

Pain Self-Management: Barriers and Opportunities

**The 8th Annual NIH Pain Consortium Symposium on Advances in Pain Research:
Integrated Self-Management Strategies for Chronic Pain
May 29th- May 30th**

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Faculty Disclosure

David A. Williams, Ph.D. is a consultant for the following companies:

- Eli Lilly and Company, Inc.,
- Forest Pharmaceuticals, Inc.
- Pfizer Inc.
- Health Focus, Inc.

A one-time licensing fee was paid to the University of Michigan by Eli Lilly for the KnowFibro.com website.



International Association for the Study of Pain

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UPDATES

Vol. XX, Issue 7

December 2012

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Interdisciplinary Chronic Pain Management: International Perspectives

Of all approaches to the treatment of chronic pain, none has a stronger evidence basis for efficacy, cost-effectiveness, and lack of iatrogenic complications than interdisciplinary care.¹⁻⁹ Initially developed in the 1940s at Tacoma General Hospital by John Bonica and colleagues in response to their recognition that the complexities of chronic pain required a complex biopsychosocial approach,¹⁰ interdisciplinary programs have subsequently spread throughout the world. Although the composition of modern interdisciplinary treatment teams may vary to some degree, Okifuji and colleagues² have noted that the typical treatment provided includes three common elements: (1) medication management, (2) graded physical exercise, and (3) cognitive and behavioral techniques for pain and stress management. Most critical is the understanding that chronic pain is a disease of the *person*, and that a traditional biomedical approach cannot adequately address all of the pain-related problems of this patient population.¹¹

Of all approaches to the treatment of chronic pain, none has a stronger evidence basis for efficacy, cost-effectiveness, and lack of iatrogenic complications than interdisciplinary care



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Of all approaches to the treatment of chronic pain, none has a stronger evidence basis for efficacy, cost-effectiveness, and lack of iatrogenic complications than interdisciplinary care

APS Presidential Public Statements on Multidisciplinary Pain Management

■ Fillingim, 2012

- “There are several important issues we must address...[one is] enhancing access to evidence-based interdisciplinary pain care”

■ Inturrisi, 2010

- “Part of the advocacy mission of APS is to promote the benefits of multidisciplinary pain care.”

■ Paice, 2008

- “Combining CBT and physical therapies with medications and other approaches is the major advantage of the multidisciplinary approach. We treat the whole person, not just the pain...we are proving every day that integrated, multidisciplinary pain care yields the best long-term outcomes.”



RESEARCH
EDUCATION
TREATMENT
ADVOCACY

Interdisciplinary Pain Management

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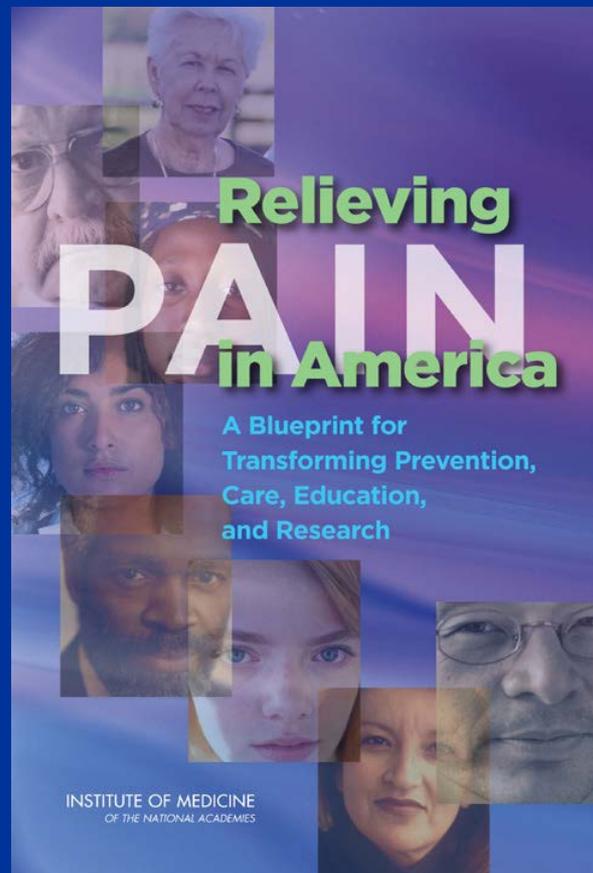
Edward C. Covington, MD

Cleveland Clinic Foundation
Cleveland, OH

Michael E. Clark, PhD

James A. Haley Veterans Hospital
Tampa, FL

“For interdisciplinary teams...patients, caregivers, and significant others’, involvement goes beyond the simple provision of information; it involves active participation of these individuals to the extent possible in treatment decisions and **self-management**”



“Among steps to improving care, healthcare providers should increasingly aim at tailoring pain care to each person’s experience, and **self-management of pain should be promoted**”

The positions of
IASP, APS and IOM seem clear,
what is standing in the way?

Pain Medicine Versus Pain Management: Ethical Dilemmas Created by Contemporary Medicine and Business

John D. Loeser, MD† and Alex Cahana, MD, PhD*†*

Two Approaches to Pain Care

**Interventional
Pain Medicine**

**Interdisciplinary
Pain Management**

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**Interventional
Pain Medicine**

Procedure Driven

Patient is passive recipient

**Interdisciplinary
Pain Management**

- Focus on multidisciplinary teams
- Focus on **self-management**

Patient is active participant

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**Interventional
Pain Medicine**

**Weak evidence for
much of chronic
pain**

Limited Evidence Supports Efficacy for Procedural Pain Medicine in CP

Generally:

Chou R, Loeser JD, Owens DK, et al. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidenced-based clinical practice guideline from the American Pain Society. *Spine*. 2009; 34:1066-1077.

Hogan QH, Abram SE. Neural blockade for diagnosis and prognosis: a review. *Anesthes*. 1997; 86:216-241.

Merrill DG. Hoffman's glasses: evidenced-base medicine and the search for quality in the literature on pain medicine. *Reg Anesth Pain Med*. 2003; 28:547-560.

Staal JB, de Bie RA, de Vet HCW, Hildebrandt J, Nelemans P. Injection therapy for subacute and chronic low back pain: an updated Cochrane review. *Spine*. 2009; 34:49-59.

Facet blocks:

Slipman CW, Bhat AL, Gilchrist RV, Isaac Z, Chou L, Lenrow DA. A critical review of the evidence for the use of zygapophysial injections and radiofrequency denervation in the treatment of low back pain. *Spine J*. 2003; 3:310-316.

Carette S, Marcoux S, Truchon R, et al. A controlled trial of corticosteroid injections into facet joints for chronic low back pain. *N Eng J Med*. 1991; 325:1002-1007.

Epidural steroid injections:

Armon C, Argoff CE, Samuels J, Backonja M. Assessment: use of epidural injections to treat radicular lumbosacral pain: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. *Neurology*. 2007; 68:723-729.

Bowman SJ, Wedderburn L, Whaley A, Grahame R, Newman S. Outcome assessment after epidural corticosteroid injection for low back pain and sciatica. *Spine*. 1993; 18:1345-1350.

Carette S, Leclaire R, Marcoux S, et al. Epidural corticosteroid injections for sciatica due to herniated nucleus pulposus. *N Eng J Med*. 1997; 336:1634-1640.

Koes BW, Scholten RJPM, Mens JMA, Bouter LM. Efficacy of epidural steroid injections for low-back pain and sciatica: a systematic review of randomized clinical trials. *Pain*. 1995; 63:279-288.

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**Interdisciplinary
Pain Management**

**Stronger evidence of efficacy -
particularly for CBT and
exercise; components of self-
management**

The efficacy of non-pharmacological therapy is supported for pain, physical functioning and mood in chronic pain states



Pain 80 (1999) 1–13

PAIN

Review Article

Systematic review and meta-analysis of randomized controlled trials of cognitive behaviour therapy and behaviour therapy for chronic pain in adults, excluding headache

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^c*United Dental and Medical School, University of London, London, UK*

Health Psychology
2007, Vol. 26, No. 1, 1–9

In the public domain
DOI: 10.1037/0278-6133.26.1.1

Meta-Analysis of Psychological Interventions for Chronic Low Back Pain

Benson M. Hoffman
Duke University Medical Center

Rebecca K. Papas
Yale University School of Medicine

David K. Chatkoff
University of Michigan—Dearborn

Robert D. Kerns
Veterans Affairs Connecticut Healthcare System and Yale
University

For FM and CWP, efficacy of nonpharmacological therapy rivals pharmacological agents

A META-ANALYSIS OF FIBROMYALGIA TREATMENT INTERVENTIONS^{1,2}

Lynn A. Rossy, M.A. and Susan P. Buckelew, Ph.D.
University of Missouri-Columbia

Nancy Dorr, Ph.D.
Jamestown College

**Kristofer J. Hagglund, Ph.D., Julian F. Thayer, Ph.D., Matthew J. McIntosh, M.A.,
John E. Hewett, Ph.D., and Jane C. Johnson, M.A.**
University of Missouri-Columbia



PAIN[®] 151 (2010) 280–295

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www.elsevier.com/locate/pain

Psychological treatments for fibromyalgia: A meta-analysis

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Stefan G. Hofmann^a

^a Department of Psychology, Boston University, Boston, MA, USA

^b University of Marburg, Department of Clinical Psychology and Psychotherapy, Marburg, Germany

Non-pharmacological Therapies in FM

Strong Evidence

- Education
- Aerobic exercise
- Cognitive-behavioral therapy

Modest Evidence

- Strength training
- Hypnotherapy, biofeedback, balneotherapy
- Acupuncture

Weak Evidence

- Chiropractic
- Manual and massage therapy
- Electrotherapy, ultrasound

No Evidence

- Tender (trigger) point injections

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“Despite the talk about evidence-based medicine (EBM), the primary driving force behind changes in health care has become economics.”

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**Interventional
Pain Medicine**

Strong business model

**Interdisciplinary
Pain Management**

**Less clear how to profit from
Self-management**

Pain Medicine Versus Pain Management: Ethical Dilemmas Created by Contemporary Medicine and Business

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**Interventional
Pain Medicine**

“as hospitals are searching for revenue generation, they have facilitated the utilization of revenue producing procedures and removed support from multidisciplinary pain clinics”

**Interdisciplinary
Pain Management**

**1998 – 210 clinics CARF accredited
2005 – 84 clinics CARF accredited**

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Interventional Pain Medicine

Medical school, resident training and CME courses continue to focus on teaching procedures.

Interdisciplinary Pain Management

**Little training time devoted
Little industry support for multidisciplinary or self-management CME**

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**Interventional
Pain Medicine**

Winning the economic game

**Interdisciplinary
Pain Management**

Winning the evidence game
- Pain efficacy equivalent to
pharma, medical, surgical
- Better at reducing costs,
closing disability, RTW,
improving function

To gain a broader reach,
Self-Management needs to be more
easily integrated into routine clinical
practice

- ehealth
- mHealth

Types of Self-Help

- Guided/supervis
 - Telephone
 - Face-to-face contact
 - Texting/email
 - Video conference
- Unguided (truly self-help) no therapist involve

Guided Approaches to Self-Help: Website + coach RCT's

- Swedish Study (2004)
 - Professional Therapist
- Expert Patient Program (2008)
 - Lay moderator
- Self Care Pain Management Program (2009)
 - Nurse moderator
- WEBMAP (2009)
 - Professional therapist (for kids)
- Teens Taking Action (2010)
 - BA in Psychology moderator
- Stepping up to Health (2010)
 - Staff moderator

Unguided Approaches to Self-Help: “Therapist-less” websites RCT’s

- Oneself (2007)
- painAction (2010)
- Living Well with Fibromyalgia (2010)

**Challenge: For HCPs to trust a self-
management resource it must be
evidence based**

Living Well with Fibromyalgia: Online CBT-based Self-help



PAIN® 151 (2010) 694–702

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www.elsevier.com/locate/pain

Internet-enhanced management of fibromyalgia: A randomized controlled trial

David A. Williams^{a,*}, David Kuper^b, Michelle Segar^c, Niveditha Mohan^d, Manish Sheth^e, Daniel J. Clauw^f

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LIVING WELL with Fibromyalgia

developed by the Avera Research Institute and the University of Michigan

- **what is fibromyalgia?**
 - about fibromyalgia?
 - what causes fibromyalgia?
 - treatment advice
- **symptom management**
 - medications
 - exercise
 - sleep
 - relaxation
 - pleasant activity
- **lifestyle change**
 - goal setting
 - problem solving
 - pacing
 - reframing
 - communication

What Is Fibromyalgia?



Daniel Clauw, MD, rheumatologist

<EXIT>

exit the CD

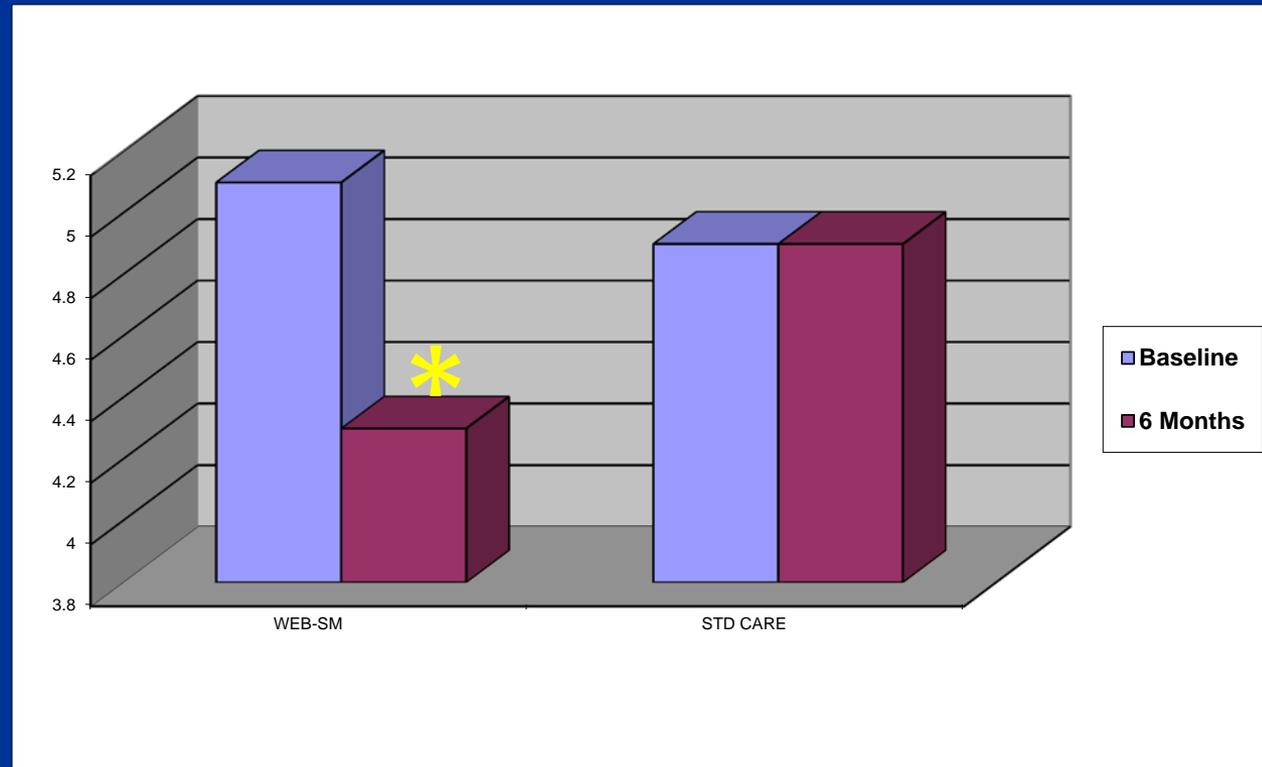


RCT of Living Well: Pain Severity

Pain Responders:

30% improvement

- WEB: 29%
- Std Care: 8%
- $p < .008$
- NNT: 5



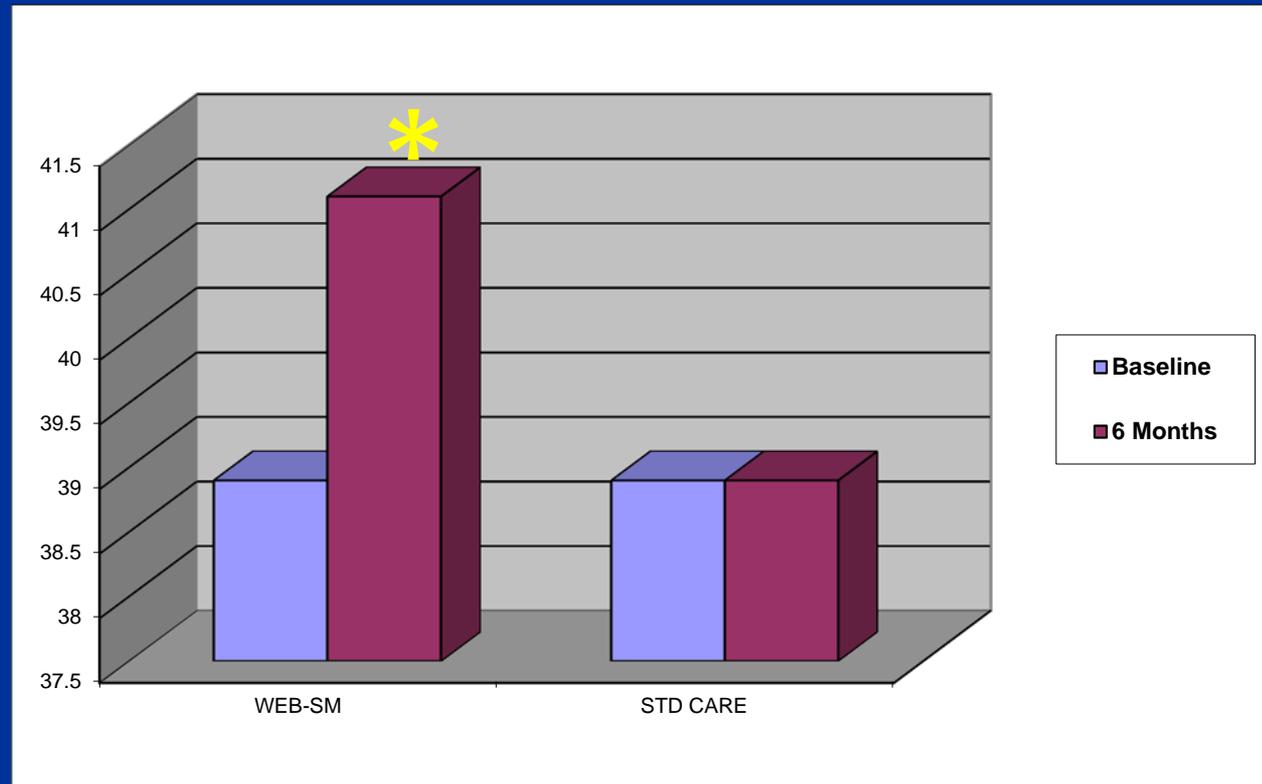
* $P < 0.05$

RCT of Living Well: Physical Functioning

Functional Responders:

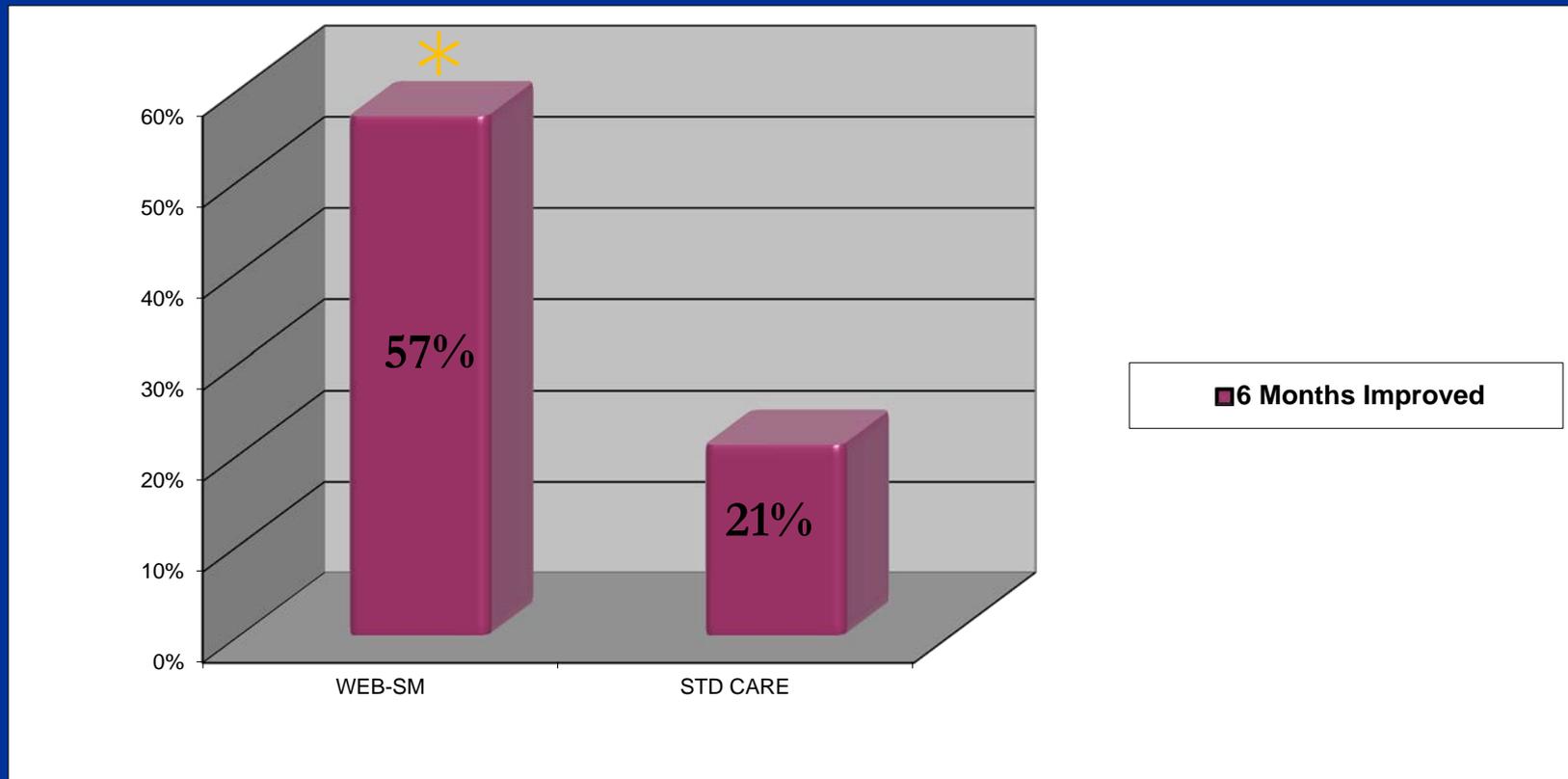
0.5 SD improvement

- WEB: 31%
- Std Care: 6%
- $p < .002$
- NNT: 5



* $P < 0.05$

Living Well: Percentage reporting feeling improved at 6 months (PGIC)



Between Class Comparisons of FDA Approved Medications for Fibromyalgia (All Doses Pooled)

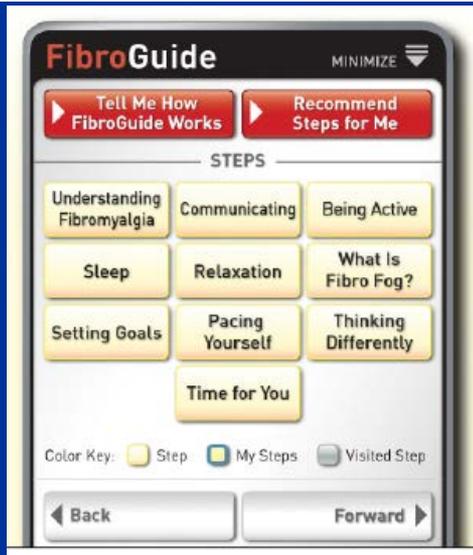
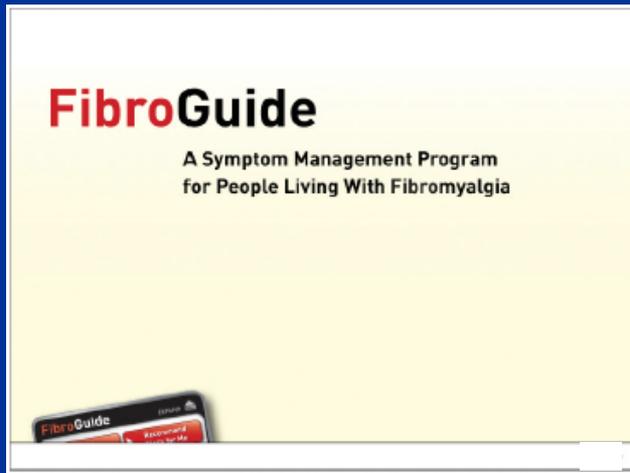
- NNT for 30% reduction in pain
 - Duloxetine 7.2 (95% CI 5.2, 11.4)
 - Milnacipran 19.0 (95% CI 7.4, 20.5)
 - Pregabalin 8.6 (95% CI 6.4, 12.9)
 - Living Well (5.0)

Challenge: How can self-management resources be sustained?

- Of the evidence-based guided and unguided self-management resources listed, > 50% were discontinued once funding for the clinical trial ended.
- Alternative approaches to sustainability
 - FibroGuide.com (free to the public underwritten by Eli Lilly)

FibroGuide.com

Self-management program for people living with fibromyalgia



- Program features 10 topics or “Steps” based on the University of Michigan *Live Well with Fibromyalgia* Program
 - Understanding Fibromyalgia
 - Being Active
 - Sleep
 - Relaxation
 - Time for You
 - Setting Goals
 - Pacing Yourself
 - Thinking Differently
 - Communicating
 - Fibro Fog

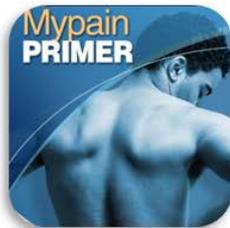
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 - MyPain Primer (proprietary program marketed by Pfizer to provider groups and insurance providers)

pain **PRIMER**TM



Smart phone and iPad delivered CBT-based pain management program containing the following:



- a patient app (video lectures, tracking, scheduling)



- a HCP app for diagnostics, scheduling and integrating pain care

Developed with support from:

Integrated Health A  Solution

Challenge: How can self-management resources be sustained?

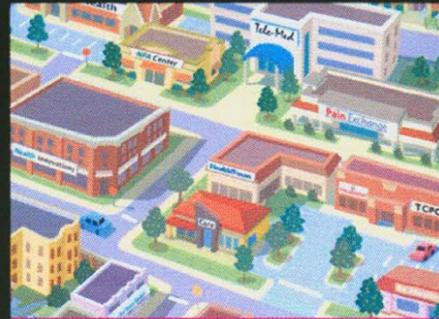
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 - FibroGuide.com (free to the public underwritten by Eli Lilly)
 - MyPain Primer (proprietary program marketed by Pfizer to provider groups and insurance providers)
 - Health Focus Inc., (a patient-centric community, where members support the availability of self-management programming)

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Pain Center



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Keys to Successful Integration of Self-Management Programs

- **Key: A strong bridge must exist between the HCP and the self-management resource**
 - Resource must be easy for HCP to use and recommend to patients
 - HCP must trust the elements of the program (evidence)
- **Key: HCPs need a mechanism to be informed about patients' use of the self-management program**
- **Each HCP may need a staff member who is responsible for linking patients with self-management resources**