



SOCIETY OF ACTUARIES

**Individual and Small Group Health
Insurance Underwriting Seminar
September 18- 19, 2008**

**Session # 5: Insight: The Real Cost of
Mental Health Benefits**

Steve Melek

The Real Cost of Mental Health Benefits

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September 19, 2008



Mental Health Facts

Prevalence of Behavioral Disorders in the general US population:
30% for years, some are mild and below threshold levels

100 Adults

22 with diagnosable mental disorder

2 will seek treatment from mental health specialists

6-7 will seek some type of treatment in primary care settings, and
13-14 will go untreated

Source: Kessler, et.al.

Depression Facts

- Affects 9.5% of the population in any given year
- 1 in 6 individuals will be affected by depression at some point in their lifetime.
- According to the World Health Organization, the incidence of depression is expected to increase.
- Average delay between onset of illness and treatment is 6-8 years

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Behavioral Healthcare Spending

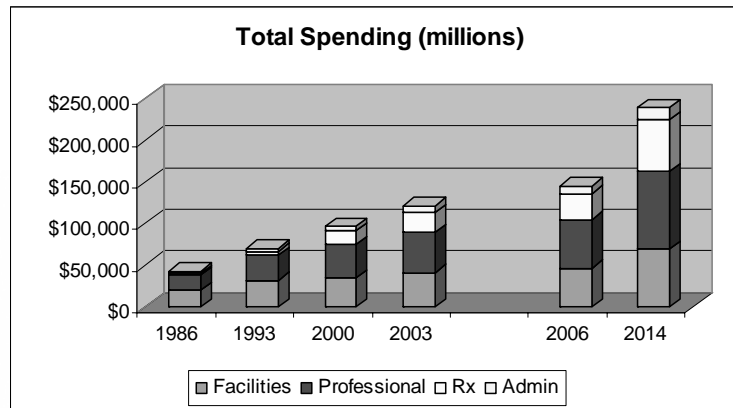
Private Insurance - Mental Health and Substance Abuse
Expenditures

1986 - \$ 9.8 billion
2000 - \$19.2 billion
Proj. 2006 - \$ 31.8 billion
Proj. 2014 - \$ 56.0 billion

Source: SAMHSA Spending Projections, 2007

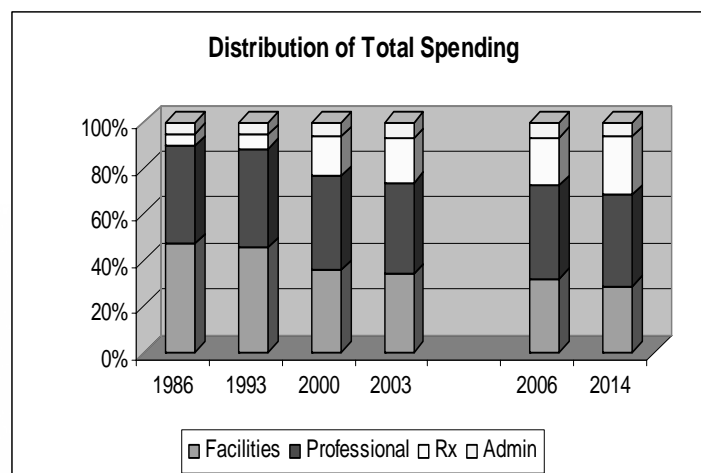
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Total Behavioral Healthcare Spending – All Payers



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Total Behavioral Healthcare Spending – All Payers



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2008 HCGs – Preliminary PMPM Costs

(all payers, typical benefits - undiscounted)

Specialty Behavioral	Loosely Managed	Well Managed
Inpatient Hospital	\$5.12	\$1.37
Outpatient Hospital	0.83	0.40
Inpatient Professional	1.01	0.27
Outpatient Professional	<u>4.32</u>	<u>2.45</u>
	\$11.28	\$4.49
Psych Drugs		
All psychotropic classes	\$12.40	\$7.45

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Psychotropic Drugs – Effectively Used?

Types of Challenges with PCPs Prescribing Psychotropics

- Low Patient Adherence Rates
- Sub-Optimal Dosing
- Therapeutic Duplication
- Impact of Side Effects
- Inappropriate Use
- Poly-pharmacy
- Contraindicated Use

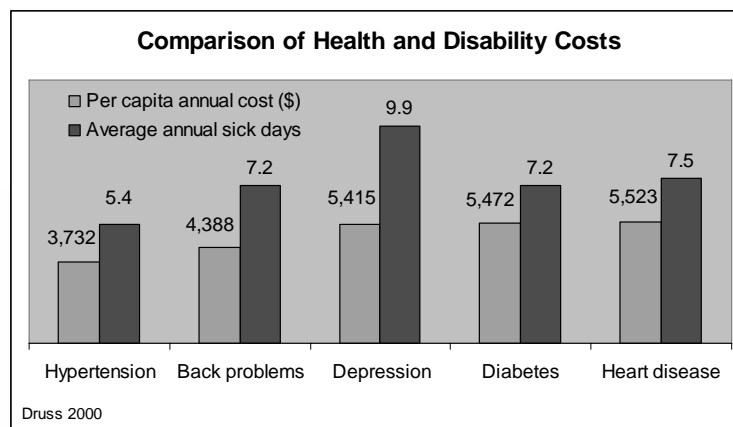
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Other Costs to Employers

- Family mental health issues account for 26% of absenteeism; stress accounts for 16%
- The cost of depression to employers is \$44 billion annually in lost productivity (depressed employees work at 70% of their optimal productivity)
- The average lost productive time per depressed worker per week includes 1.0 hour due to absenteeism and 4.6 hours due to presenteeism, compared to 0.4 hours of absenteeism and 1.1 hours of presenteeism for non-depressed workers (Stewart)

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Health and Disability Costs of Depression



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Short Term Disability Impact

- Depressed workers experienced 1.5-3.2 more STD days in a month than non-depressed workers

Source: Kessler et.al., Health Affairs, 1999

- 50% of behavioral STD have a 2nd STD
- 75% of 2nd STD have a 3rd STD
- 95% of 3rd STD have additional STD

Source: Coca-Cola Company

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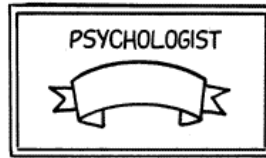
Economic Burden

Based on average impairment and prevalence estimates, depression and other mental illness ranked 3rd for the overall economic burden of illness among the top 10 health conditions, at an average annual cost per employee of \$348, behind hypertension (\$392) and heart disease (\$368)

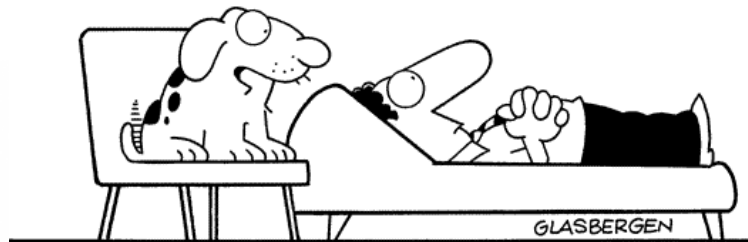
Source: Goetzel et.al., JOEM, April 2004

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Evidence-Based?



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E-mail: randyg@norwich.net



“My therapy is quite simple: I wag my tail and lick your face until you feel good about yourself again.”

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Depression Treatment

- Depression is a treatable illness!
- Effective treatments for depression exist and there are evidence-based guidelines for the diagnosis and treatment.
- Early effective treatment helps to keep depression from becoming more severe, or chronic.
- Effective treatment can prevent recurrences of depression.

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The Quality of Treatment

- Minimally Effective Treatment of Behavioral Disorders:
 - 48% of those treated in MH setting
 - 13% of those treated in Medical setting
 - 8% of all members with prevalent disorders
- In spite of effective treatments and evidence-based guidelines, only 1 in 5 individuals with depression **who seek treatment** are treated according to minimum standards (JAMA, 2003).

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The Quality of Treatment

	<u>Effective</u>	<u>Ineffective</u>
Max Productivity		
- baseline	72%	72%
- 2 years	76%	68%
Hours Lost Work		
- baseline	23	23
- 2 years	4.5	13.5

Treatment Value \$1,982/year/depressed FTE

Rost, et.al. 2004

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The Behavioral Health Carve-Out

- Proliferated in the 1990s in response to sky-rocketing mental health costs.
- Today 80%+ of medically insured Americans have MH coverage through a MBHO
- Contributes to challenges in collaborative or integrated treatment for depression.

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The “Silo” Effect

- Physical and mental health treatment separated.
- Little or no collaboration between physicians and mental health specialists.
- Many non-psych physicians not well-trained in diagnosis and treatment of MH conditions.
- Access to MH treatment is restricted.

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Primary Care Issues

- Two-thirds or more of all psychopharmacological drugs are prescribed by PCPs.
- 25-36% of primary care patients have a diagnosable mental disorder
- Mental health disorders often present with physical symptoms such as fatigue, chest pain, dyspnea, low back pain, etc. (80% of individuals eventually diagnosed with depression complain of physical pain first)
- PCPs not well-trained in BH may focus on the physical symptom and overlook the underlying mental disorder.

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Depression & Pain

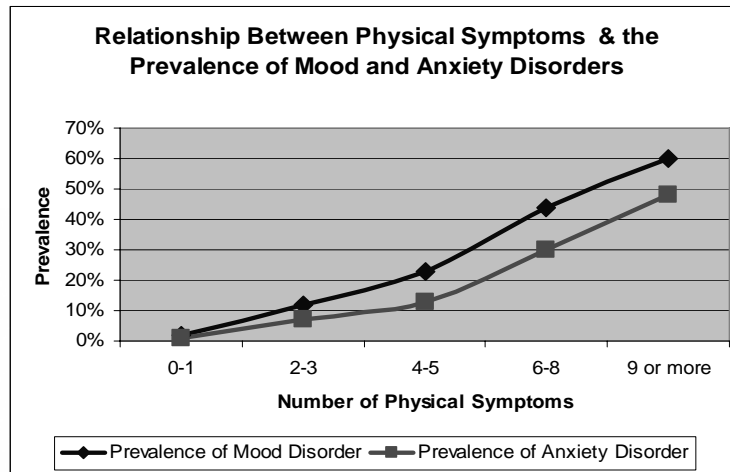
- People with chronic pain have 3x the average risk of developing psychiatric symptoms – usually mood or anxiety disorders
- Depressed patients have 3x the average risk of developing chronic pain
- People in pain who are also depressed become extremely heavy consumers of medical services, even if they have no severe underlying medical illness.
- Pain slows recovery from depression, and depression makes pain more difficult to treat

Sources: Bair MJ, Bao Y, Lesho EP, Ohayon MM, Parker JC, Turk DC, et.al.

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Physical Symptoms & Psych Disorders

(Kroenke, et.al.)



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Primary Care		
PCP Office/Urgent Care Visits	\$31.55	\$28.43

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Increased Use of Healthcare Services

- Untreated mental health increases medical care costs.
- Presence of mental health conditions has been shown to increase usage of non-behavioral health services by 70% (American Psychiatric Association).

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Prevalence of Co-morbid Depression or Anxiety among Chronic Conditions

Commercial Population Chronic Medical Condition	1. Disease Prevalence Rates		2. Co-morbid Prevalence Rates	
	Scientific	Treatment	Scientific	Treatment
Diabetes Mellitus	7.0%	5.2%	29.0%	24.8%
Hypertension	16.1%	9.1%	28.0%	24.7%
Arthritis	14.1%	7.9%	30.0%	25.9%
Asthma	6.6%	2.4%	54.0%	19.5%
COPD	3.8%	1.4%	37.0%	30.5%

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Example of Co-morbid Patients (Mixed Protocol Members)

Chronic Medical Illness

(70% have behavioral symptoms;
30% have MH/SUD)

Mental Illness

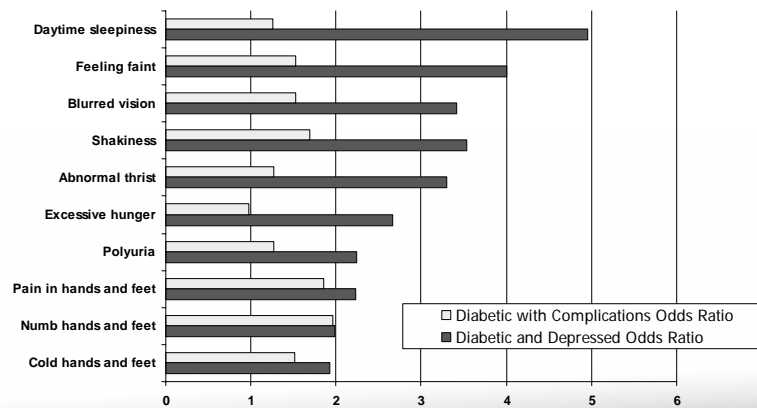
(80% have somatic symptoms)

▪ Diabetes

➤ Depression

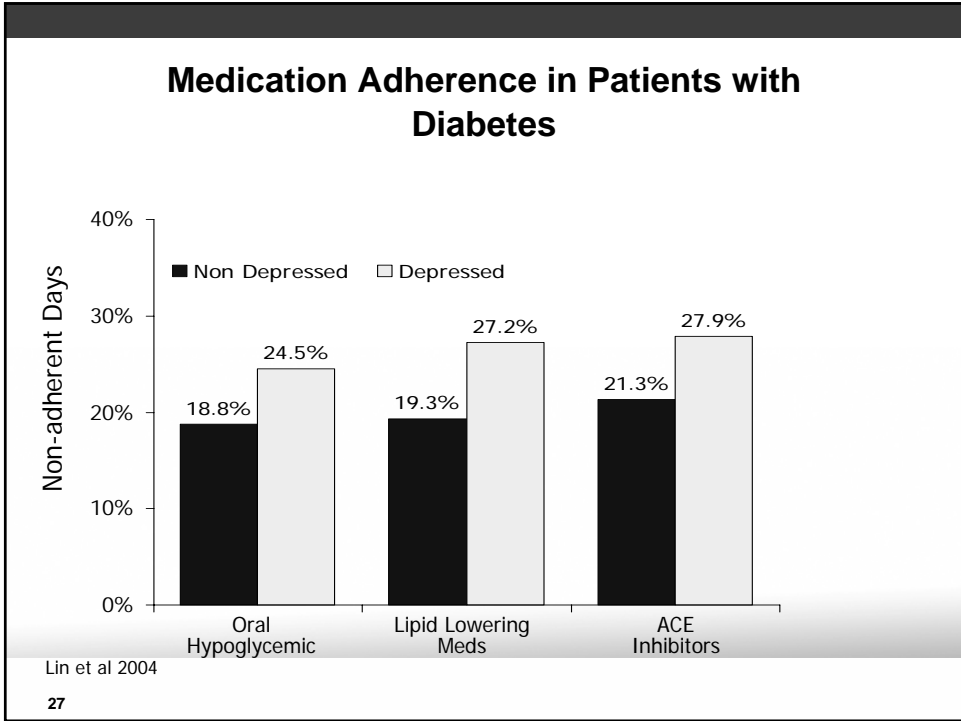
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Relationship of Depression to Diabetic Symptoms



Ludman et al, Gen Hosp Psychiat 26:430-436, 2004.

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Depression Effect on Self-Care in Diabetic Patients

Self-care activities (past 7 days)	No Major depression	Major depression	Odds ratio	95% CI
Healthy eating ≤ 1 time/week	8.8%	17.2%	2.1	1.59-2.72
5 servings of fruit/vegetables ≤ 1 time/week	21.1%	32.4%	1.8	1.43-2.17
High fat foods ≥ 6 times/week	11.9%	15.5%	1.3	1.01-1.73
Physical activity (>30min) ≤ 1 time/week	27.3	44.1	1.9	1.53-2.27
Specific Exercise Session ≤ 1 time/week	45.8	62.1	1.7	1.43-2.12
Smoking: Yes	7.7	16.1	1.9	1.42-2.51

--courtesy of Katon, 2004
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Impact of Co-morbid Psych Illness with Chronic Medical Conditions on PMPM Costs

<i>Chronic Medical Condition</i>	<i>With Comorbid Depression Treatment</i>	<i>No Comorbid Depression Treatment</i>
Diabetes	\$1,182 (108)	\$ 701 (10)
Hypertension	\$ 961 (98)	\$ 550 (9)
Arthritis	\$1,048 (122)	\$ 521 (12)
Asthma	\$1,065 (125)	\$ 399 (9)
COPD	\$1,377 (133)	\$ 713 (14)
Total Healthcare Cost PMPM (Behavioral Cost)		

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Underwriting Guidelines

Psychosis, Neurosis, Depression, Psychotherapy (continued)

Rating

Neurotic disorders			
No prior hospitalization			
No prior counseling	<1 year	6	
	>1 year	STD	
Current counseling			
No current counseling	<3 years	30 to 15	
	>3 years	STD	
Prior hospitalization			
No current counseling or psychotherapy			
	<2 years	60 to 40	
	2-5 years	20 to 10	
	>5 years	STD	
Active counseling or psychotherapy			
	<2 years	110 to 90	
	2-5 years	70 to 60	
	>5 years	50	
Psychotic disorders			
Major depression			
	<2 years	150 to 100	
	2-10 years	50	
	>10 years	50 to 25	
Bipolar disorder (manic depression)			
	<1 year	200 to 100	
	>1 year	50	
Schizophrenia and other			
Active counseling or psychotherapy, add			
	<5 years	150	
History of shock therapy, add			
	<5 years	150	
	>5 years	100	

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Integration Outcomes

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ColoradoAccess Care (Health Plan) Integration: *Net Savings \$400 Per-Member-Per-Month*

- Office visits: 22% decrease
- Emergency room visits: 26% decrease
- Hospital admissions: 72% decrease
- Hospital days: 76% decrease
- Medical and pharmaceutical costs: 24% decrease

<http://www.managedhealthcareexecutive.com/coloradoaccess>

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Decreased Health Care Cost with Integrated Treatment of: Substance Abuse Related Medical Conditions

	<u>Integrated*</u> (N = 189)	<u>Independent</u> (N = 181)	
Annual Cost ↓	\$ 2,772	\$ 708	p < .02
Inpatient	\$ 1,920	\$ 156	p < .04
ER	\$ 264	\$ 252	p < .02
Abstinent (6 mo.)	69%	55%	p < .006

*integrated primary care and chemical dependence services

Parthasarathy et al, Med Care 41:257-367, 2003
Weisner et al, JAMA 286:1715-1723, 2001

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Benefit Design – Parity or Not?

- Most private sector health insurance plans for small groups and individuals impose some form of benefit limits on mental illness benefits, often through higher copays, fewer allowable IP days and OP visits, and higher out-of-pocket limits – manage costs by managing benefits
- Restricting access to behavioral health services through higher copays, benefit limits, and utilization management have been shown to increase non-BH service use (Rosencheck et al, 1999).
- Getting the right treatment to the right patient at the right time.

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Early Evidence on Demand Response

- RAND Health Insurance Experiment
- Compared the price elasticity of demand for ambulatory mental health care compared to general medical care (how much the quantity of services demanded by consumers responds to price)
- Result: the elasticity for ambulatory mental health care was estimated to be more than twice that for general medical care

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The Impact of Parity on the FEHB Program

- 7 plans with parity evaluated between 1999 and 2002 against a matched set without parity
- Difference-in-difference analysis
- Result: Observed increase in the rate of use of MSHA services after implementation of parity was due almost entirely to a general trend in increased use that was observed in comparison health plans as well as FEHB plans
- Result: The implementation of parity was associated with a statistically significant increase in use in one plan (+0.78%), a significant decrease in use in one plan (-0.96%), and no significant difference in use in the other five plans (from -0.38% to +0.23%)

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Actuarial Pricing Estimates

- Early estimates for the Clinton-proposed Health Security Act: CBO, Price Waterhouse, DHHS, Watson Wyatt, Coopers & Lybrand, Milliman & Robertson (early-mid 1990s)
- Ranged in price impact of 1% to 11%, with the CBO at 4%
- Recent estimates: CBO at 0.9% gross impact, 0.4% net impact (after accounting for behavioral response of health plans, employers and workers)
- Recent HR1424 Analysis by Milliman: 0.6% without increased UM, and <0.1% with increased UM

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Against Parity

- Mandated Benefits are Bad (in general)
- Too Many Mandated Benefits – adds up to real money
- Let the Employer Choose
- Lack of Control over Benefit Use; Runaway Costs
- Treatment doesn't work; waste of money
- Lack of evidence; lack of consistency in treatment
- When does someone get well?

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For Parity

- Mandated Benefits can be necessary
- Cost Offsets of Effective treatment
- Let the Employee Choose
- Well-established Control over Benefit Use; Controlled Costs
- Treatment does work; may save money
- Considerable new evidence; consistency in treatment
- Without coverage, healthcare costs get bigger, not smaller

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Solutions

For every complex problem there is a simple solution.....

.....and it is usually wrong!

H.L. Mencken

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