

# TEAMcare at The Polyclinic: Multi-Condition Collaborative Care for Diabetes, Heart Disease and Depression

Elise Ernst, MEd, MSW, MBA
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Paul Ciechanowski, MD, MPH

# Multi-Condition Collaborative Care: An Effective Model for Integrating Behavioral Health in Primary Care and ACO Settings

Paul Ciechanowski, MD, MPH Associate Professor Dept. of Psychiatry Diabetes Care Center University of Washington Seattle, WA

#### Mr. T.

#### 64 yr. old married, naval shipyard worker

- Uncontrolled type 2 diabetes (A1c = 9.6%)
- Hypertension (BP = 174/94 mmHg)
- Hyperlipidemia (LDL = 141 mg/dL)
- Obesity (Weight = 269 lbs; BMI =  $39.7 \text{ kg/m}^2$ )
- Hypothyroidism, psoriasis, gout
- History of diverticulitis, kidney stones

Medications: glyburide, lisinopril, atenolol, atorvastatin, levothyroxine

# It gets worse...

Mr. T.

Primary complaint: ongoing fatigue

PHQ-9 = 19/27:

meets criteria for major depression

# The Challenge of Multiple Comorbidity for the US Health Care System

Anand K. Parekh, MD, MPH

Mary B. Barton, MD, MPP

HE AGING OF THE US POPULATION, COMBINED WITH improvements in modern medicine, has created a new challenge: approximately 75 million people in the United States have multiple (2 or more) concurrent chronic conditions, defined as "conditions that last a year or more and require ongoing medical attention and/or limit activities of daily living." Is the 21st-century US health care system prepared to deal with the consequences of successfully treating patients who have conditions, often multiple, that they would not have survived in the early 20th century? Current indications suggest that it is not.

As the number of chronic conditions affecting an individual increases, so do the following outcomes: unnecessary hospitalizations; adverse drug events; duplicative tests; conflicting medical advice; and, most important, poor functional status and death. <sup>1-5</sup> Approximately 65% of total health care spending is directed at the approximately 25% of US population who have multiple chronic conditions. <sup>2</sup> Individuals with multiple chronic conditions also face financial challenges related to the out-of-pocket costs of their care, including higher prescription drug costs and total out-of-pocket health care spending. <sup>2</sup>

future of health care reform is uncertain, Congress has drafted legislation that includes experimental and pilot approaches to realigning such incentives and payments. Even if these necessary reforms were enacted, the effects of the clinician in improving health outcomes would remain dependent on the active participation of the individual patient. It is not clear whether the potential benefits of chronic disease self-care management; personal health records; and other health information exchange platforms, such as secure messaging, are being fully realized to maximize patient participation and health.

# The "Multi-Condition" Patient

**JAMA, April 7, 2010** 

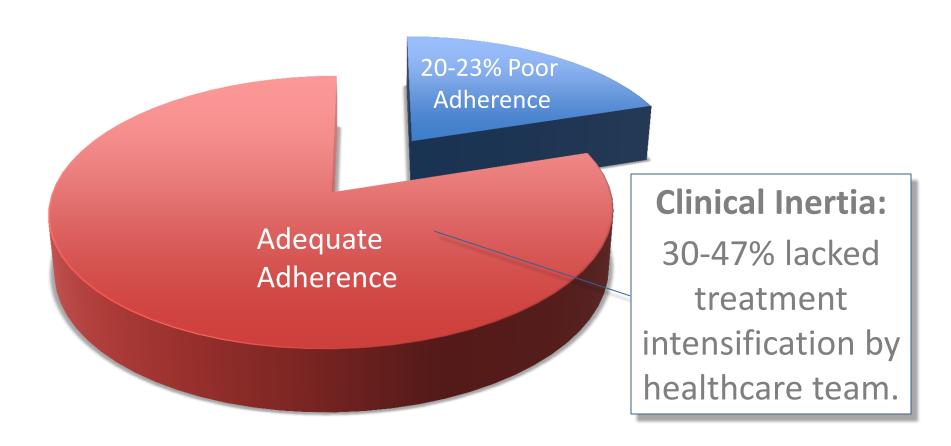
# Study: 161,697 Patients

• HbA<sub>1</sub>c ≥ 8.5%

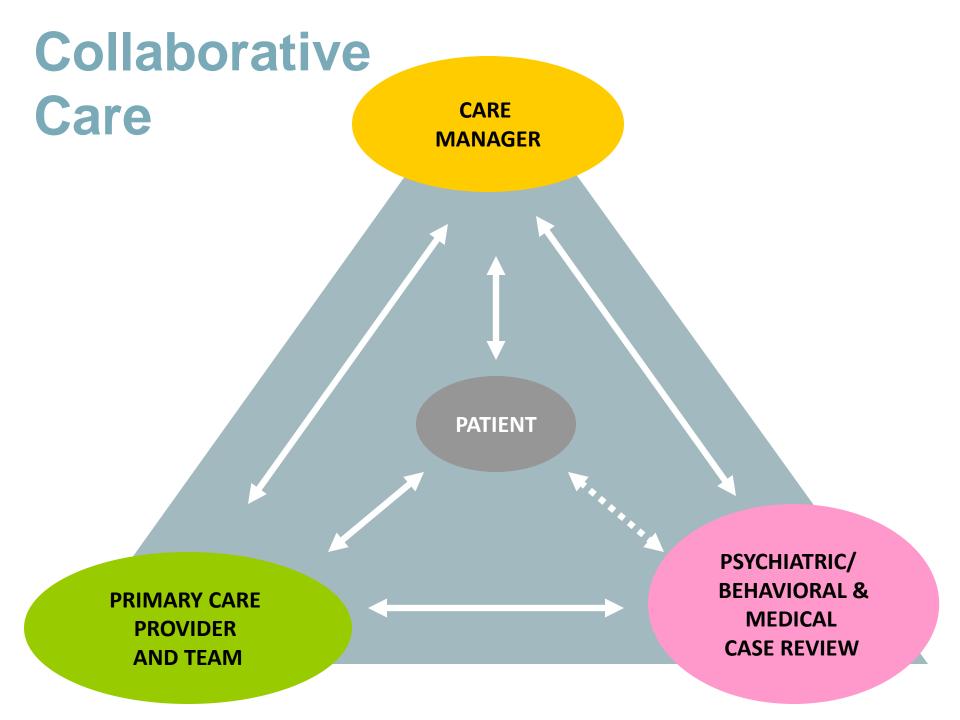
Systolic blood pressure > 140 mmHg

• LDL > 130 mg/dL

# Study: 161,697 Patients



Schmittdiel et al., J Gen Intern Med. 2008; 23(5): 588-594.





Up to 20% of patients with chronic conditions such as diabetes and heart disease have co-existing depression and are at higher risk of heart attack, stroke and other complications.

- Dr. Wayne Katon

# a TEAM behind you committed to care



research

resources

#### in the news

January, 2011 - In a randomized controlled trial, testing an intervention called TEAMcare, nurses worked with patients and their doctors and health teams to manage care for depression and physical disease together, using evidence-based guidelines. more







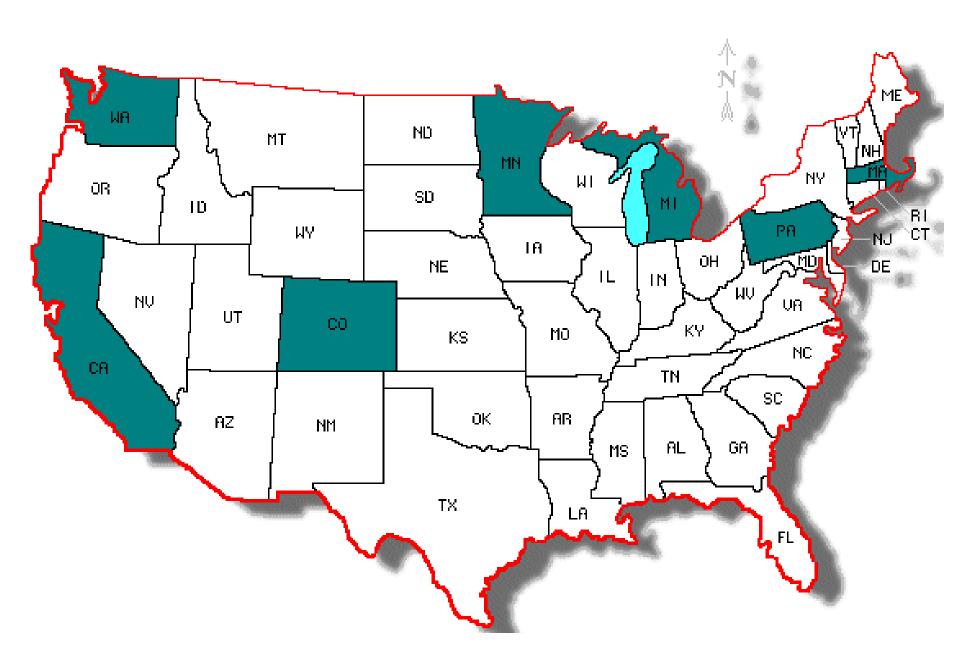








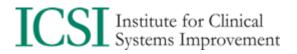
# teamcarehealth.org















#### KAISER PERMANENTE

Kaiser Foundation Health Plan, Inc. Southern California Region











#### Patient Identification

- Automated data (ICD-9) of having:
  - diabetes and/or coronary artery disease
- Poor disease control:
  - HbA1c ≥ 8.5%
  - Blood pressure > 140/90 mmHg
  - LDL >130 mg/dL
- PHQ-9 ≥ 10

#### Program Goals

- Improve depression care
  - Behavioral activation
  - Antidepressants
- Improve medical disease control
  - HbA<sub>1c</sub>, HTN, LDL
- Improve self-care
  - Diet, Exercise
  - Cessation of Smoking
  - Glucose Monitoring

#### **Program Goals**

•A1c

Blood Pressure

Cholesterol (LDL)

Depression

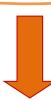


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Chronic Care Model



Treat-to-Target Approach

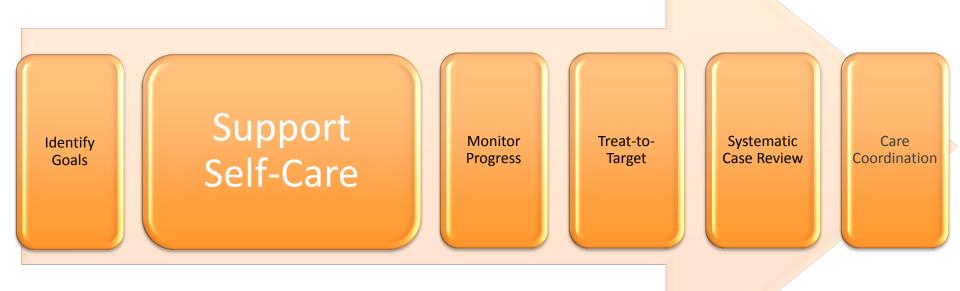


#### One Approach Across Different Chronic Illnesses

Wagner, 1996; Bodenheimer 2002;

Katon 1995; Unutzer 2002; Riddles 2003





#### Improving Adherence

- Patient self-care materials: book and video on depression, patient manual
- Nurse support/education/motivational interviewing
- Medisets
- Simplifying medication regimen
- \$4 generics to avoid \$10 co-pays



**Self-Monitoring Tools** 

### Care Managers

- Motivational interviewing/enhancement
- Problem solving
- Behavioral activation

### Decisional Balance (e.g. smoking)

	Changing	Not changing
Pros)	<ul><li>Less coughing</li><li>Wife will be happy</li></ul>	
fits (	•Socially acceptable	
<b>Benefits</b> (Pros)	•Faster healing	
		•Higher risk of cancer
Cons		•Poorer health
Costs (Cons)		<ul> <li>Wound will not heal</li> </ul>
Cos		

### Decisional Balance (e.g. smoking)

	Changing	Not changing
Benefits (Pros)	<ul><li>Less coughing</li><li>Wife will be happy</li><li>Socially acceptable</li><li>Faster healing</li></ul>	<ul><li>Helps me deal with stress</li><li>Helps me think clearly</li><li>Keeps the weight off</li></ul>
Costs (Cons)	<ul><li>Lose friends who smoke</li><li>Gain weight</li></ul>	<ul><li>Higher risk of cancer</li><li>Poorer health</li><li>Wound will not heal</li></ul>



Initial	Clinic	Enroll Date	1920	PHQ BP BL Now		HbA <sub>1c</sub> BL Now		LDL BL Now		
	BRN	8/11/2008	19	14*	152/86	140/100 *	10.1	6.91	135	106 *
	OLY	5/19/08	19	19 *	141/69	127/77	7.3	6.8	181	138 *
	EVM	11/12/07	14	9*	160/98	150/85 *	6.4	6.8	108	67
	NGT	10/30/07	13	2	209/119	126/76	9.2	8.3 *	119	99
	LYN	8/23/07	14	3	149/71	111/58	8.1	7.7 *	85	82



#### Treat-to-Target (TTT)

#### **Treatment titration**

- Frequent and consistent
- Relentless, incremental increases/changes

#### Always:

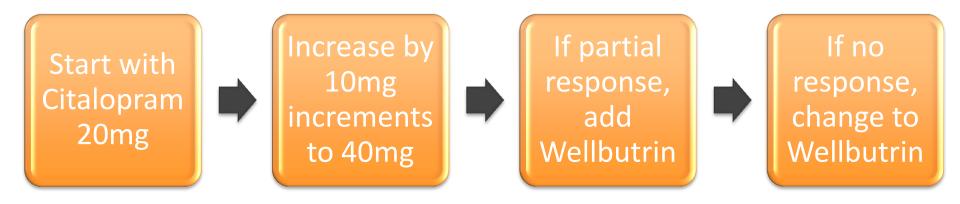
- Increase/change to next step
- If not, document why not!

#### **TTT Algorithm**

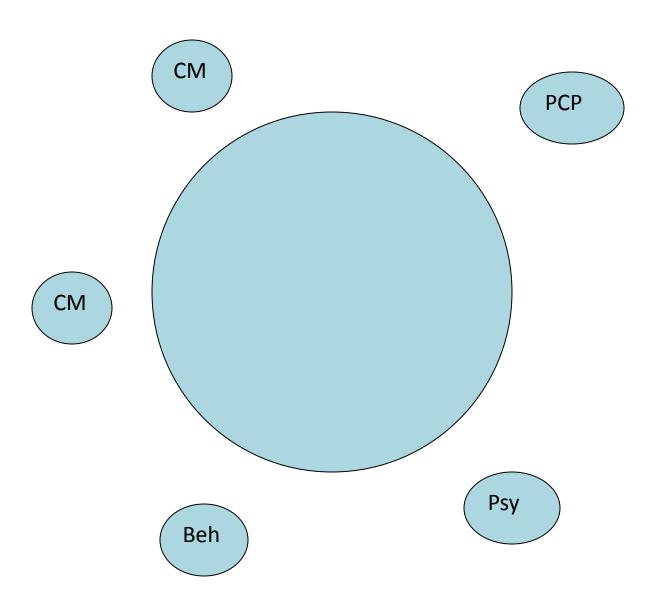
- Simplified and uniform approaches across conditions to achieve targets
  - Riddles et al., Diabetes Care, 2003
  - Kaiser Permanente, Care Management Institute

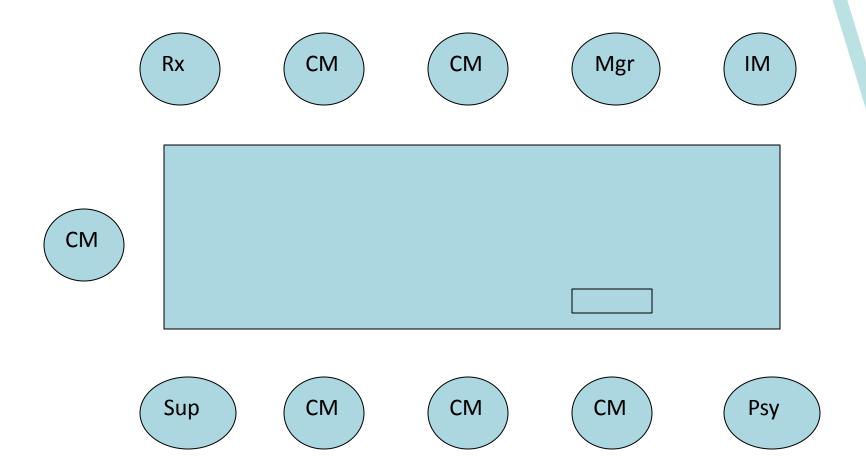
#### Treat-to-Target (TTT)

#### Depression









Case manager:	Date:	Suggested actions
Patient ID:		<ul><li>Medication changes:</li><li>Simplify, consolidate</li><li>Check formulary</li></ul>
Next contact:		<ul><li>Check lowest prices</li><li>Assess adherence</li></ul>
Patient ID:		<ul> <li>Assess side effects</li> </ul>
Next contact:		<ul><li>Behavioral activation:</li><li>Physical activation</li><li>Social activation</li><li>Pleasant events</li></ul>
Patient ID:		Motivational issues: • Stages of change
Next contact:		Decisional balance
Patient ID:		<ul> <li>Disease self-management:</li> <li>BP cuff, BP record</li> <li>Pedometer</li> <li>Glucometer (new or 2<sup>nd</sup>)</li> </ul>
Next contact:		<ul> <li>Sleep hygeine</li> </ul>
Patient ID:		<ul><li>Nutritionist/Dietician</li><li>Mediset</li></ul>
Next contact:		<ul><li>Strategies for hard-to-reach:</li><li>Contact PCP</li><li>Voicemail</li><li>Letter</li></ul>

Case Manager D200my Zolott - Start = 450my 2-3 weeks then Updating Chart Supervision sheet go up to 200 mg Labs PHQ-9 score @diabetes education - Durady las referral, flue this EPIC, Access 3 give option = interns, is she willing? Next contact: Checking Patient ID: 744 Patient chart- ? updates Case Manager: Labs Odiabetes education to check BS BID ether DAM and attor Strategies for hard-to-reach QAM and 20 p meal Contact PCP 2) citalogram 4 30 40mg (ask Tr month & tun 40mg) Voicemail Letter Opt-out visit by voicemail Next contact: Patient ID: 81 **Educational materials** Case Manager: DVD, Depression book nave her to Patient booklet D'make plan in the next week to do I thing toget My HealthCare AHA/ADA materials Bhow much metformin is she taking ?? (1500 or 750??) Phase of intervention Next contact: Move to maintenance



#### Case Management Workload

- 96 patients in steady state for full FTE nurse case manager
- 2.5 hours weekly of internist and psychiatrist case review supervision per 96 patients
- Psychiatrist 10 hours per month, internist
   10 hours per month per 96 patients

# Does it really work?



#### The NEW ENGLAND JOURNAL of MEDICINE

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Free Abstract





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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.

N Engl J Med 2010; 363:2611-2620 December 30, 2010

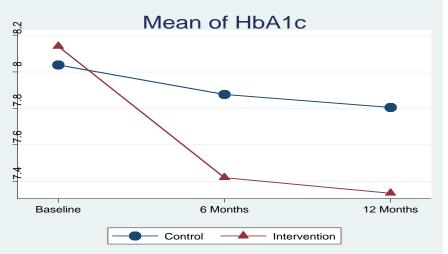
#### BACKGROUND

Patients with depression and poorly controlled diabetes, coronary heart disease, or both have an increased risk of adverse outcomes MEDIA IN THIS ARTICLE

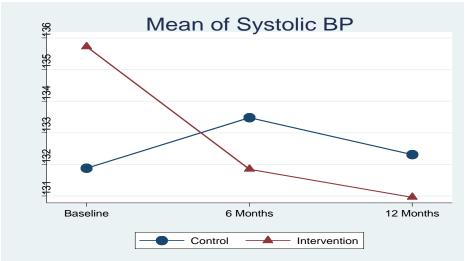
FIGURE 1

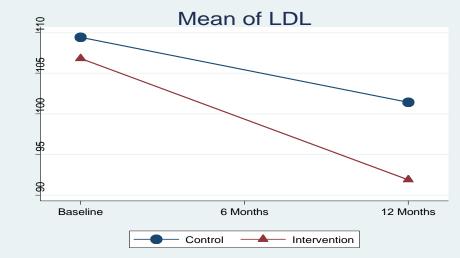


















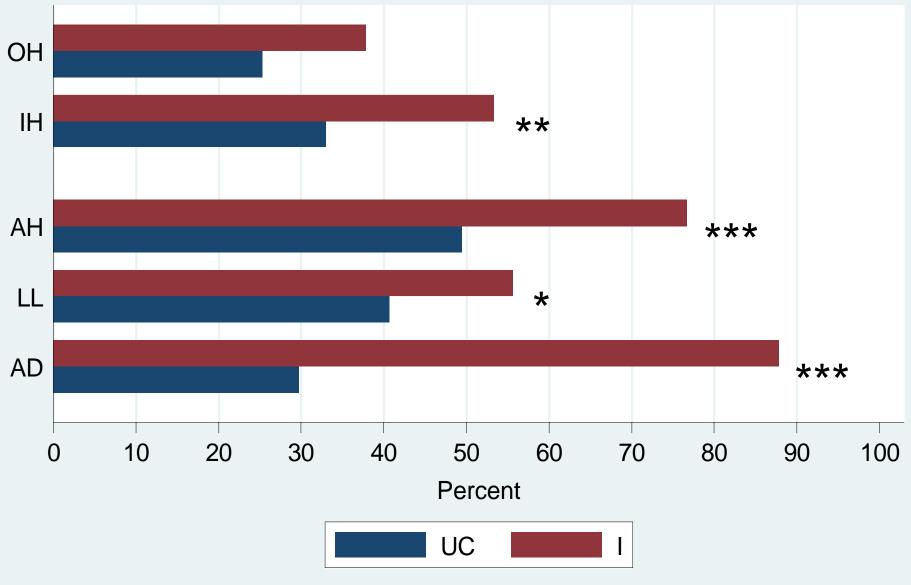


- **Blood** pressure
- LCholesterol (LDL)
- **L**Depression

#### Comparison with Other Studies

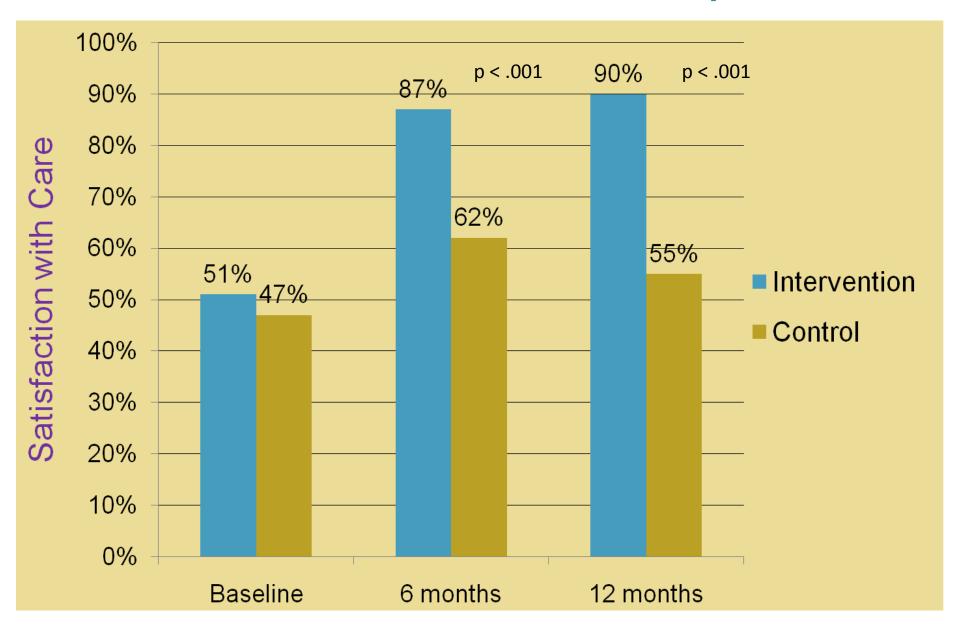
Domain	I vs. C TEAMcare study	I vs. C other studies	Description
Depression	SCL: 0.4 ES: 0.65	ES: 0.25	37 Collaborative Care Trials
HbA <sub>1c</sub>	0.58%	0.42%	66 Diabetes Care Trials
Systolic Blood Pressure	5.1 mmHg	4.5 mmHg	44 Trials
LDL Cholesterol	6.9 mg/dL		

#### Any Medication Adjustment

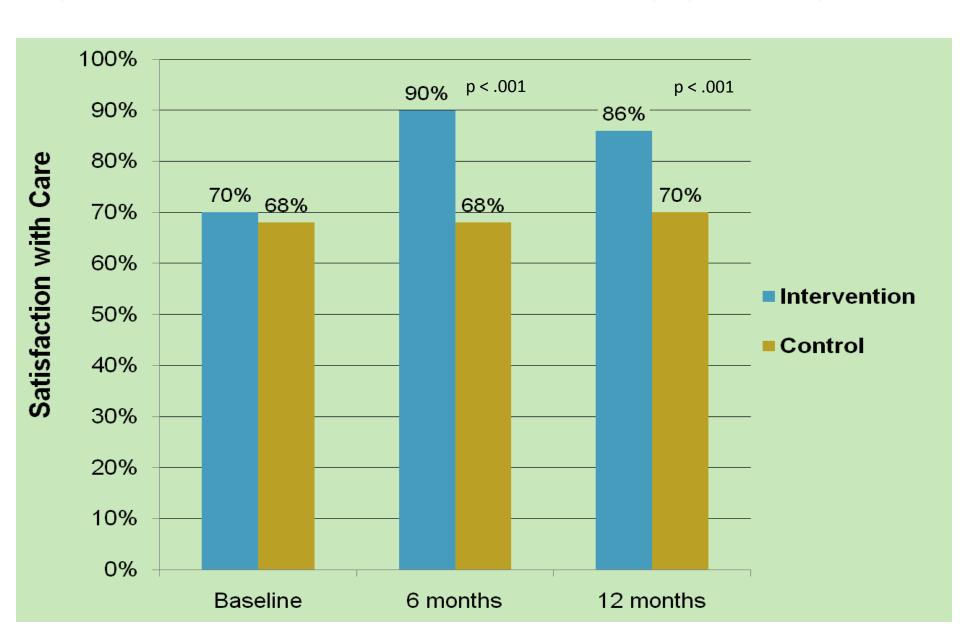


<sup>\*</sup> p-value < 0.05; \*\* p-value < 0.01; \*\*\* p-value < 0.001

#### Satisfaction with Care of Depression



#### Satisfaction with Diabetes/CHD Care



## Adjusted 24-Month Intervention vs. Usual Care Outpatient Costs



# 24-Month Intervention vs. Usual Care Adjusted Outpatient Costs (\$54/visit for 10 visits)



# Achieving Level 2 or Level 3 PCMH NCQA Accreditation Depends on Compliance with 10 *Must-Pass* Components

Written standards for patient access and patient communication	
Use of data to show standards for patient access and communication are met	
Use of paper or electronic charting tools to organize clinical information	X
Use of data to identify important diagnoses and conditions in practice	X
Adoption and implementation of evidence-based guidelines for two chronic medical conditions and one behavioral condition	X

# Achieving Level 2 or Level 3 PCMH NCQA Accreditation Depends on Compliance with 10 *Must-Pass* Components

Active support of patient self-management	X
Systematic tracking of tests and follow-up on test results	X
Systematic tracking of critical referrals	
Measurement of clinical and/or service performance	X
Performance reporting by physician or across the practice	X

#### Multi-Condition Collaborative Care

An evidence-based strategy for addressing patients with multiple conditions using a team-based approach

#### Associated with:

- better outcomes
- better quality of care
- lower cost





# TEAMcare Collaborative Care at The Polyclinic: Program Description

Elise Ernst, MEd, MSW, MBA
Vice President of Practice Management
The Polyclinic
Seattle, WA





#### The Polyclinic Profile

- Independent, physician-owned, multi-specialty clinic since 1917
- Over 200 providers in 30 specialties, 66 are PCPs
- 192,000 patients
- 13 locations
- Primary Care is on the top floor!







## When and how did TEAMcare start at The Polyclinic?

- Part of Primary Care Transformation
- Attendance at TEAMcare training led to conversations with Drs. Katon and Ciechanowski.
- Over many months, UW and The Polyclinic designed the initial program.
- RN FTE was "borrowed" as there were no RNs in Primary Care at that time.





- Contract was negotiated/signed (No cost to patients).
- 2-day RN training was completed.
- Materials were created for patients, PCPs, and clinic staff, including FAQs.
- Presented at IM and FM section meetings to gain physician and administrative approval.
- First case staffing was September 2012.
- To date over 100 patients have been enrolled, utilizing 6 RNs who are parttime to this program (maximum 25% of their time).





#### Who is the **TEAM**?

- 6 RN Case Managers
- 1 Pharmacist
- 1 RN Supervisor
- 1 Certified Diabetic Educator
- 1 Internal Medicine Physician
- 1 Psychiatrist

#### Additional:

- 2 Masters' level Psychology Interns from Seattle Pacific University
- VP of Primary Care











#### How TEAMcare works at the Polyclinic

Patients are referred in one of two ways:

- 1. PCPs refer patients to RNs directly, or
- Diabetes Registry is sorted for all PHQ-9s with score of ≥ 10, along with at least one other clinical value out of control; A1c ≥ 8, or LDL ≥ 100, or BP ≥ 140 (systolic).
- 3. Majority of patients are initially found by data sort.
- 4. As PCPs become more aware of program, they refer additional patients.





#### What are some of the Tools?

- PHQ-9 (Patient Health Questionnaire)
- FAQs (customized for your organization)
- Patient handout introducing TEAMcare
- Decision Balance Worksheet (grid)
- Problem Solving Treatment Worksheet
- Motivational Interviewing Techniques
- Goal Setting—How to choose a problem to address
- Shared Decision-Making
- Self-Harm Risk Assessment Policy
- Notes and MyChart in EPIC



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#### Self-Harm Risk Policy



## THE TICKER This weekend's Saturday Clinic! NEW POLYCLINIC Read this story for the roster of physicians who will be available at The Polyclinic's Saturday Clinics at Madison Center and Northgate this weekend, Saturday, September 7, from 9 a.m. – 3 p.m... WHAT'S CIPCULATING



Join Team Polyclinic at the Seattle AIDS Walk and Sk Run on Saturday, September 28 at Volunteer Park. The event benefits Lifelong AIDS Alliance, a comprehensive AIDS service organization offering HIV/AIDS prevention and care services...

Thurs	day 9/5/2013		
· ildi	Measure	Target	
Arrived Patients	1,702	1,971	0
lew Patients	79	TBD	0
Monday 9/2/2013	3 thru Thursday 9	/5/2013	
	Measure	Target	
rrived Patients	5,299	5,912	0
ew Patients	207	TBD	0





#### Case Staffing

- Weekly 2-hour meetings
- Each patient's EPIC record is brought up on screen
- RN presents patient
- Drs. Townsend and Ciechanowski share management of the staffing
- Team has staffed 45-55 patients in one setting.
- RN supervisor uses a timer to keep us moving along!





#### Case Staffing, continued

- If a patient is not new, presentation starts with previous week's recommendations.
- Recommendations are made for managing depression, including possible suicide risk, and diabetes, focusing on non-controlled measures.
- Medication lists are reviewed and updated.
- Health maintenance issues are also addressed.
- Team strives to move each patient to target on all 4 parameters.
- Humor is helpful!





#### **TEAMcare in action**







#### Communication with Referring PCP?

- A note taker records all recommendations.
- Immediately following the meeting, RNs enter lab orders into EPIC, send notes to clinic staff, and send notes to PCPs with team recommendations.
- PCP can either:
  - 1) choose to follow recommendations, or
  - 2) consult with RNs for further clarity, or
  - 3) ignore them.





## RN contacts with patients are approximately 50/50:

- 50% face-to-face, including "stalking" patients at scheduled clinic visits.
- 50% phone and email contact, including MyChart messaging.





### TEAMcare Collaborative Care at The Polyclinic: Clinical Data and Outcomes

Oren Townsend, MD
Medical Director of the Physicians'
Care Network
The Polyclinic
Seattle, WA

THE **Patients Enrolled** POLYCLINIC N = 90TEAMcare™ Graduated Active

N = 37 No depression N = 7

N = 32No depression N = 6

#### **Program Enrollment Criteria**

- Automated data (ICD-9) of having:
  - diabetes +/- coronary artery disease
- Poor disease control:
  - $HbA_{1c} ≥ 8.0\%$
  - Blood pressure ≥ 140/90 mmHg
  - LDL ≥ 100 mg/dl
- PHQ-9 ≥ 10 = Major Depression

Active N = 37 No depression N = 7

Graduated N = 32No depression N = 6

#### **Participating Care Managers**

Angie 3

Irene 28

Kariena 6

Kelly 29

Nicoleta 15

Sara 4

Shu Lin 5

Active N = 37 No depression N = 7

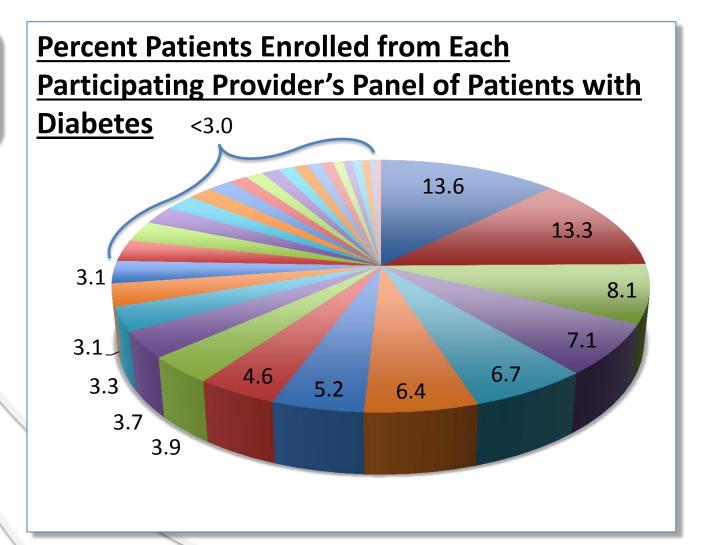
Graduated
N = 32
No depression
N = 6

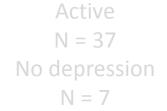
#### **Participating Providers**

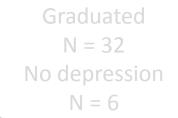
Baumgaerte	el	2	Lee	1
Bautista	1		Liddell	1
Brown	2		Mayeda	7
Brunsvold	1		McCabe	3
Cabodi	1		McIntyre	2
Clark	2		Myint	11
Cordova	11		Palagi	1
Farooqi	1		Peterson	1
Friedmann	4		Raymer	7
Frownfelter	4		Rosen	1
Gonchar	1		Rossi	2
Goode	1		Sharp	3
Hatfield	2		Sherman	9
John	2		Showell	1
King	2		Stimson	1
Kiyonaga	1		Townsend	1

Active N = 37 No depression N = 7

Graduated
N = 32
No depression
N = 6







#### **Number of Patients per Provider**

$$N = 3$$

$$N = 6$$

$$N = 23$$

Active N = 37 No depression N = 7

Graduated N = 32No depression N = 6

#### **Patient Demographics**

Mean Age +/- SD (yrs)	60.5 +/- 11.5
Age Range (yrs)	27 to 88
Female Gender (%)	62 (68.9%)
Male Gender (%)	28 (31.1%)

Active N = 37 No depression N = 7

Graduated
N = 32
No depression
N = 6

#### **Baseline Patient Clinical Characteristics**

Mean HbA1c (%)	8.5 +/- 2.1
Mean Systolic BP (mmHg)	130.3 +/- 15.7
Mean Diastolic BP (mmHg)	77.2 +/- 10.0
Mean LDL (mg/dL)	110.2 +/- 42.3
Mean PHQ-9	13.7 +/- 5.2

Active N = 37 No depression N = 7

Graduated
N = 32
No depression
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#### **Mean Length of Enrollment (weeks)**

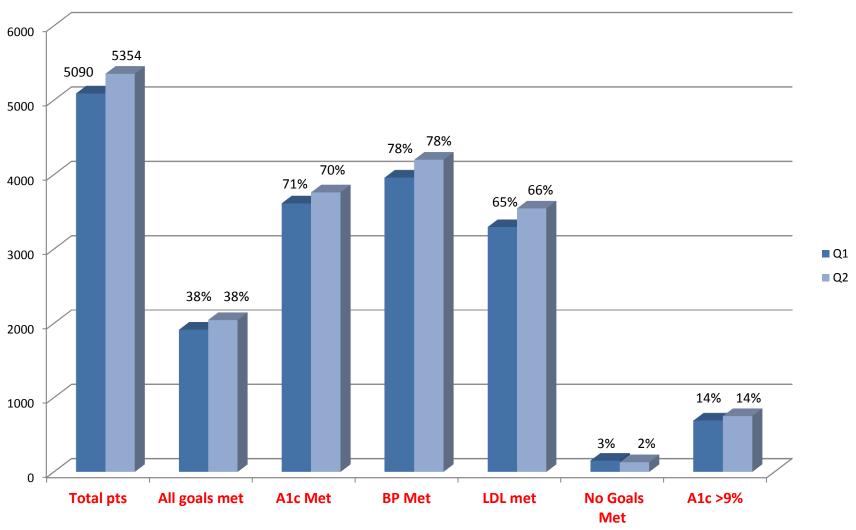
Active Patients (range)	21.6 +/- 14.0 (1 to 46)
Graduated Patients (range)	15.8 +/- 9.3 (1 to 39)
Discharged Patients (range)	17.3 +/- 10.2 (4 to 38)
All Patients (range)	18.5 +/- 11.8 (1 to 48)

Active N = 37No depression N = 7

Graduated
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No depression
N = 6

#### Q1 2013: Q2 2013 Bundle Data Comparison

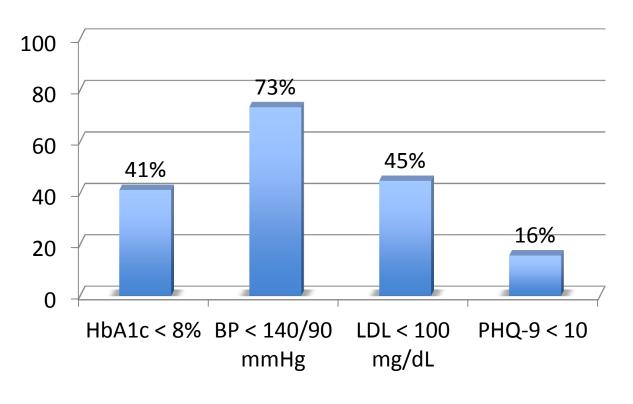
A1C <8 \* LDL <100 \* BP < 140/90



Over 300 patients added to registry in Q2 by including diabetes with complexities codes 250.4-250.7

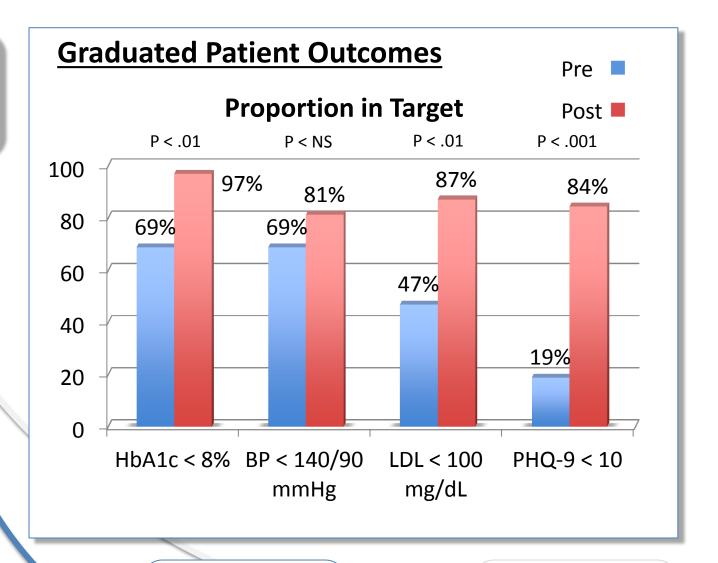
#### **Baseline Patient Clinical Characteristics**

#### **Proportion in Target**



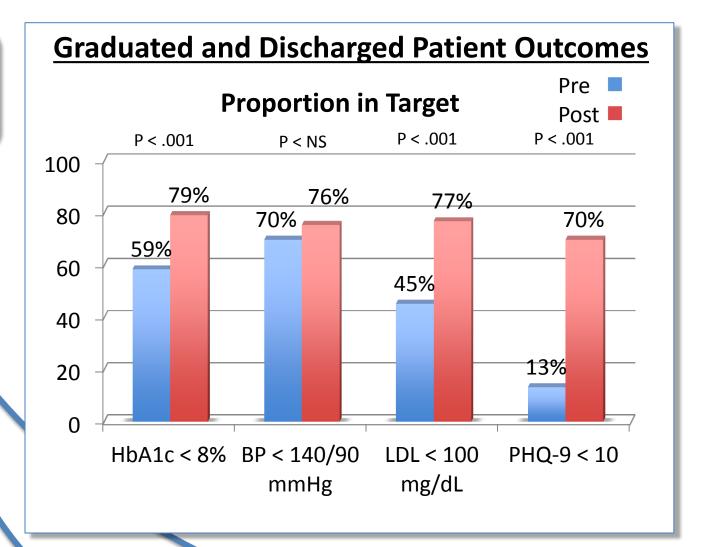
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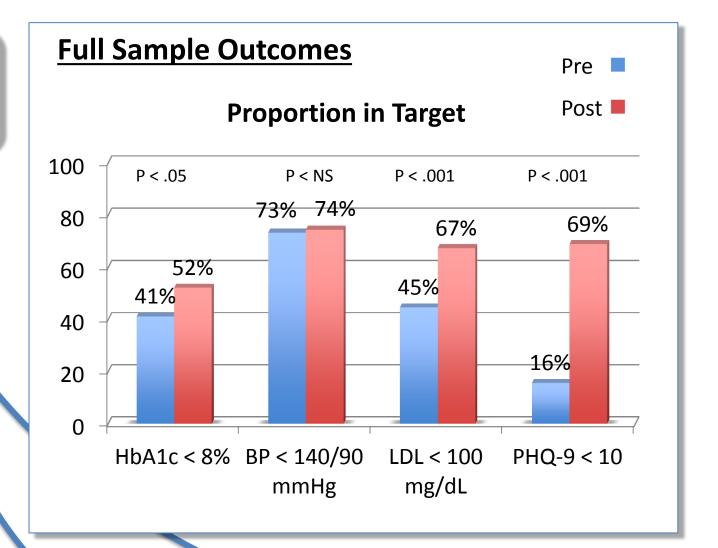
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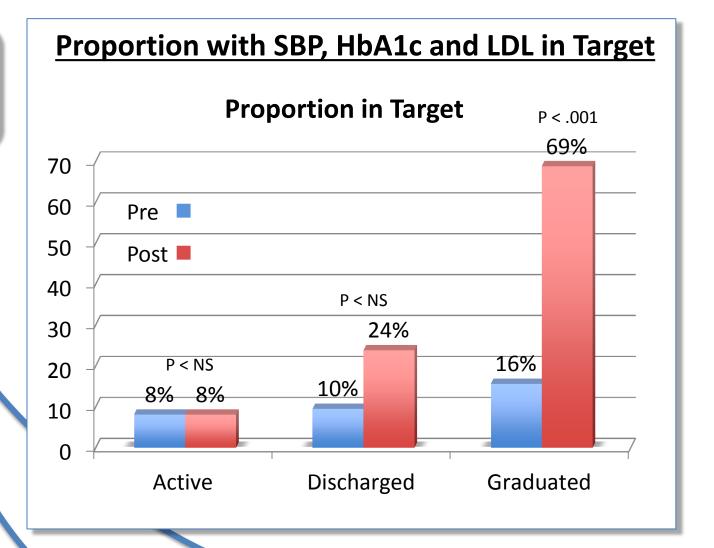
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Active
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Graduated
N = 32
No depression
N = 6





# TEAMcare Collaborative Care at The Polyclinic: Lessons Learned

Oren Townsend, MD and Elise Ernst, MEd, MSW, MBA





# What are the challenges the RNs face?

#### **TEAMcare:**

- "Challenges the traditional paradigm of patientdoctor relationship which involves a doctor visit, diagnosis and prescription of a treatment the patient has to follow at home."
- "Requires following patients in their day-to-day routines and extending our support to them in areas they identify as needing help."





"It is a different RN role to work one-on-one with patients, with weekly follow through. It can be professionally empowering to partner with a patient to formulate and reach goals."





"It is definitely a different way to care for patients than what you learned in school, quite the opposite. It is not predictable, and there will be times when you have no control over a situation, but the satisfaction is much greater when the most resistant patient will call out of the blue to talk about their diabetes management."





# Role of TEAM MDs—Why does it work?

"It takes a special physician or psychiatrist to be able to step back from the traditional role and be willing to step into a role where everyone on the team is viewed equally."





# What has been the response of patients?

- "The patient response varies. Some patients enjoy the routine and structure while others view it as an intrusion on their lives. Finding a balance with each patient is essential if the goal is for the patient to receive the most benefit from the program."
- "This outcome-focused program has partnered with patients in a new way to self monitor their diabetes."





#### **Comments from Patients**

- "It's been very helpful for me to have N (the RN)."
- "She has definitely been a good addition to my conscience."
- "She gives me good reminders I need to keep track of myself."
- "The team really took a closer look at my medications."
- "I'm losing weight again."





#### **Comments from Patients**

- "It's good to know that somebody's out there that knows what you're going through."
- "It's good information about my Diabetes that she gives me."
- "This program is so good, it touches on everything."
- "Before TEAMcare, I was just existing, not really worried about getting myself on track."
- "I think it's an excellent choice for a person to make."





#### Comments from PCPs

- "I have sent 11 patients to TEAMcare, and it has been a wonderful help for my patients, and for me. They have all improved their diabetes management."
- "They (patients) get regular communication and follow up from the RN, and having all the notes in EPIC is a bonus."





# What defines Organizational Readiness?

- Initial support & ongoing commitment of Leadership
- EMR
- Reliable report generation from registry data
- Psychiatrist (or access to psychiatric consultation)
- PCP (Internal Medicine/Family Medicine)
- RNs who have care management experience and are trained in TEAMcare model
- Administrative support





### Organizational Readiness, continued

- RN supervisor/manager
- Organizational willingness to administer PHQ-9 to patients with one or more chronic conditions
- Approved Self-Harm Risk Policy to support PCPs/Staff with suicidal patients
- Co-location of RNs in Primary Care & Endocrinology
- Buy-in and education throughout all of Primary Care, including PCPs





# Organizational Readiness, continued

- Policies and Procedures in place to address other behavioral health needs, including social work (The Polyclinic has just approved a small Behavioral Health program for 2014).
- Operations manager to solve day-to-day program issues as they arise.
- Ongoing support of administration as challenges arise.
- An attitude of perseverance and patience--embrace change!





# One year later, what have we learned?

- Write a Self-Harm Risk Policy prior to program inception and train to it.
- Train the team more broadly at beginning of program.
- Schedule regular training updates as team members change.





# One year later, what have we learned?

- Use RN care managers to train other clinical staff.
- Create methodology for gathering data that is well defined and agreed to by team, and keep it simple.
- Communicate with larger organization on a regular basis.





# Questions?