



First off, thank you for coming!

Disclosures: With respect to the following presentation, **I have no** financial or monetary conflicts of interest, pharmaceutical industry ties or Swiss bank accounts. I will not be discussing the use of any off-label treatments, therapies, medical devices or scooters. I won't be discussing drugs to make people feel better. I'll be discussing people making people feel better. I don't own any people. My wife owns me.



my bosses...

Who am I?

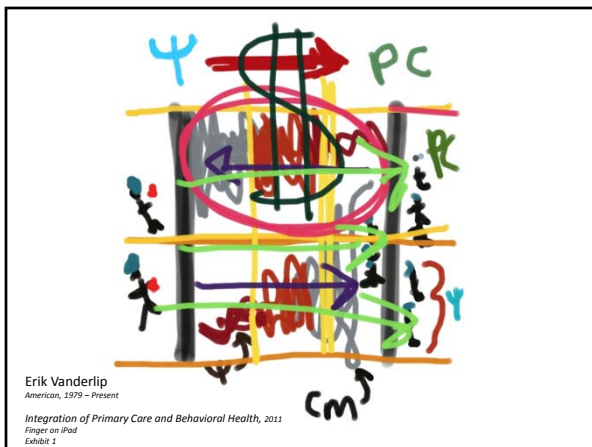



Roots: Me and Gerry Clancy, Oklahoma









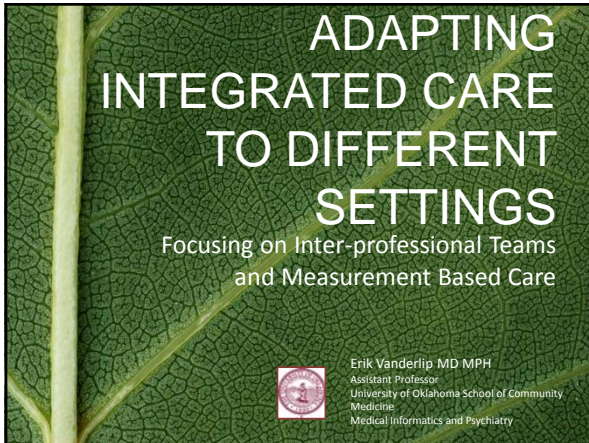


DEPRESSION IS
BOTH A CAUSE AND
EFFECT OF
DIABETES.

QUOTEID.COM Dr. Wayne Katon


Wayne Katon, MD
Professor of Psychiatry
Director of Health Services and Epidemiology
University of Washington, Seattle

<http://psychnews.psychiatryonline.org/newsarticle.aspx?articleid=1722860>



ADAPTING
INTEGRATED CARE
TO DIFFERENT
SETTINGS

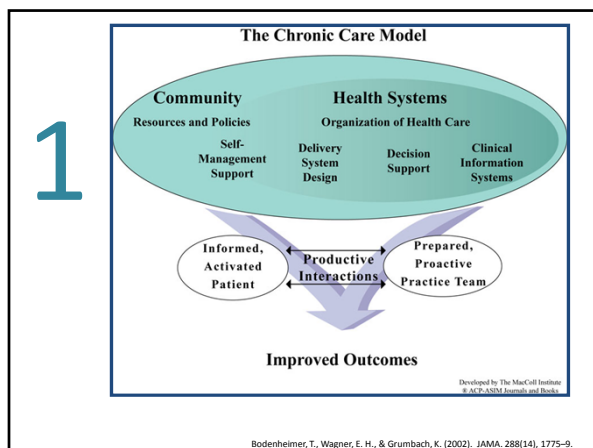
Focusing on Inter-professional Teams
and Measurement Based Care

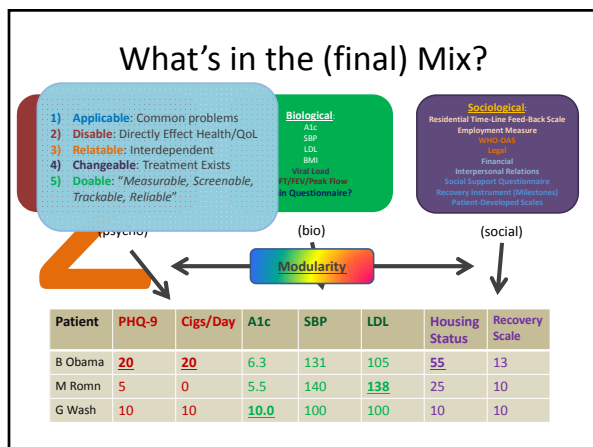
 Erik Vanderlip MD MPH
Assistant Professor
University of Oklahoma School of Community
Medicine
Medical Informatics and Psychiatry

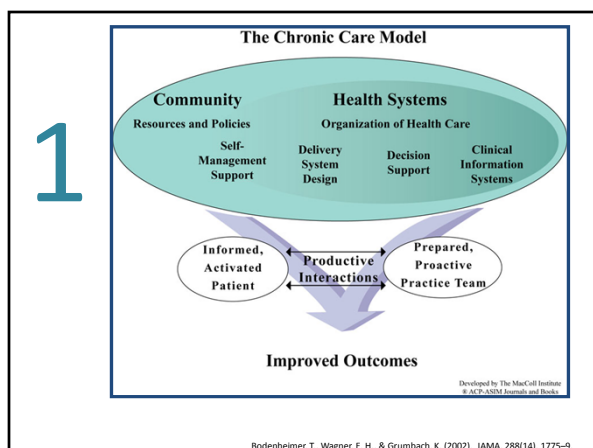
Objectives

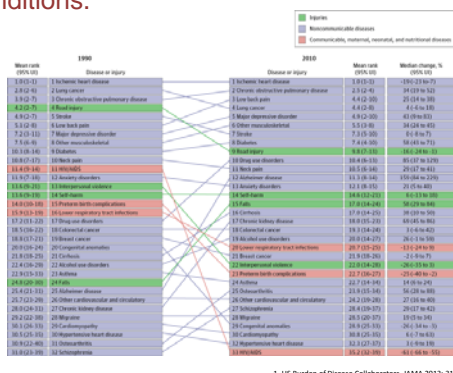
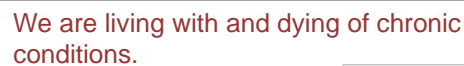
1 2

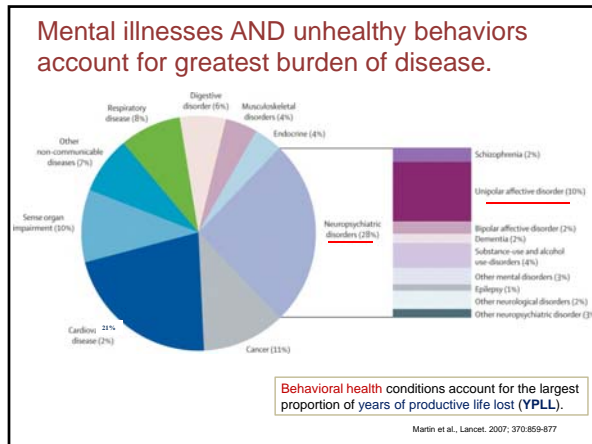
I have 2 objectives with this talk.

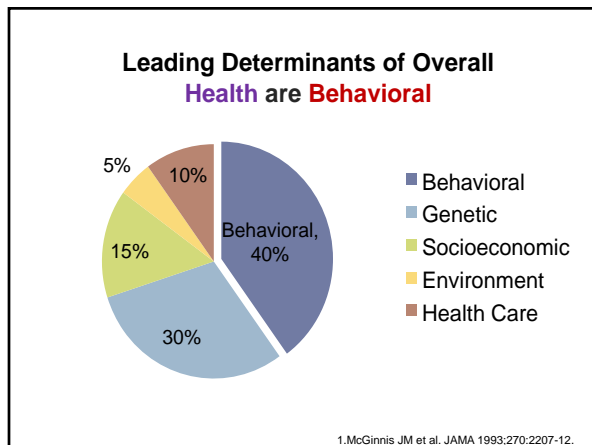


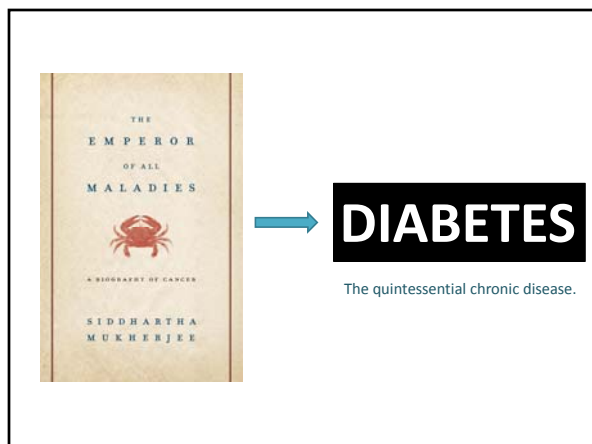


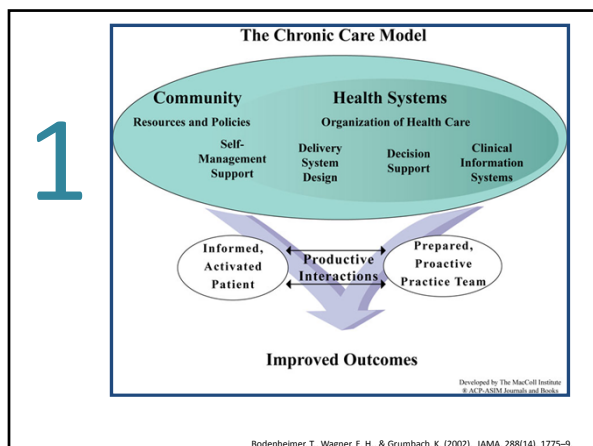


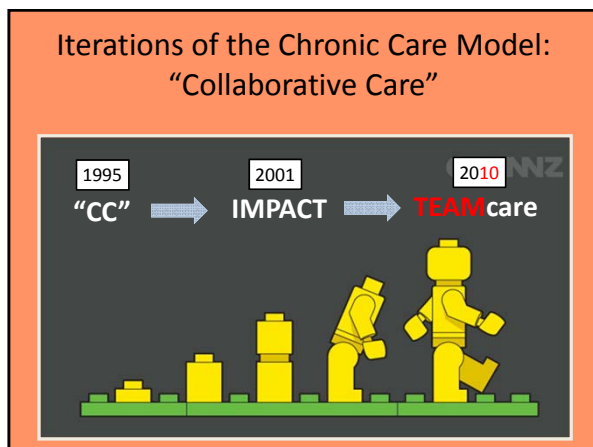












Ahead of the game...

Collaborative Management to Achieve Treatment Guidelines

Impact on Depression in Primary Care

Wayne Katon, MD; Michael Von Korff, ScD; Elizabeth Lin, MD, MPH; Edward Walker, MD; Greg E. Simon, MD, MPH; Terry Bush, PhD; Patricia Robinson, PhD; Joan Russo, PhD

Objective.—To compare the effectiveness of a multifaceted intervention in patients with depression in primary care with the effectiveness of “usual care” by the primary care physician.

Design.—A randomized controlled trial among primary care patients with major depression or minor depression.

Patients.—Over a 12-month period a total of 217 primary care patients who were recognized as depressed by their primary care physicians and were willing to take antidepressant medication were randomized, with 91 patients meeting criteria for major depression and 126 for minor depression.

Interventions.—Intervention patients received increased intensity and frequency of visits over the first 4 to 6 weeks of treatment (visits 1 and 3 with a primary

SIGNIFICANT advances in medical therapy are not always reflected in everyday clinical practice.¹ Translating a treatment’s biomedical efficacy into practical effectiveness often requires significant changes in the knowledge and attitudes of both physicians and patients, as well as changes in the organization of health care delivery. Efforts to develop guidelines for clinical practice are a response to this gap between knowledge and practice.^{2,3}

1026 JAMA, April 5, 1995—Vol 273, No. 13

Billboard Year-End Hot 100 singles of 1995

From Wikipedia, the free encyclopedia

This is a list of *Billboard* magazine's Top Hot 100 songs of 1995.^[1]

No	Title	Artist(s)
1	"Gangsta's Paradise"	Coolio featuring L.V.
2	"Waterfalls"	TLC
3	"Creep"	TLC
4	"Kiss from a Rose"	Seal
5	"On Bended Knee"	Boyz II Men
6	"Another Night"	Real McCoy
7	"Fantasy"	Mariah Carey
8	"Take a Bow"	Madonna
9	"Don't Take It Personal (Just One of Dem Days)"	Monica
10	"This Is How We Do It"	Montell Jordan

"Core Principles of Effective Collaborative Care"

Patient-Centered Care Teams

- Team-based care: effective collaboration between PCPs and Behavioral Health Providers.

Population-Based Care

- Patients tracked in a registry: no one 'falls through the cracks'.

Measurement-Based "Treat to Target"

- Measurable treatment goals clearly defined and tracked for each patient
- Treatments are actively changed until the clinical goals are achieved – "treat to target"

Evidence-Based Care

- Treatments used are 'evidence-based'
- Pharmacology, brief psychotherapeutic interventions, models

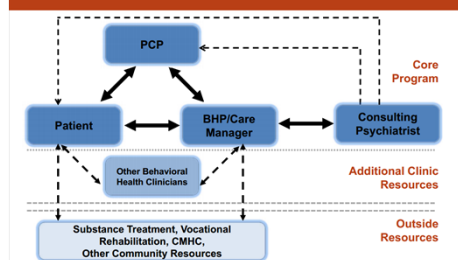


<http://uwaims.org> and Whitebird et al, AJMC, 2014.

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IMPACT Collaborative Care Model *Incarnate*

Collaborative Team Approach



<http://uwaims.org> 27

The IMPACT Data

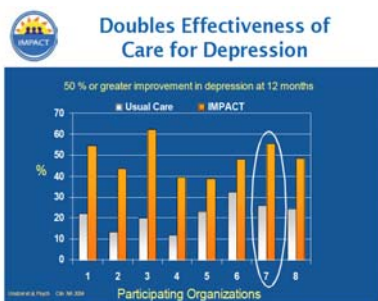


Figure 1: Percentage improvement in depression using IMPACT model and care as usual

Unutzer, J. 2002. Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial. JAMA: The Journal of the American Medical Association 288 (23) (December 11): 2836-2845. doi:10.1001/jama.288.23.2836.

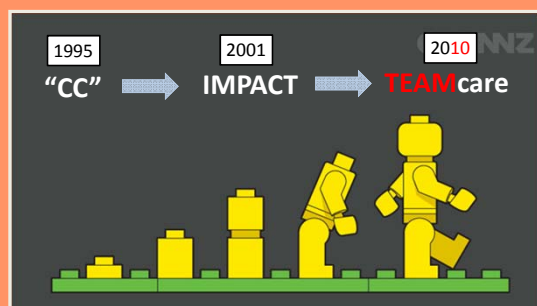
IMPACT Data, Savings

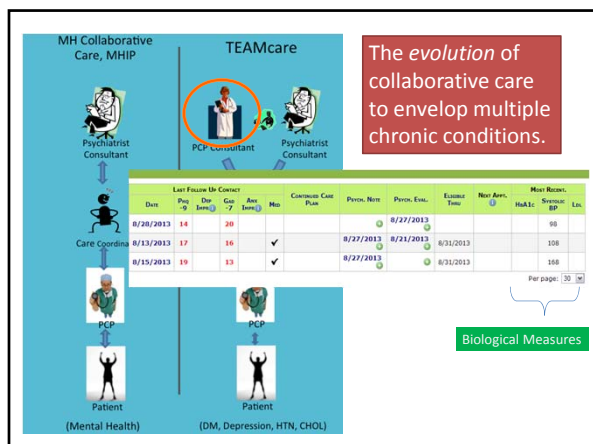
Cost Category	4-year costs in \$	Intervention group cost in \$	Usual care group cost in \$	Difference in \$
IMPACT program cost		522	0	522
Outpatient mental health costs	661	558	767	-210
Pharmacy costs	7,284	6,942	7,636	-694
Other outpatient costs	14,306	14,160	14,456	-296
Inpatient medical costs	8,452	7,179	9,757	-2578
Inpatient mental health / substance abuse costs	114	61	169	-108
Total health care cost	31,082	29,422	32,785	-\$3363

Savings

Unutzer et al., American Journal of Managed Care 2008;14:95-100

Iterations of the Chronic Care Model: "Collaborative Care"





IMPACT 2.0 Incarnate

Screenshot from CMTS/MHIP

Last Follow Up Contact					Continuity Care Plan	Psych. Note	Psych. Eval.	Estimate Time	Next Appx. Date	Most Recent HbA1c	Most Recent Serum BP	Lst.
Date	Phy	Dis	Geo	Ass								
8/28/2013	14	20					8/27/2013					98
8/13/2013	17	16		✓		8/27/2013	8/21/2013	8/31/2013				108
8/15/2013	19	13		✓		8/27/2013		8/31/2013				168

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Registries of patients.

TeamCare Summary Report

Initial	Clinic	Enroll Date	PHQ		BP		HbA _{1c}		LDL	
			BL	Now	BL	Now	BL	Now	BL	Now
NSH	5/19/08	19	19	141/69	127/77	7.3	6.8	168	138	
NSH	1/9/08	15	2	118/80	130/80	9.2	8.3	138	124	
EVM	11/12/07	14	9	160/98	150/85	6.4	6.8	108	67	
EVM	10/30/07	13	2	209/119	126/76	7.3	7.7	119	103	
LYN	8/23/07	14	3	149/71	111/58	8.1	7.7	85	82	

NAACON
CONFERENCE
October 10-11, 2014

<http://www.teamcare.org>
NAACON 2014

Name	A1c (initial)	A1c (recent)	PHQ9 Initial	PHQ9 Recent	SBP Initial	SBP Recent	Non-HDL Initial	Non-HDL Recent
Mary (new)	9.5	--	21	--	125	--	115	--
Todd	9.2	7.3	15	4	145	135	245	150
John	10.7	8.2	13	6	155	138	195	122
Gregor	8.9	7.1	22	11	135	137	168	110
Lucy	11.2	9.4	18	13	163	132	213	145
Bess	9.8	7.4	25	8	149	137	218	125

THE NEW ENGLAND JOURNAL of MEDICINE

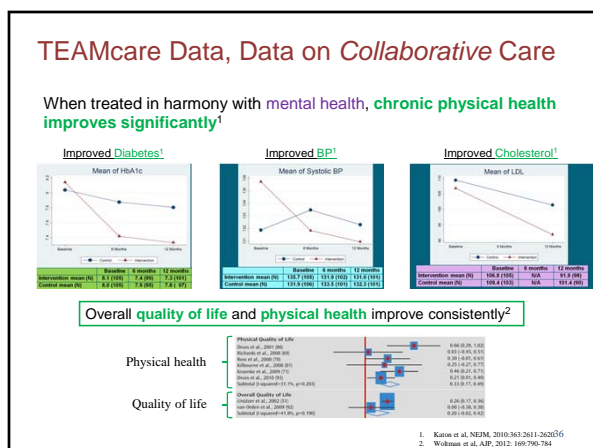
ORIGINAL ARTICLE

Collaborative Care for Patients with Depression and Chronic Illnesses

Wayne J. Katon, M.D., Elizabeth H.B. Lin, M.D., M.P.H., Michael Von Korff, Sc.D., Paul Ciechanowski, M.D., M.P.H., Evette J. Ludman, Ph.D., Bessie Young, M.D., M.P.H., Do Peterson, M.S., Carolyn M. Rutter, Ph.D., Mary McGregor, M.S.N., and David McCulloch, M.D.

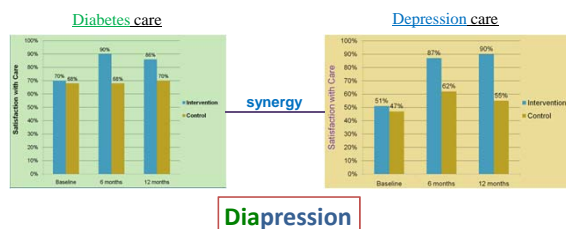
ABSTRACT

2010



Intelligent Integration Breeds Synergy

After 12 months of care, multi-condition collaborative care **improved patient satisfaction** in depression **AND** diabetes care¹



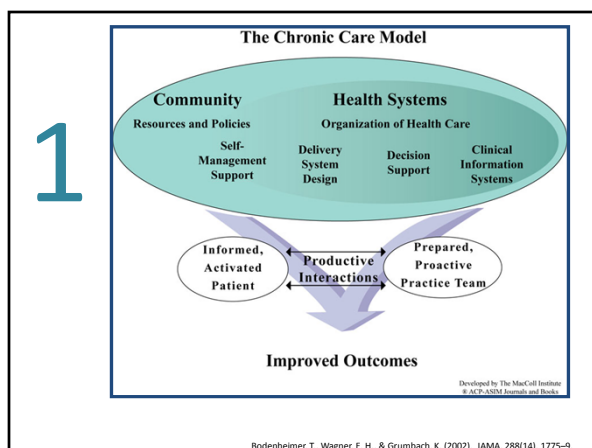
1. Katon et al. NEJM. 2010;363:2611-2620

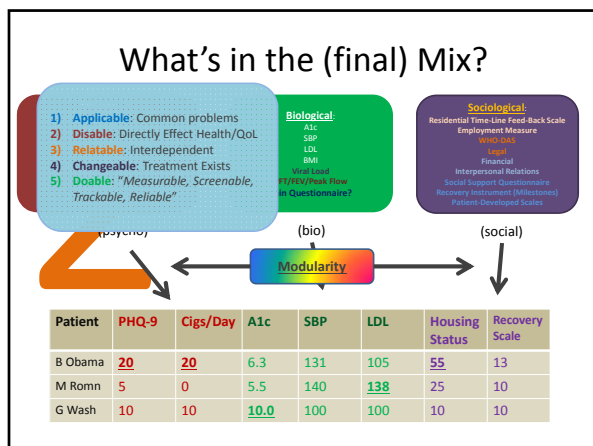
Collaborative Care: Evidence Beyond Evidence

"Seventy-nine RCTs (including 90 relevant comparisons) involving 24,308 participants in the review."

"Collaborative care is associated with significant improvement in depression and anxiety outcomes compared with usual care, and represents a useful addition to clinical pathways for adult patients with depression and anxiety."

Archer, 2012, Cochrane





"Core Principles of Effective Collaborative Care"

LATER LECTURES

Patient-Driven Care Teams

- Team-based care: effective collaboration between PCPs and Behavioral Health Providers

Population-Focused Care

- Patients tracked in a registry: no one 'falls through the cracks'.

Measurement-Guided "Treat to Target"

- Measurable treatment goals clearly defined and tracked for each patient
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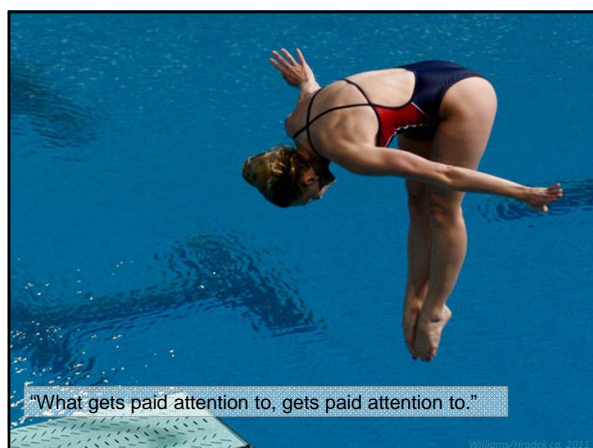
Evidence-Based Care

- Treatments used are 'evidence-based'
- Pharmacology, brief psychotherapeutic interventions, models

LATER LECTURES

<http://www.aaaon.org> and Whitehead et al. AJMC, 2014.

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Name	A1c (initial)	A1c (recent)	PHQ9 Initial	PHQ9 Recent	SBP Initial	SBP Recent	Non-HDL Initial	Non-HDL Recent
Mary (new)	9.5	--	21	--	125	--	115	--
Todd	9.2	7.3	15	4	145	135	245	150
John	10.7	8.2	13	6	155	138	195	122
Gregor	8.9	7.1	22	11	135	137	168	110
Lucy	11.2	9.4	18	13	163	132	213	145
Bess	9.8	7.4	25	8	149	137	218	125

What's in the Mix? Current Model

Screenshot from CMTS/MHIP

Last Follow Up Contact				Contributed Care Plan	Psych. Note	Psych. Eval.	Eligible Time	Not Appr. J	Most Recent	
Date	Pho -9	Dis -9	Gap -7						Ass -9	Min
8/26/2013	14	20				8/27/2013				98
8/13/2013	17	16		✓		8/27/2013	8/21/2013	8/31/2013		108
8/15/2013	19	13		✓		8/27/2013		8/31/2013		168

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Psychological Constructs/Measures

It's not by accident...

- 1) Common problems
- 2) Directly impact QoL and Health Outcomes and **FUNCTIONING**
- 3) Interdependent: Diapression
- 4) We can change them (apply TREAT TO TARGET guidelines)
- 5) Easily "able": "Measurable, Screenable, Trackable, Reliable"
 - a. We have good (valid, reliable) instruments for all of these!

Biological Measures

What's in the Mix? Community/Safety-Net Settings

1) Applicable: Common problems

2) Disable: Deficits in Functioning

3) Relatable: Interdependent

4) Changeable: Treatment Exists, "TTT"

5) Doable: "Measurable, Screenable, Trackable, Reliable"

Biological:

- A1c
- SBP
- LDL
- BMI
- Viral Load
- PFT/FEV/Peak Flow
- Pain Questionnaire?

Psychological:

- PHQ-9
- PCL-C
- GAD-7
- SMI: PANSS, YMRS/Internal State
- AMMD4

Substance Use Disorders:

- Cig Eq./Day
- AUDIT
- Opioid Scale?
- More...

Sociological:

- Residential Time-Line Feed-Back Scale
- Employment Measure
- WHO-DAS
- Legal
- Financial
- Interpersonal Relations
- Social Support Questionnaire
- Recovery Instrument (Milestones)
- Patient-Developed Scales

What to Include? **Biological**

Problem/Morbidity

Outcome/Measure

Biological:

Diabetes
Hypertension
Cholesterol
Obesity
Hepatitis
COPD
Chronic Pain



Biological:

A1c
SBP
LDL
BMI
Viral Load
PFT/FEV/Peak Flow
Pain Questionnaire?

What to Include? **Psychological**

Problem/Morbidity

Outcome/Measure

Psychological:

Depression
Trauma, PTSD
SMI: Bipolar, Schizophrenia
Personality Disorders
Substance Use
Disorders:
Tobacco
Alcohol
Opiates
More...



Psychological:

PHQ-9
PCL-C
GAD-7
SMI: PANSS, YMRS/Internal State
?
Substance Use
Disorders:
Cig Eq./Day
AUDIT
Opiate Scale?
More...

What to Include? **Sociological**

Problem/Morbidity

Outcome/Measure

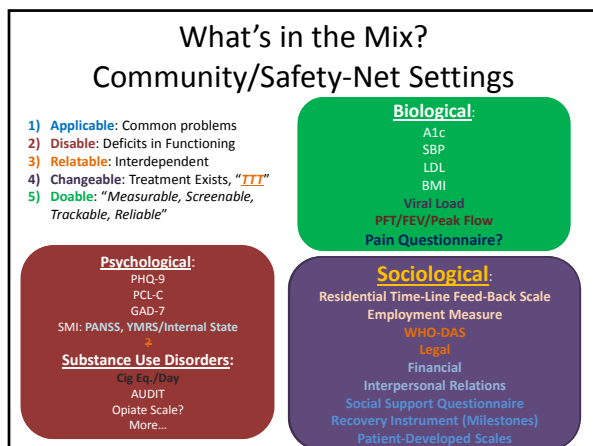
Sociological:

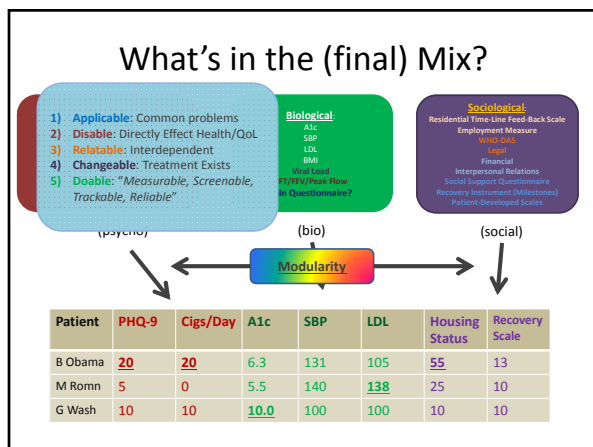
Housing
Employment
Disability
Legal
Financial
Interpersonal
Relations
Social Support



Sociological:

Residential Time-Line Feed-Back
Scale
Employment Measure
WHO-DAS
Legal
Financial
Interpersonal Relations
Social Support Questionnaire
Recovery Instrument
(Milestones)
Patient-Developed Scales







Names are to the left of this...

A demonstration of population-focused care *and* "treat-to-target".

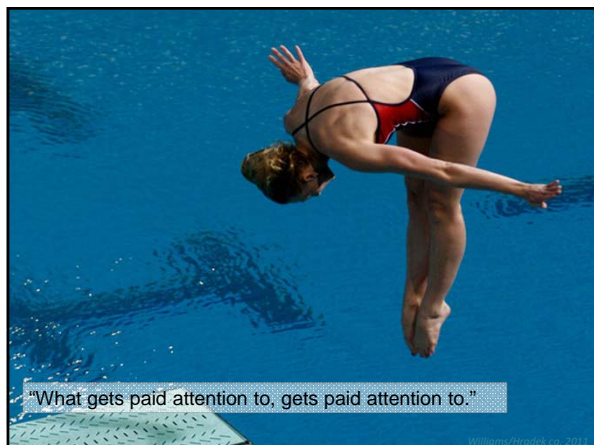
Age (Years)	Smoking	SBP	BMI	Non-HDL Cholesterol	A1c	Glucose
32	Y	190	21.95	0		
63	N	164	54.42	90		199
43	N	160	34.89	139	8.10%	
53	Y	154	40	148	9.20%	237
23	Y	151	37.71	154	5.80%	114
37	Y	150	24.42	0		
60	Y	150	28.37	59	5.50%	138
57	Y	150	26.72	92		99
63	Y	149	28.73	97	6.30%	
49	Y	147	29.8	131		108
53	Y	145	48.21	126	6.10%	91
25	N	144	30.37	187		77
74	N	143		0		
38	Y	143	27.57	90	5.90%	133
53	Y	142	48.71	126		99
40	Y	141	33.6	196	5.80%	98
51	Y	140	42.41	0		83
56	Y	140	29.14	131		95
45	Y	140	42.83	140	6.50%	111
30	Y	140	33.48	179	5.60%	72
60	N	140	34.71	193	5.42%	91
60	N	138	29.05	0		
43	Y	138	33.12	127	9.90%	297
72	Y	138	22.64	177	5.60%	85





- 1) **Applicable**: Common problems
 2) **Disable**: Directly Effect Health/QoL
 3) **Relatable**: Interdependent
 4) **Changeable**: Treatment Exists
 5) **Doable**: "Measurable, Screenable, Trackable, Reliable"

Patient	PHQ-9	Cigs/Day	A1c	SBP	LDL	Housing Status	Recovery Scale
B Obama	20	20	6.3	131	105	55	13
M Romn	5	0	5.5	140	138	25	10
G Wash	10	10	10.0	100	100	10	10



"Core Principles of Effective Collaborative Care"

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<http://www.ahrq.org> and Whitchard et al, AJMC, 2014.



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