Delivery of Evidence-Based Treatment for Multiple Anxiety Disorders in Primary Care:

The CALM Study

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Coordinated **A**nxiety **L**earning & **M**anagement

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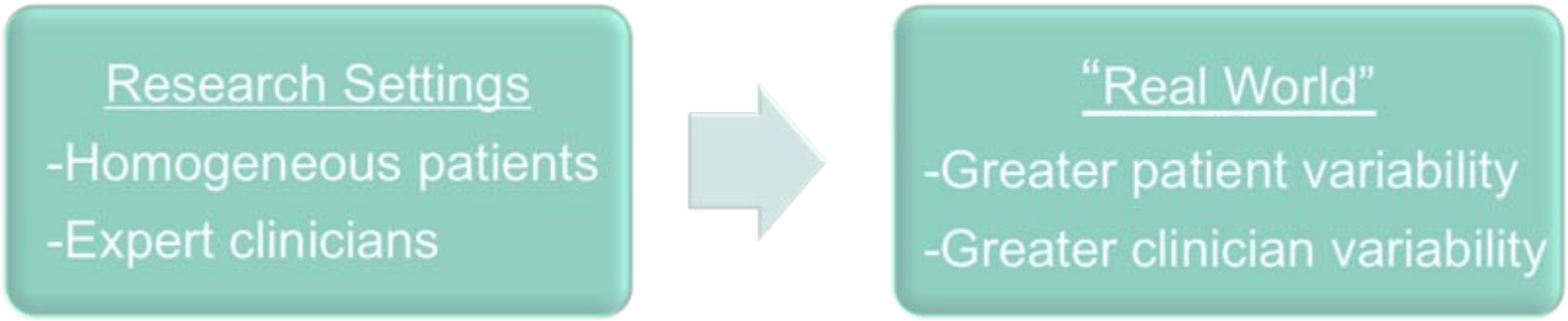
Translational Research: From Bedside to Practice

- Improving mental health care requires



- More patients fail to improve because they **DON'T RECEIVE** existing effective treatments rather than because these treatments are ineffective

Implementation of Evidence-Based Practice?

"Your order is not ready, nor will it ever be."

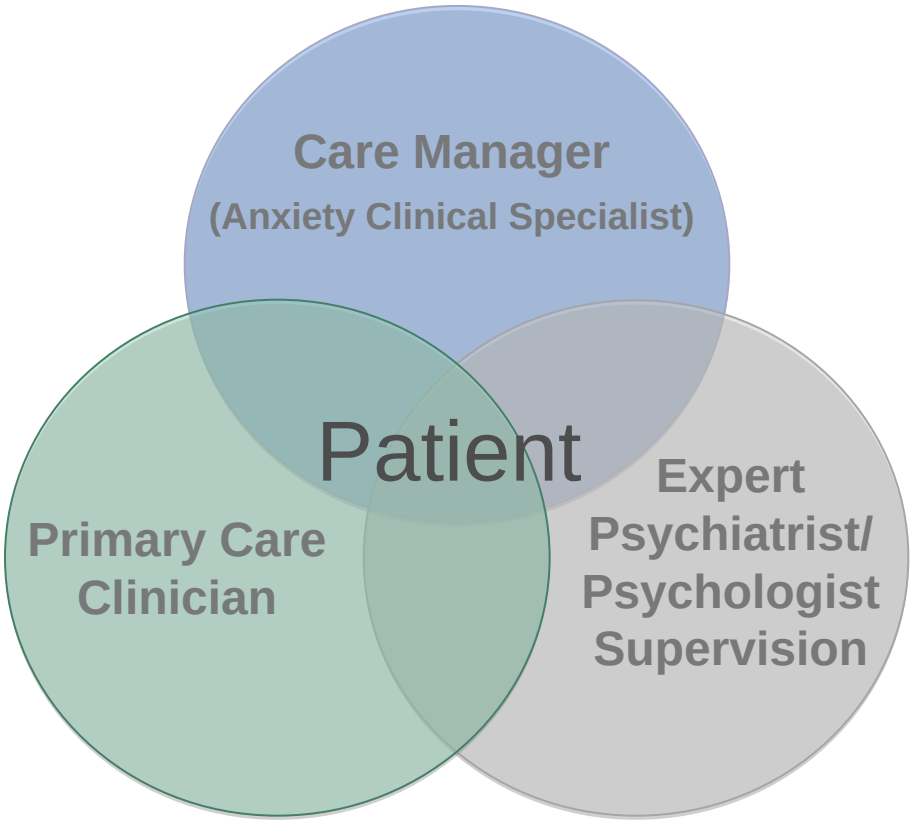
Making Anxiety Treatments More Available

- Primary Care is the **“de facto mental health system”** in the US
- The majority of patients with anxiety and depression are seen in **primary care, rather than mental health specialty settings**

Primary Care: An Important Focus for Public Health

- Collaborative care has been extensively studied as a model for treatment delivery in **depression**
- Only three studies have examined collaborative care for primary care **anxiety** (Roy-Byrne et al 2001; Rollman et al 2006; Roy-Byrne et al 2006)
- CALM investigation was modeled after the IMPACT study of primary care geriatric depression (Unutzer et al)

Collaborative Care Model for Delivering Psychiatric Care



Measurement-Based Care

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CALM: Innovation

- Targets four anxiety disorders (PD, GAD, SAD, PTSD)
  - Eliminates need for multiple treatment approaches
  - Facilitates ease of use
- Takes EBP to the people
  - Treatment delivery in primary care setting
  - Delivered by clinicians **without** a background in CBT for anxiety
- Utilizes computer-assisted CBT
  - Bolsters fidelity (adherence and competence)
  - Facilitates tailoring to client
- Incorporates web-based tracking system
  - "Measurement-based care" to facilitate treatment decisions and supervision

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CALM: Treatment Details

- **CBT Sessions**: 8-10 over 3 months
- **Delivery**: guided in real time by ACS (anxiety clinical specialist)
- **Focus**: most distressing disorder
- **Flexibility**: emphasized in session order and content
- **Medication**: prescribed by PCP, psychiatrist advises about dosing and type
- **Stepped Care**: additional CBT or medication are possible over the next 9 months

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CALM: Medication Approach

- Evidence-based medication prescribed by PCP
  - Algorithm driven approach
- ACS focus is on adherence, normalization of health habits (e.g., reduced caffeine, good sleep hygiene, minimize alcohol) and encouraging a more active lifestyle
- Psychiatrist supervises weekly
- Low patient interest
  - 57% already taking medication and were still symptomatic

CALM: CBT Approach

- CBT program has two parts:
  1) Basic modules-content applicable across anxiety disorders
  2) Tailored modules-content unique to each anxiety disorder
- Computer program guides patient AND clinician
  - Allows CBT to be delivered by non-expert providers with minimal training

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Basic Module: CALM Thinking

DISTRESS→ NEGATIVE THINKING

Remember from the **EDUCATION** Section:

- Anxiety and Depression can make us think that:
  - bad things are more likely to happen than is really the case
  - bad things are bigger and worse than they really are
- Depressed mood can make us think additionally that:
  - we are to blame for the bad things that have happened or could happen in the future
  - good things are less likely to happen than is really the case

- When we feel anxious or depressed, we can pretty much bet that whatever we are worried about is not as likely to happen, not as big a deal, or not as much our own fault as we may think, and that good things are more likely than we are thinking.

CALM: Web-Based Care Monitoring

- Accessible to all study staff
- ACS receives reminders
  - Patient- has remitted, has not been seen for several weeks, is not improving
- Graphs anxiety and depression outcomes
- Charts number and type of sessions
- Allows for measurement based supervision
  - Facilitates more efficient supervision

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Treatment History

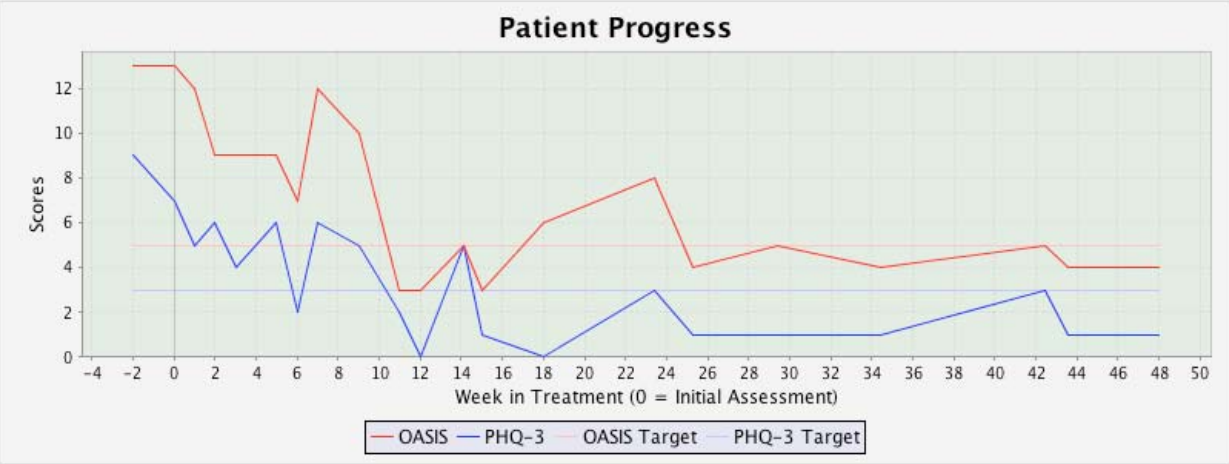
Subject ID : **Enrollment Date** : 5/4/2007

MINI

Diagnoses						OASIS	PHQ-3
☑ GAD	☑ SAD	☐ PTSD	☑ PD	☑ MDD	☐ Dysthymia	13	9

Contacts

Date	Type	Wk. in T.	Visit Type	Duration in min.	Oasis	PHQ-3	Medication	Daily Dose	Cbt
5/8/2007	IA	0	Clinic	110	13	7	Citalopram (Celexa) Trazodone (Desyrel)	10 12.5 PRN	
5/15/2007	FU	1	Clinic	80	12	5	Citalopram (Celexa) Trazodone (Desyrel)	10 12.5 PRN	1
5/22/2007	FU	2	Clinic	80	9	6	Citalopram (Celexa) Trazodone (Desyrel)	10 12.5 PRN	2
5/29/2007	FU	3	Clinic	70	9	4	Citalopram (Celexa) Trazodone (Desyrel)	10 12.5 PRN	3
6/6/2007	FU	4	None	5			Citalopram (Celexa) Trazodone (Desyrel)	10 12.5 PRN	
3/8/2008	CC	43	Phone	30	4	1	Citalopram (Celexa)	40	
4/8/2008	CC	48	Phone	20	4	1	Citalopram (Celexa)	40	



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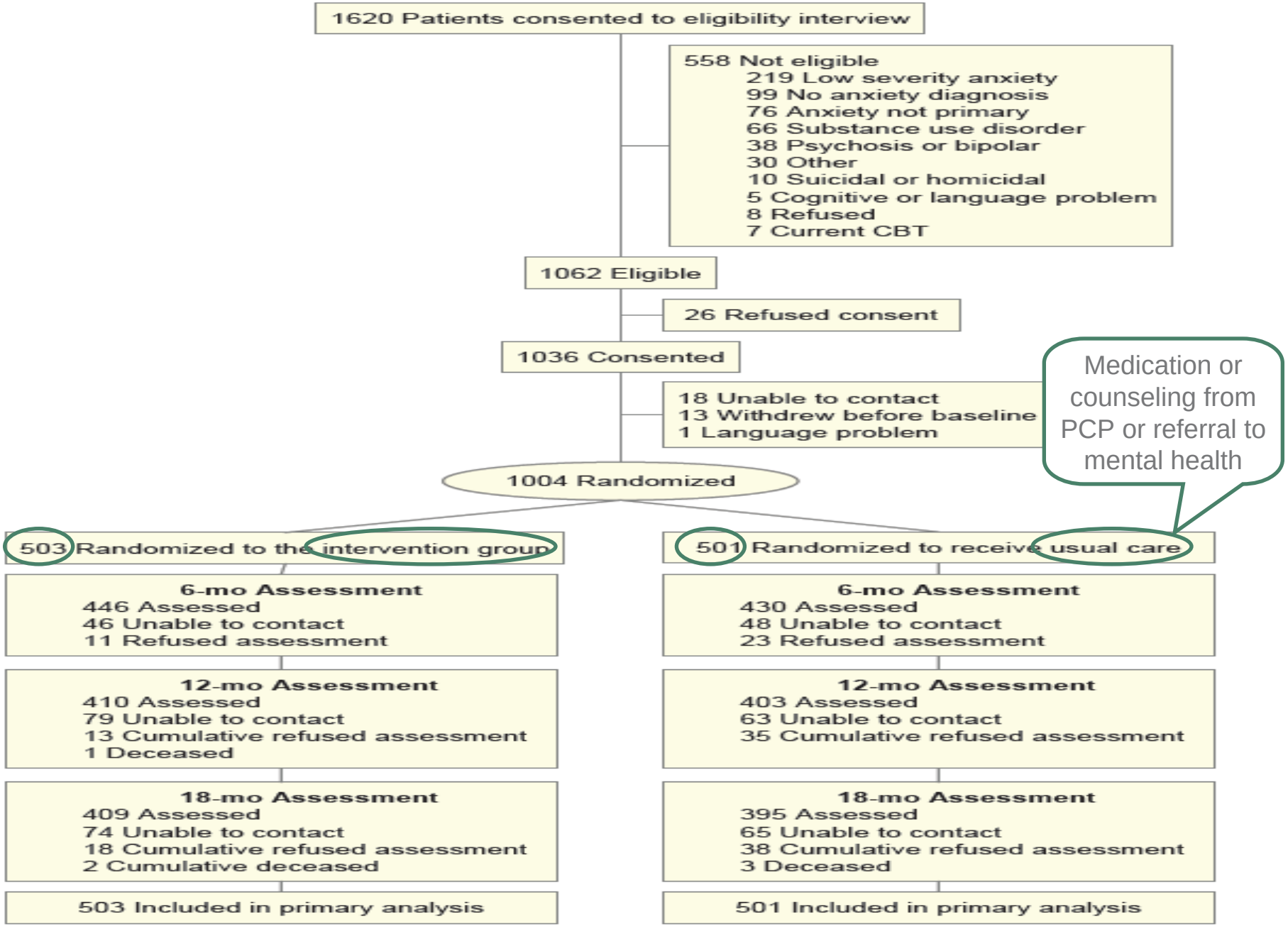
Next Follow-up with _____ : Date : 5 / 2 / 2008 Time : 9 : 30 AM At the clinic

Anxiety Clinical Specialist :
Primary Care Provider :

Phone Number :

Design of the CALM Study

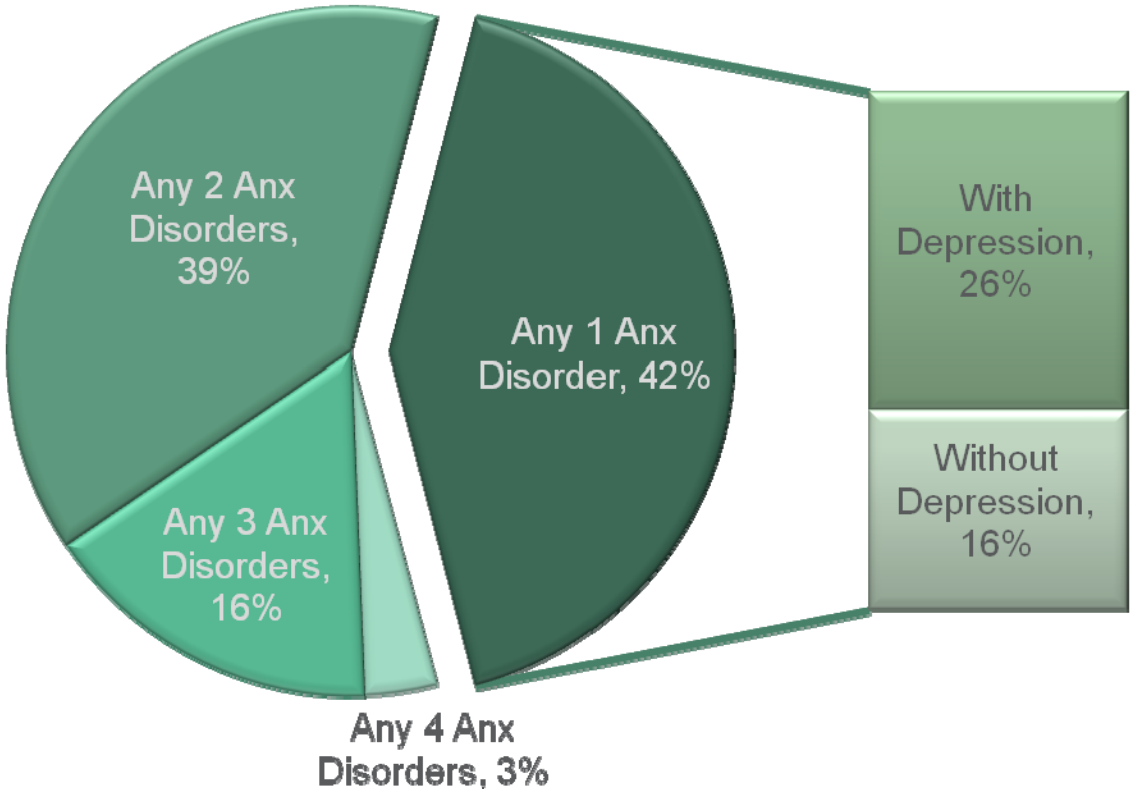


Subjects (N = 1004)

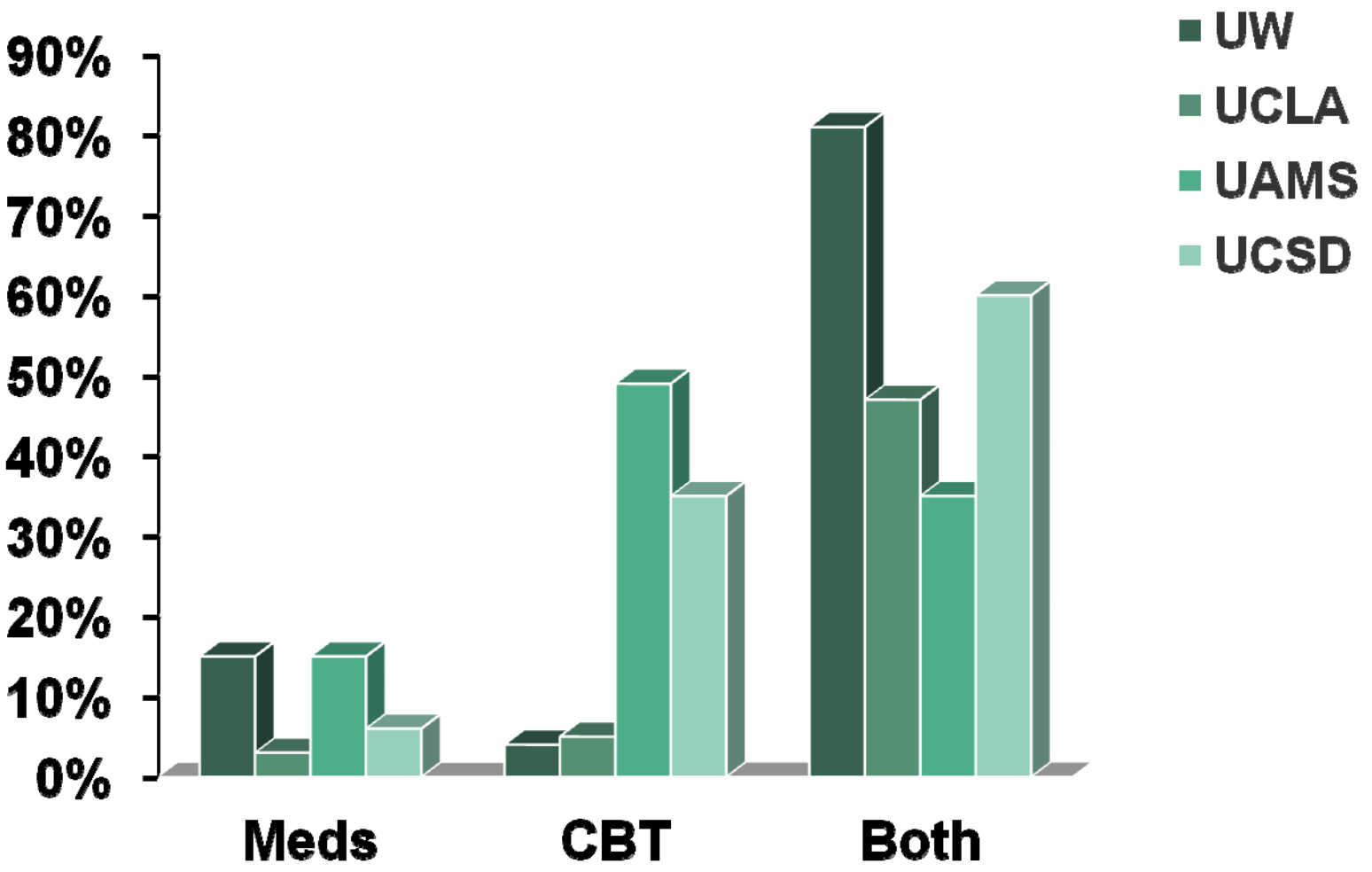
Age	43 (mean)
Gender	71% female
Race	57% White, 20% Latino, 12% African American, 12% Other
Marital Status	53% married
Education	78% some
Working	71% outside home
Insurance	85% insured
Medical Illness	42% 2 or more chronic illnesses

Diagnosis (N=1004)

GAD	75%
Panic	47%
SAD	40%
PTSD	18%
MDD	64%



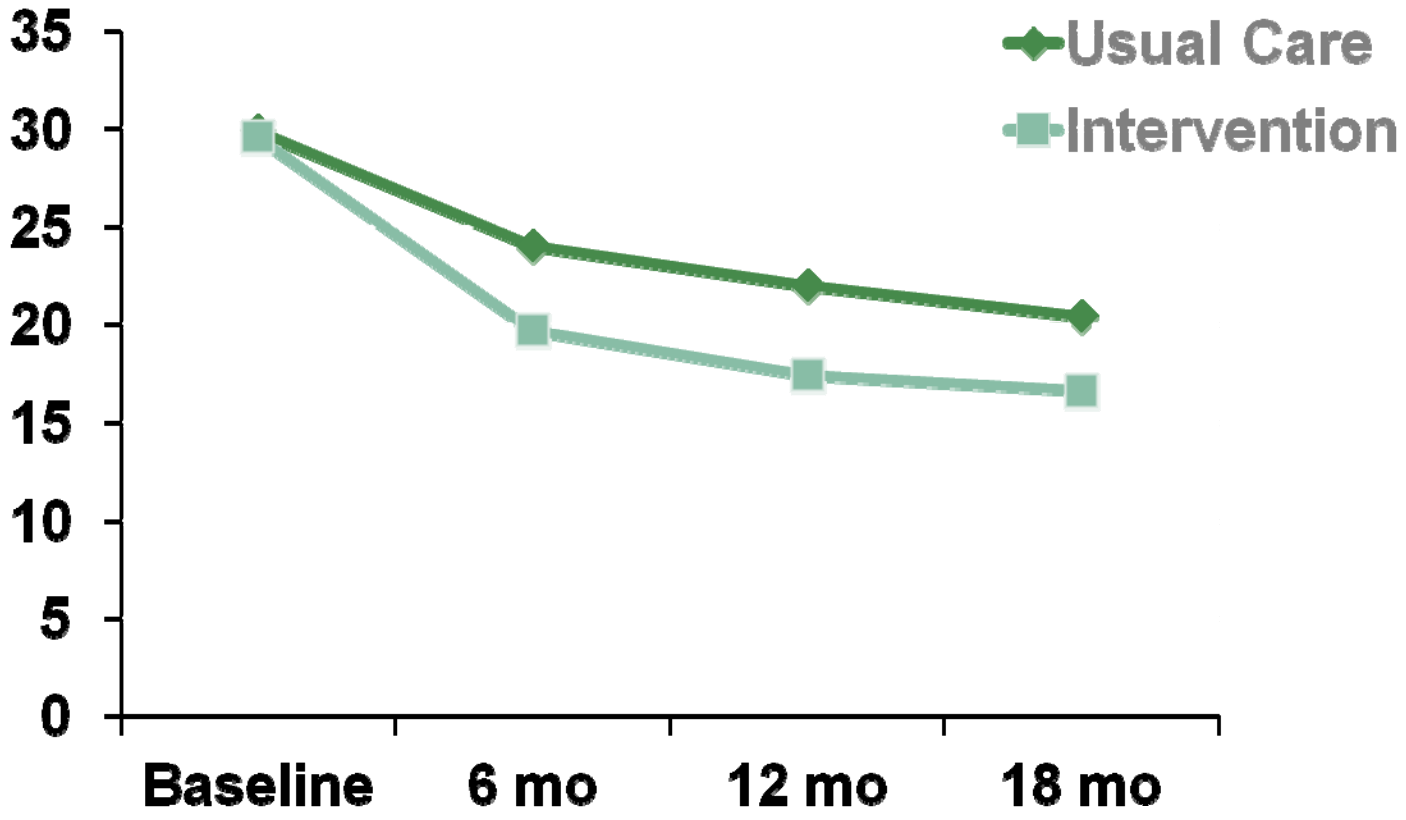
Treatment Received by Site



Improved Quality of Anxiety Care

- More intervention patients reported receiving **CBT elements** in therapy at 6 (82% vs. 34%) and 12 (49% vs. 26%) months
- More intervention patients reported receiving an appropriate **change in medication** at 6 months (25% vs. 17%)

CALM: BSI Anxiety



Cohen's d=0.30, 0.31, 0.18

P <.001, N=1004

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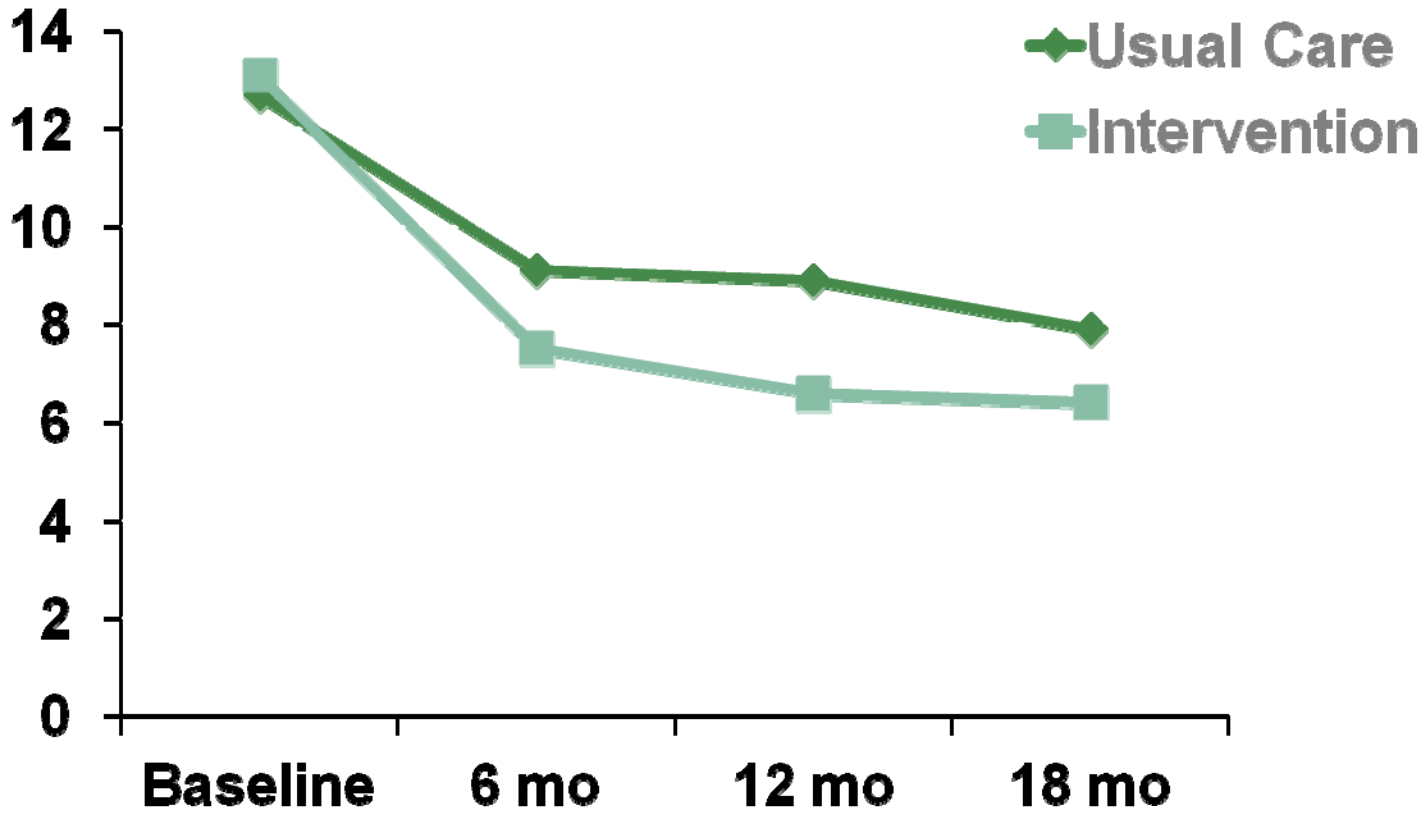
CALM: PHQ-9 Depression



Cohen's d=0.26, 0.37, 0.24

P <.001, N=1004

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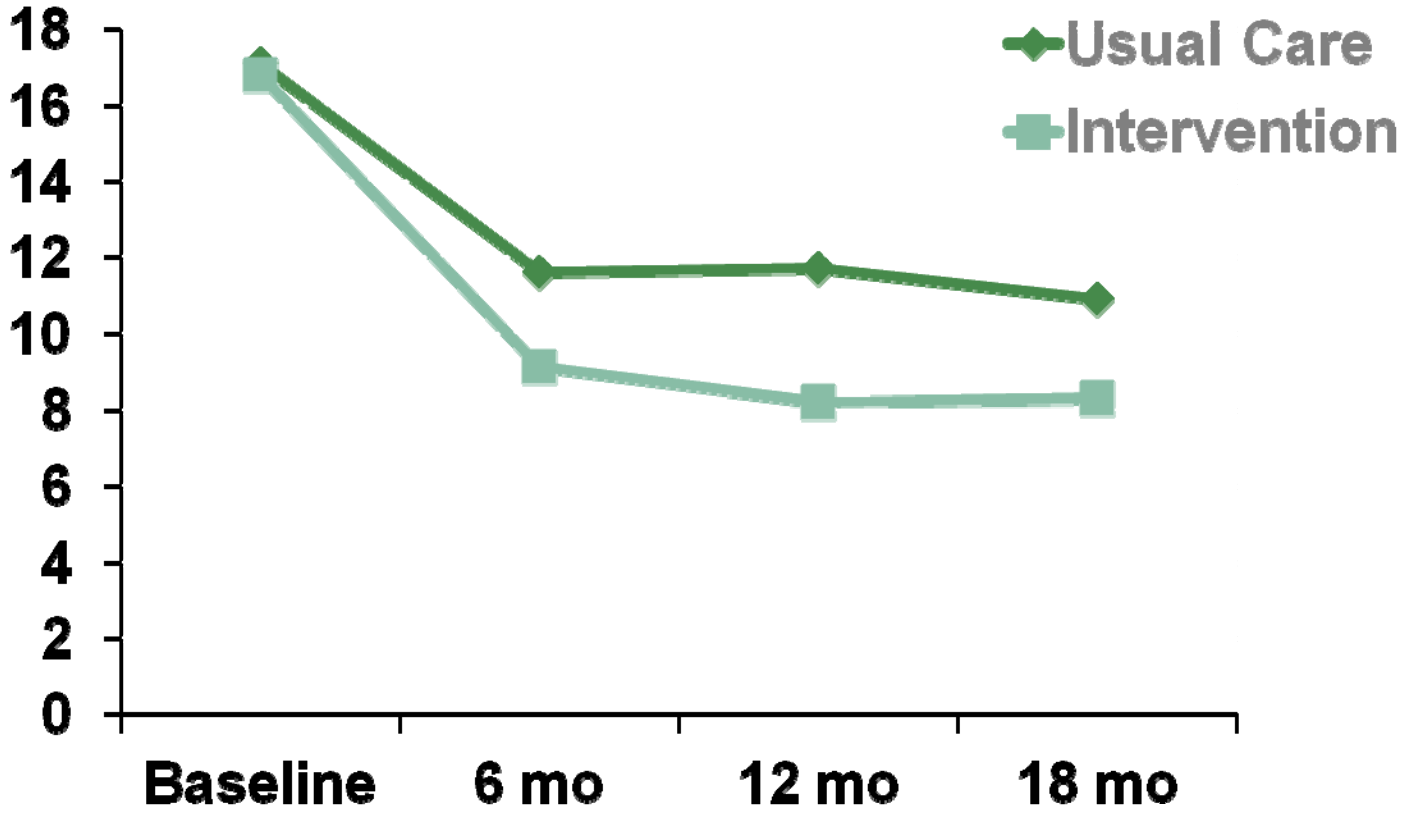
CALM: Sheehan Disability



Cohen's d=0.32, 0.44, 0.55

P <.001, N=1004

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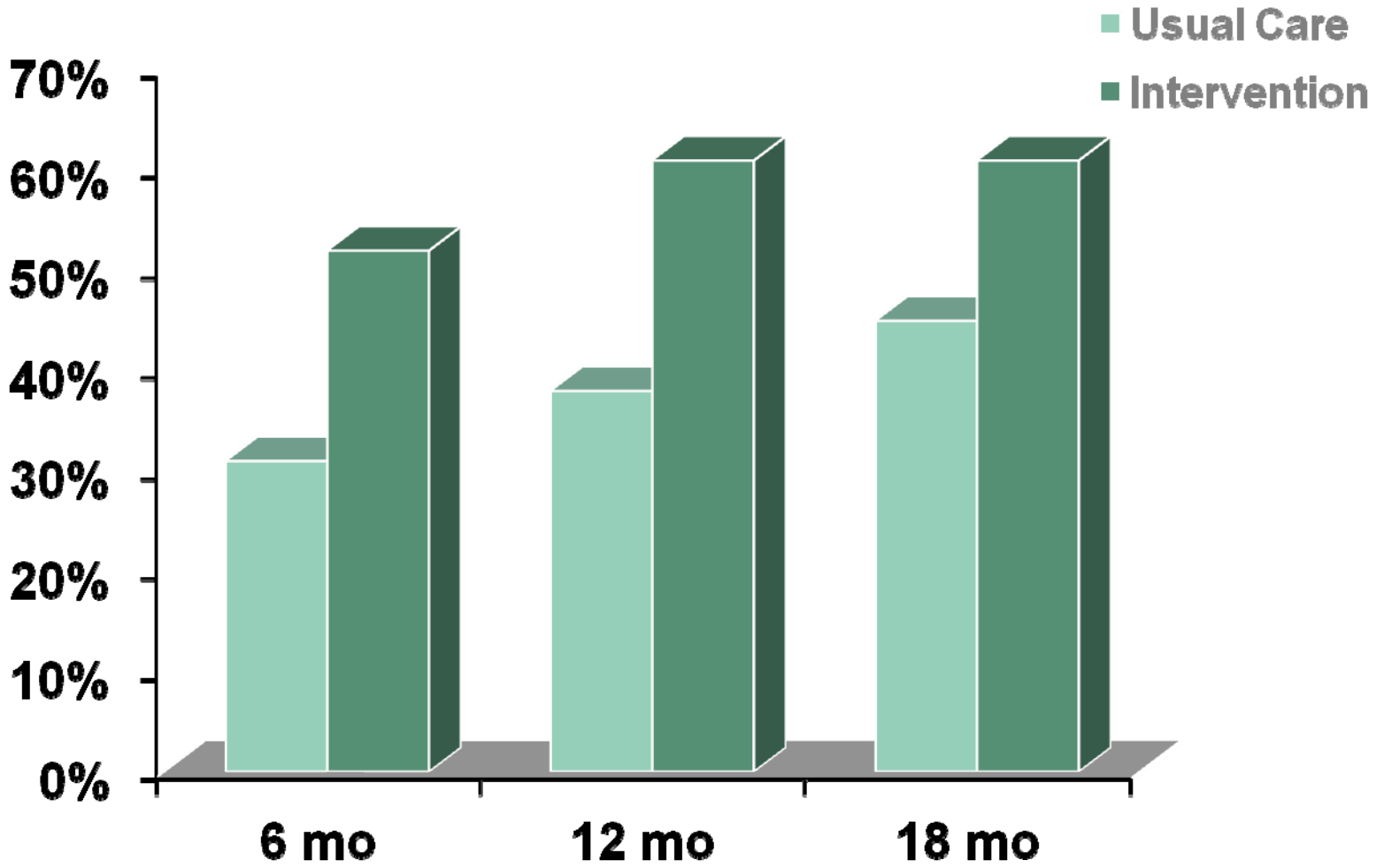
CALM: Response (BSI-12)



>50% Improvement
NNT=5, *P* <.001, N=1004

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Conclusions

- **CALM works!**
  - It delivers flexible, evidence-based, anxiety treatment to primary care patients with multiple anxiety disorders and produces more improvement than usual care (and at a reasonable cost)
- **CALM works well!**
  - Effect sizes are similar to those obtained in efficacy and effectiveness studies
    - Despite “tailoring” (treatment protocol flexibility) to adjust to a range of settings that vary by payer, income, ethnicity and organizational features

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Conclusions

- CALM shows how technology can facilitate the use of evidence-based treatments in real world settings that lack anxiety disorder expertise
  - To maximize the quality of the clinical work of non-experts ("evidence-based care")
  - To monitor patient outcomes and adjust treatment ("measurement-based care")
- CALM can serve as a model for how to address the multiple co-morbid psychiatric disorders that are the rule, rather than the exception, in most clinical care settings

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CALM: Going Forward

- Training for individuals and groups that are interested in implementing in their own setting (Beta-test training for Mayo Clinic done August 2011 in Seattle, WA)

- RO1 NIMH application to test the implementation of CALM vs. Usual Care in Specialty Mental Health in an HMO (G. Simon PI)
  - Investigation will examine-
    - the acceptability and adoption of the program by the overall system
    - its effect on quality of care, treatment fidelity, cost and patient outcomes