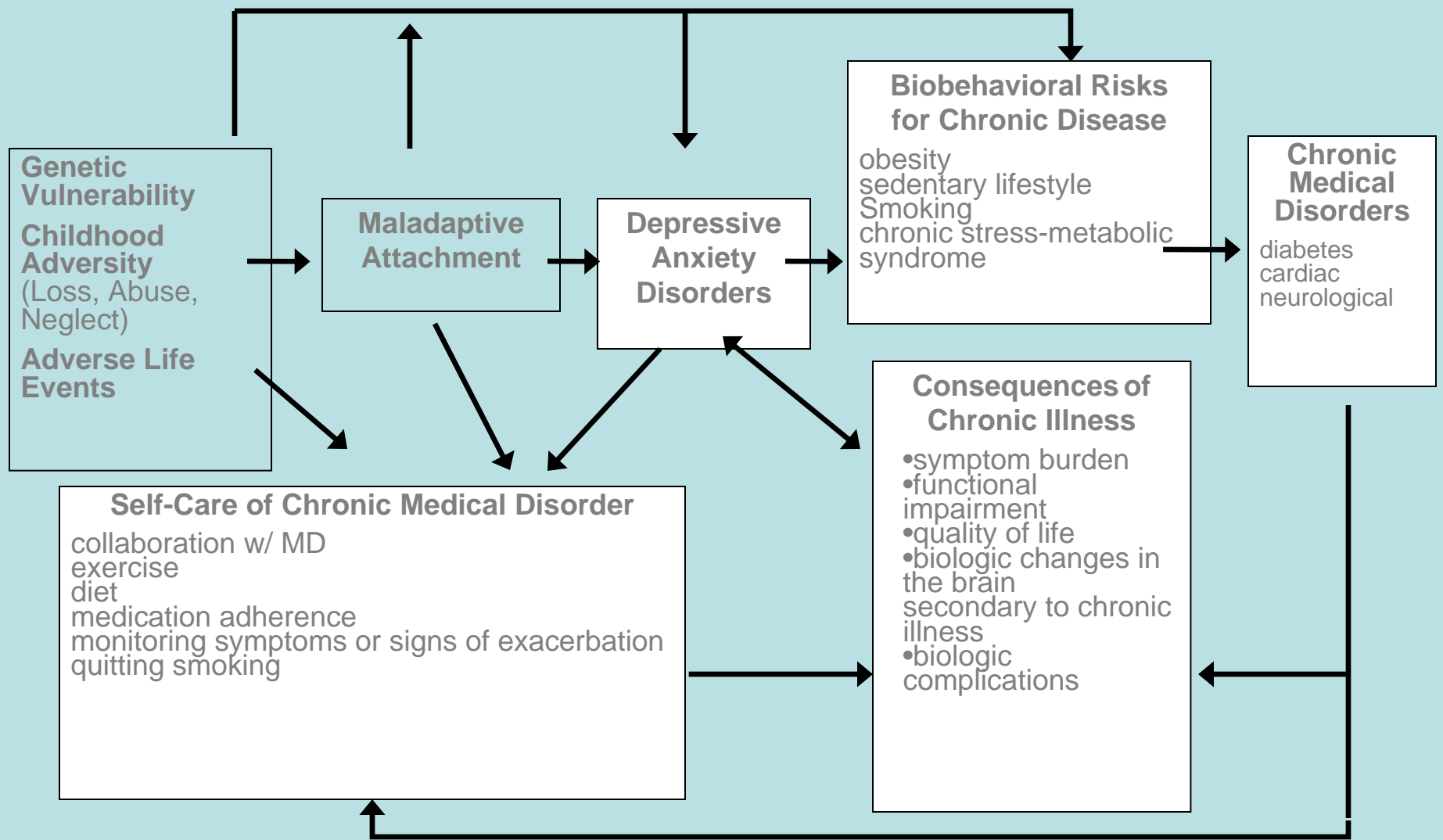
- 6/30 studies show positive association with depression and later cancer
- 25-33% prevalence of maj dep in cancer
- 15/24 studies link depression as predictor of poor outcome in cancer
- Depression more commonly precedes pancreatic cancer than other CA (4:1)

*Spiegel and Giese-Davis, Biological Psychiatry, 2003*

*Carney et al, Psychosomatic Medicine, 2003*

# MECHANISMS/RELATIONSHIPS

- Physical illness “causes” depression
  - psychological reaction (“good reasons”)
  - physical disability ‘causes’ depression
  - physiological mediators (endocrine, immune)
- Depression “causes” physical illness or worsens it
  - psycho-neuro-endocrinology
  - psycho-neuro-immunology
- Depression “causes” disability
- Depression in physical illness “causes” excess disability over and above impairment from physical illness



**BIO-PSYCHO-SOCIAL MODEL OF DEPRESSION AND PHYSICAL ILLNESS:  
INTERACTIONS OF ETIOLOGY AND OUTCOME**

*Katon, Biological Psychiatry, 2003*

# ANTIDEPRESSANTS IN CAD/CVD

- **Tricyclics**
  - prolong conduction
  - cause postural hypotension
- **SADHART (*Glassman et al, JAMA 2002*)**
  - Sertraline is safe and effective after MI
  - Sertraline inhibits platelet aggregation
- **ENRICHD (*Taylor et al, Arch Gen Psychiatry 2005*)**
  - Patients on SSRIs have ↓↓ death and ↓↓ repeat MI (OD=.55)

# ANTIDEPRESSANTS IN DIABETES

- **Tricyclics**
  - useful for diabetic neuropathy
  - watch for postural hypotension and gastroparesis
  - may impair glycemic control
- **SSRIs shown to improve depression/GHb**
- **Evidence of efficacy of new dual agents (venlafaxine, duloxetine) for neuropathic pain**

# OTHER TREATMENTS

- **Psychotherapies (many RCT)**
  - **Problem-Solving Therapy (primary care)**
  - **CBT (ENRICHHD - *JAMA 2003*)**
    - **with social support interventions**
- **Psycho-stimulants (few RCT)**
  - **TBI (*Lee et al Human Psychopharm 2005*)**
- **ECT (few RCT in medically ill)**
- **Combined antidepressant + psychotherapy (few RCT in medically ill)**

# NEW CONCEPT: VASCULAR DEPRESSION (Sub-Cortical Ischemic Depression)\*

- Defined by:
  - First onset of depression at or after 60 years of age
  - Presence of HT and/or TIA or surgery for vascular disease
- Associated with:
  - ↓ depressive ideation
  - ↑ psychomotor retardation
  - ↓ response to antidepressants
  - ↓ Cognitive dysfunction (executive)
- MRI findings: Left frontal and left putamen deep white matter hyperintensities

*Alexopoulos, J Am Ger Soc 2003*

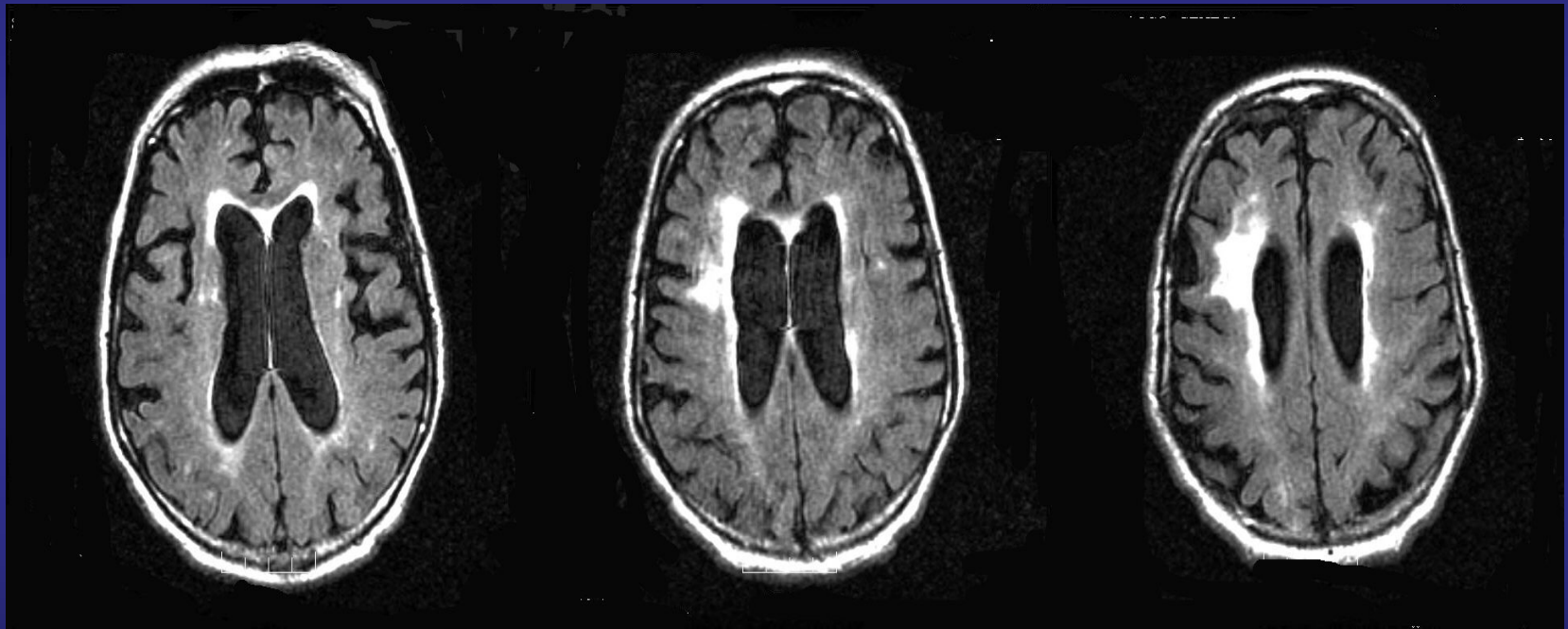
*Krishnan, Biol Psychiatry 2004\**

*Alexopoulos et al, Biol Psychiatry 2005*

*Heiden et al, J Psychiatric Res 2005*

*Rapp et al, Am J Psych 2005*

# T2 Hyperintensities on MRI



Courtesy of Martin Goldstein MD

# NEW TOOL: PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

- 9-item, self-administered questionnaire
- Validated for diagnostic assessment
  - 88% sensitivity and specificity for MDD
- Validated for follow up of outcomes
- 1st two questions for screening (PHQ2)
  - 83% sensitivity and 92% specificity
- Performs well after stroke (and other illness)
  - *Williams et al, Stroke 2005*

*Spitzer R, et al. JAMA 1999*

*Kroenke K et al, Medical Care, 2003*

*Kroenke K et al, J Gen Int Med, 2001*

# PHQ - 9 Symptom Checklist

1. Over the <u>last two weeks</u> have you been bothered by the following problems?	Not at all 0	Several days 1	More than half the days 2	Nearly every day 3
a. Little interest or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
b. Feeling down, depressed, or hopeless	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Trouble falling or staying asleep, or sleeping too much	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Feeling tired or having little energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Poor appetite or overeating	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Feeling bad about yourself, or that you are a failure . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Trouble concentrating on things, such as reading . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Moving or speaking so slowly . . .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Thoughts that you would be better off dead . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. ... how <u>difficult</u> have these problems made it for you to do your work, take care of things at home, or get along with other people?</b>				
Subtotals:		3	4	9
TOTAL:		16		

# SCORING THE PHQ: SEVERITY

- **Count numerical values of symptoms**
  - **0-4**      **not clinically depressed**
  - **5-9**      **mild depression**
  - **10-14**    **moderate depression**
    - **88% sensitivity, 88% specificity (MDD)**
  - **>14**      **severe depression**

## USE OF THE PHQ

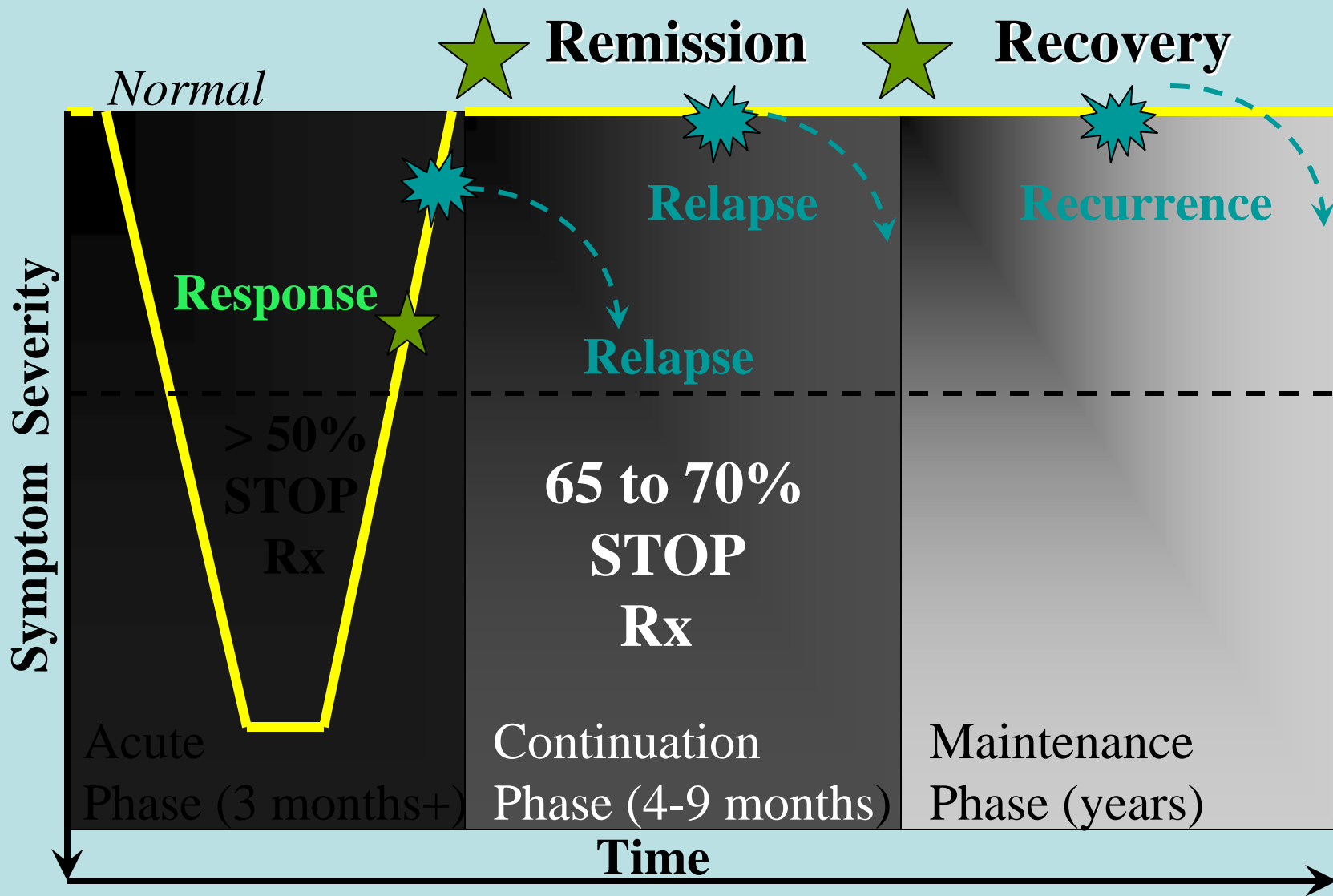
- **Assess high-risk, 'red flag' patients**
  - **Chronic illness**
  - **Unexplained physical complaints**
    - **sleep disorder, fatigue**
  - **Patients who appear sad**
  - **Recent major stress or loss**

# TREATMENT OF DEPRESSION

# TREATMENT

- **Watchful waiting**
- **Psychotherapy**
- **Antidepressant medication**
- **Combination therapies**

# THREE PHASES OF TREATMENT



# WATCHFUL WAITING (WW)

- **Some low intensity depressions remit spontaneously**
- **WW is an acceptable “treatment plan”**
- **Initial treatment of choice for minor depression**

# **GOAL: FULL REMISSION**

- **Remission of symptoms treatment goal**
  - **Resolution of emotional/physical symptoms**
- **Restoration of full functioning**
  - **Return to work, hobbies, relationships**
- **PHQ score < 5 for three months**

# Potential Consequences of Failing to Achieve Remission

- Increased risk of relapse and resistance<sup>1-3</sup>
- Continued psychosocial limitations<sup>4</sup>
- Decreased ability to work and productivity<sup>5,6</sup>
- Increased cost for medical treatment<sup>6</sup>
- Sustained depression may worsen morbidity/mortality of other conditions<sup>7-9</sup>

1. Paykel ES, et al. *Psychol Med*. 1995;25:1171-1180.

2. Thase ME, et al. *Am J Psychiatry*. 1992;149:1046-1052.

3. Judd LL, et al. *J Affect Disord*. 1998;59:97-108.

4. Miller IW, et al. *J Clin Psychiatry*. 1998;59:608-619.

5. Simon GE, et al. *Gen Hosp Psychiatry*. 2000;22:153-162.

6. Druss BG, et al. *Am J Psychiatry*. 2001;158:731-734.

7. Frasure-Smith N, et al. *JAMA*. 1993;270:1819-1825.

8. Penninx BW, et al. *Arch Gen Psychiatry*. 2001;58:221-227.

9. Rovner BW, et al. *JAMA*. 1991;265:993-996.

# PSYCHOTHERAPY

- **Effective (CBT/IPT/PST)**
  - Mild to moderate major depression
  - Adjunct to antidepressants
- **Possibly effective**
  - Dysthymia (chronic depression)
  - Minor depression
  - For patients in life transitions or with personal conflicts

# PHARMACOTHERAPY

- **Effective**
  - major depression
  - chronic depression (dysthymia)
- **Equivocal**
  - minor depression

# ANTIDEPRESSANTS

- **TRICYCLICS**
- **SSRIs**
  - ✎ citalopram (Celexa)
  - ✎ escitalopram (Lexapro)
  - ✎ fluoxetine (Prozac)
  - ✎ paroxetine (Paxil)
  - ✎ sertraline (Zoloft)
- **OTHER NEW AGENTS**
  - ✎ bupropion (Wellbutrin SR, XL) - DA/NE
  - ✎ duloxetine (Cymbalta) - SRI/NRI
  - ✎ mirtazapine (Remeron) - NE/5HT
  - ✎ venlafaxine (Effexor XR) - SRI/NRI

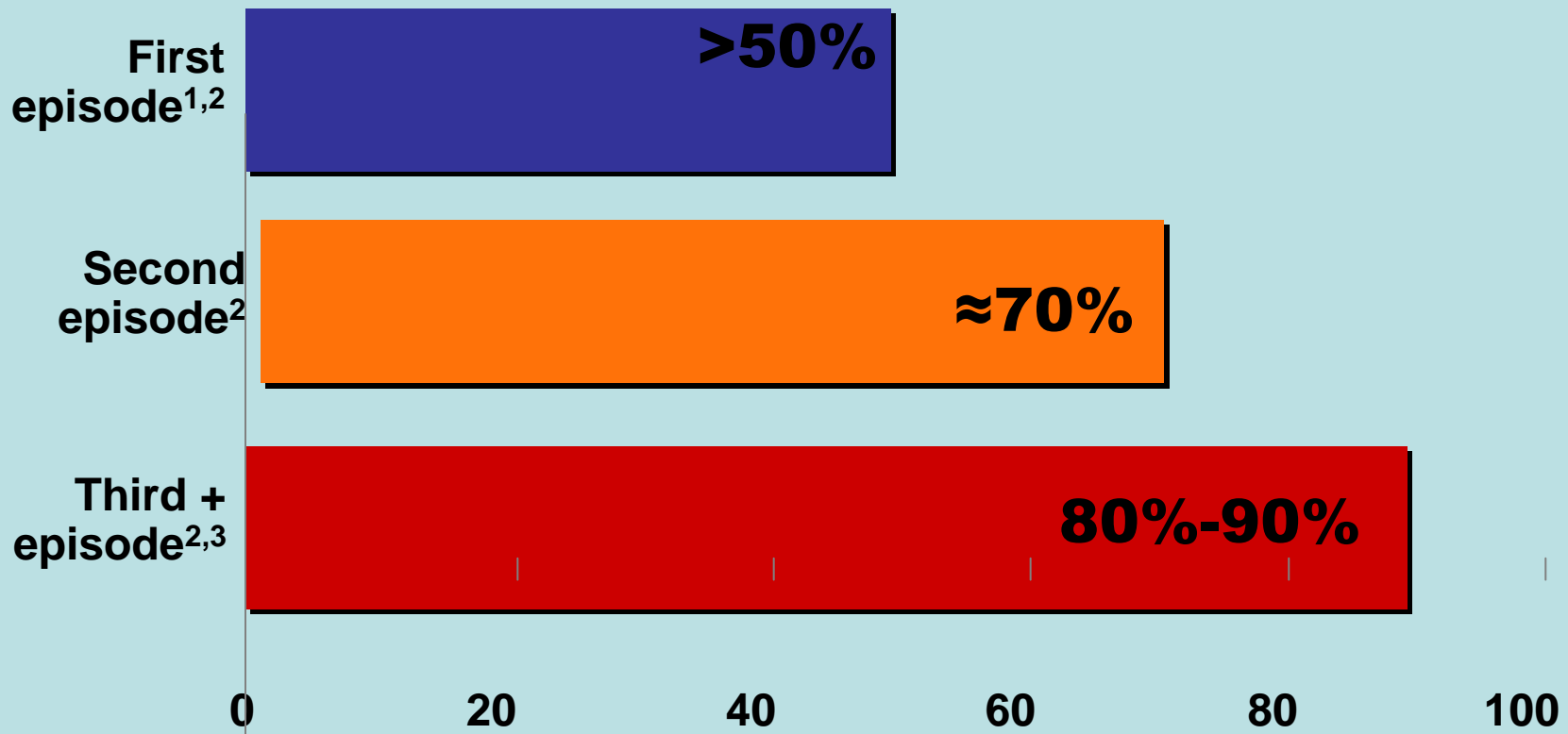
# MEDICATION ALGORITHM

- **Start with SSRI or new agent**
- **Early follow-up (1-2 weeks)**
- **Increase dose every 2-4 weeks (to evaluate effect of each dose change)**
- **Repeat PHQ every month**
- **MCID=5 points on PHQ-9**
- **Raise dose or change treatment until PHQ<5 for 3 months (remission)**

## PARTIAL OR NON-RESPONSE

- If no response, switch drug or class
- If partial response at maximum dose, consider augmentation/consultation
- Continue medication for at least 4-9 months after full remission
- Use full-dose maintenance for recurrent depressions

# RECURRENCE BECOMES MORE LIKELY WITH EACH EPISODE OF DEPRESSION



Risk recurrence (%) following recovery during long-term follow-up\*

1. Judd LL, et al. *Am J Psychiatry*. 2000;157:1501-1504.
2. Mueller TI, et al. *Am J Psychiatry*. 1999;156:1000-1006.
3. Frank E, et al. *Arch Gen Psychiatry*. 1990;47:1093-1099.

# DRUG INTERACTIONS

- **Obtain medication history**
- **Be aware that all drugs can affect the action and serum levels of other drugs**
- **Monitor the clinical effects and serum levels of all medications**
- **Use electronic data base**

# DRUG INTERACTIONS (INHIBITION OF CYTOCHROME P450)

- IID<sub>6</sub>
  - Moderate inhibition
    - duloxetine (Cymbalta)
    - fluoxetine\* (Prozac)
    - paroxetine\* (Paxil)
  - Low inhibition
    - bupropion\* (Wellbutrin)
    - escitalopram (Lexapro)
    - mirtazapine\* (Remeron)
    - sertraline (Zoloft)
    - venlafaxine (Effexor)

\*generic available

# ANTIDEPRESSANTS IN DIABETES

- **Tricyclics**
  - useful for diabetic neuropathy
  - watch for postural hypotension and gastroparesis
  - may impair glycemic control
- **SSRIs shown to improve depression/GHb**
- **Evidence of efficacy of new dual agents (venlafaxine, duloxetine) for neuropathy**

# OTHER TREATMENTS

- **Psycho-stimulants**
  - methylphenidate (Ritalin)
  - dextroamphetamine
  - modafinil (Provigil)
- **Electroconvulsive therapy**

# TREATMENT OF ANXIETY

## 5-HT DRUGS: ALL APPROVED INDICATIONS

	MD	Panic	OCD	SAD	GAD	PTSD	
citalopram	X						
duloxetine	X						DN
escitalopram		X			X		
fluoxetine	Adult and children	X	Adult and children				BN
paroxetine	X	X	Adult and children	X	X	X	PDD
sertraline	X	X	Adult and children	X		X	PDD
venlafaxine	X	X		X	X		

DEP=major depression; OCD= Obsessive-compulsive disorder; SAD=social anxiety disorder; GAD=generalized anxiety disorder; PTSD=post-traumatic stress disorder; BN=bulemia nervosa; PDD=premenstrual dysphoric disorder; DN =diabetic neuropathy

# TREATMENTS FOR ANXIETY DISORDERS

	Other				
	CBT	SSRI	Bus**	Antidep*	BZ***
<b>Panic Disorder</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
<b>Soc anxiety disorder</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
<b>OCD</b>	<b>X</b>	<b>X</b>			
<b>Generalized anxiety</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>PTSD</b>	<b>X</b>	<b>X</b>			
<b>Specific phobia</b>	<b>X</b>				

\*Tricyclic antidepressants and venlafaxine

\*\*buspirone \*\* CBT = cognitive behavioral therapy; \*\*\*BZ = benzodiazepines.

# **BENZODIAZEPINES**

**(all available as generics)**

- **Short acting:**      **lorazepam (Ativan)**  
                                 **oxazepam (Serax)**
- **Intermediate:**      **alprazolam (Xanax)**
- **Long acting:**      **clonazepam (Klonopin)**  
                                 **diazepam (Valium)**  
                                 **chlordiazepoxide (Librium)**

\*excreted in the urine, after simple metabolism

# PSYCHOPHARMACOLOGY IN THE ELDERLY: SPECIAL CONSIDERATIONS

Pharmaco-kinetics - increased effect

- hepatic metabolism decreased
- decreased protein binding

Pharmaco-dynamics - increased effect

- increased receptor sensitivity

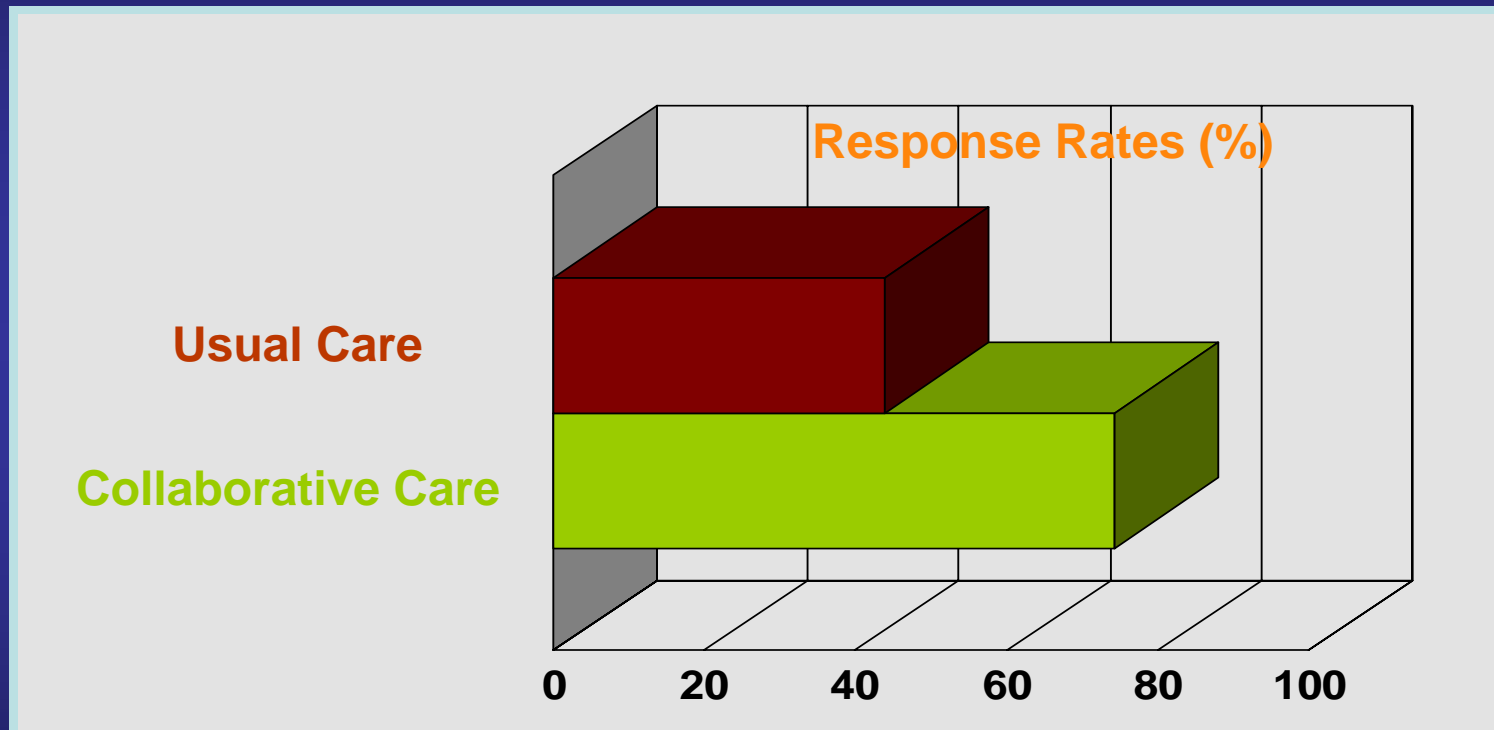
Clinical Implications

- Start low, go slow... but GO!

# **NEW MODELS OF CARE: Depression in Primary Care**

- **Historical role of PCP**
  - *de facto* provider of mental health services
- **Future role of PCP**
  - **explicit partnership between PCPs and behavioral health specialists**

# COLLABORATIVE CARE



*Katon et al, JAMA 1995*

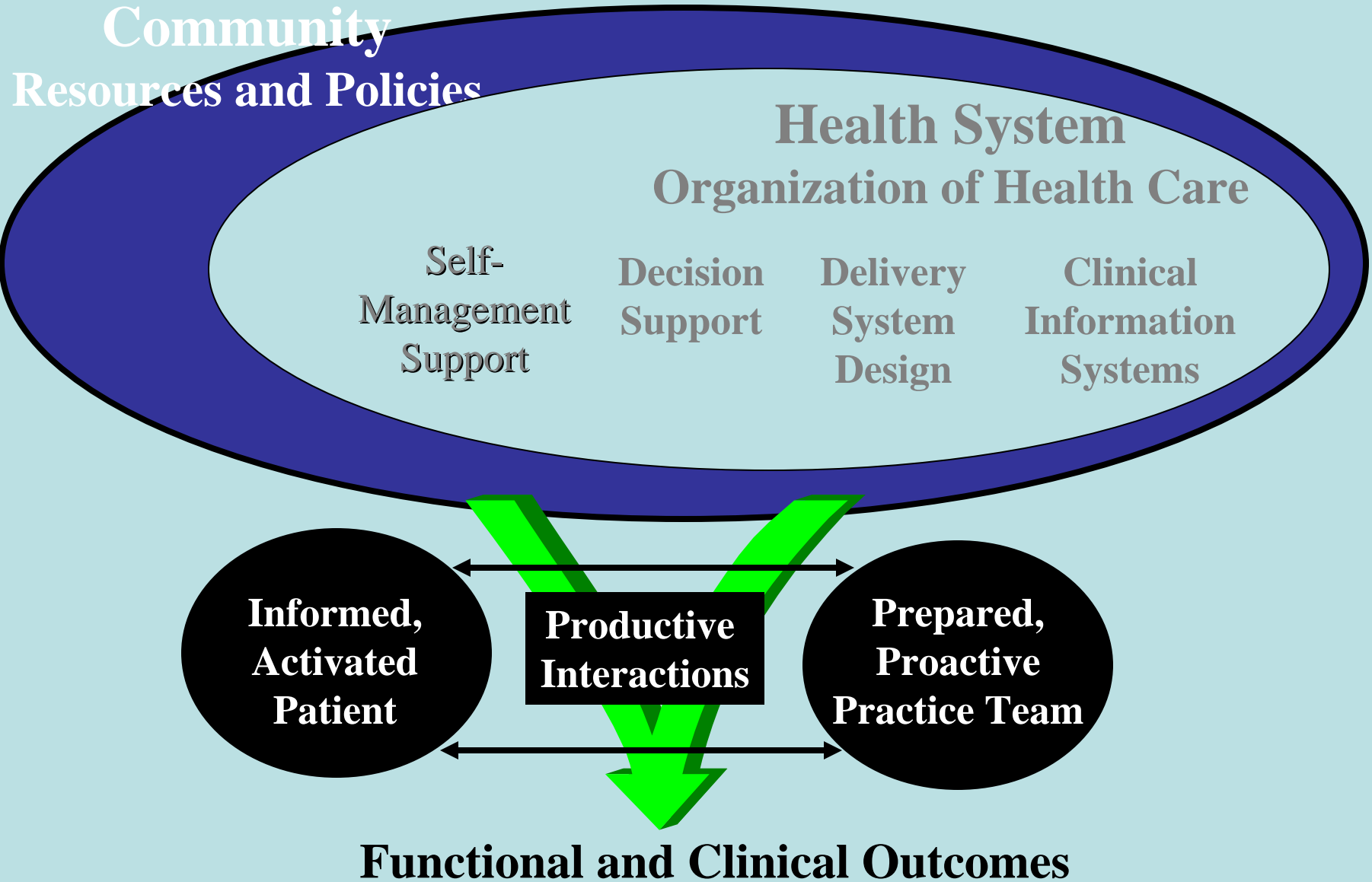
# Collaborative Care (CC) for Depression

- Several versions/models of CC demonstrated effective
- 60-80% one-year response in CC vs. 50% recovery in “care as usual”
- Fewer disability days in CC
- No “cost-offset” demonstrated yet
- “Cost-efficacy” demonstrated

# CORE ELEMENTS OF CC

- Evidence-based guidelines
- Patient and PCP education
- Objective tools (PHQ-9)
- Care manager
- Step-care model
- Information system

# A Model for Improving Chronic Illness Care\*



\*E. Wagner, MD, W.A.MacColl Institute, Group Health Cooperative of Puget Sound

# Collaborative Care in General Medical and Specialty Settings

- Effective in patients with RA, stroke, etc.
- Patients with significant general medical illness(es) respond just as well as those without general medical illnesses
  - *Harpole et al, General Hospital Psychiatry 2005*
- Depression Rx. effective in improving physical functioning
  - *Simon et al, Psychol Med 2005*
  - *Callahan et al, J Am Ger Soc 2005*

**Thank You!**

# ValueOptions' Depression Treatment Support Program

For more information about our program and to access member tip sheets, please visit

[http://www.valueoptions.com/members/Tips\\_and\\_Resources.htm](http://www.valueoptions.com/members/Tips_and_Resources.htm).