



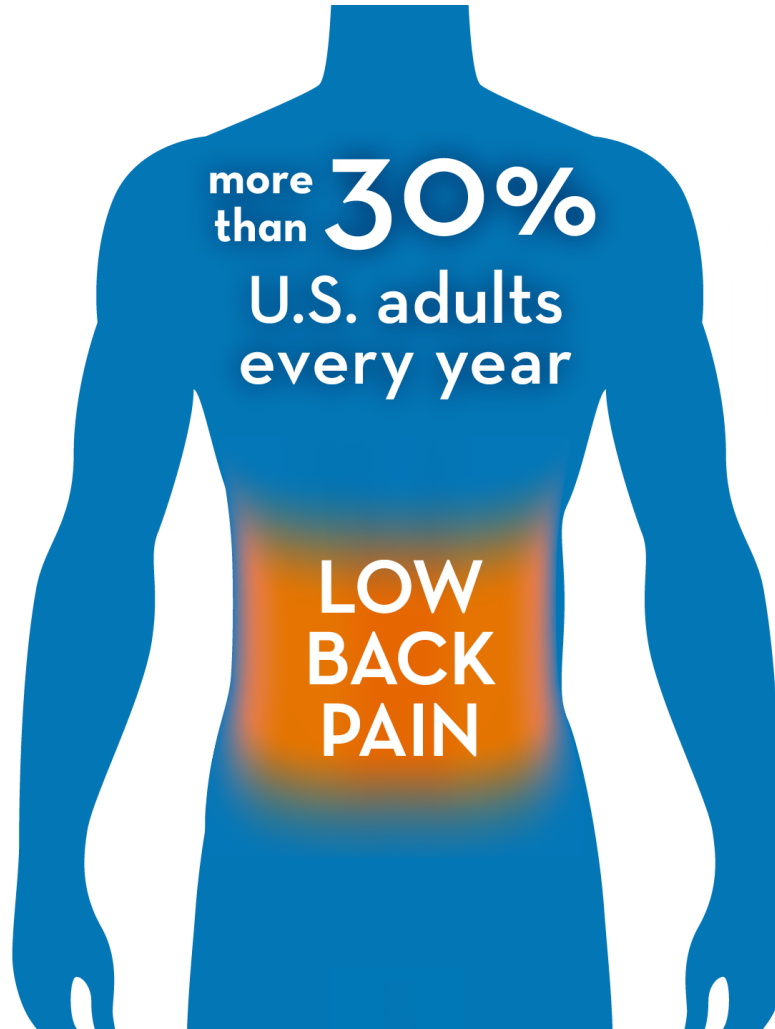
Low Back Pain Program

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Low Back Pain



#1 cause of
**opioid
prescriptions**

#1 cause of
**disability and
lost workdays**

Costly

Prevalent

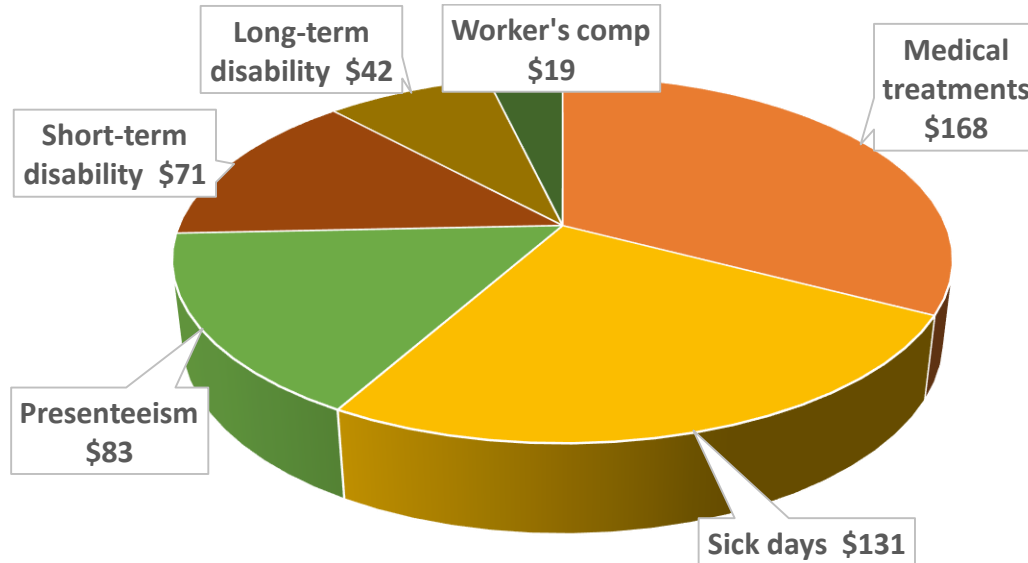
Recurrent

Impact on Employers

Working age issue

- 72% of adult healthcare visits for LBP are working age¹
- \$100,000 – Average cost of a chronic LBP disorder²

Cost to employer - \$514 / employee (2013 dollars)³



“Employers stand to benefit from understanding the extent of back pain in their workforce and helping employees prevent, treat and manage their pain.”

Tom Parry, PhD., Integrated Benefits Institute
President Emeritus



Impact on Employers ... and Employees

Absenteeism

- 40% due to LBP¹

Productivity

- 24% of adults report LBP affects ability to work²

Wellbeing

- 76% higher medical costs than those without LBP³
- Average of 4.9 co-morbidities⁴
 - Depression
 - Chronic fatigue
 - Obesity



¹ Manchikanti L, Singh V, Datta S, Cohen SP, Hirsch JA, ASIPP (2009). "Comprehensive review of epidemiology, scope, and impact of spinal pain". Pain Physician. 12 (4): E35–70.

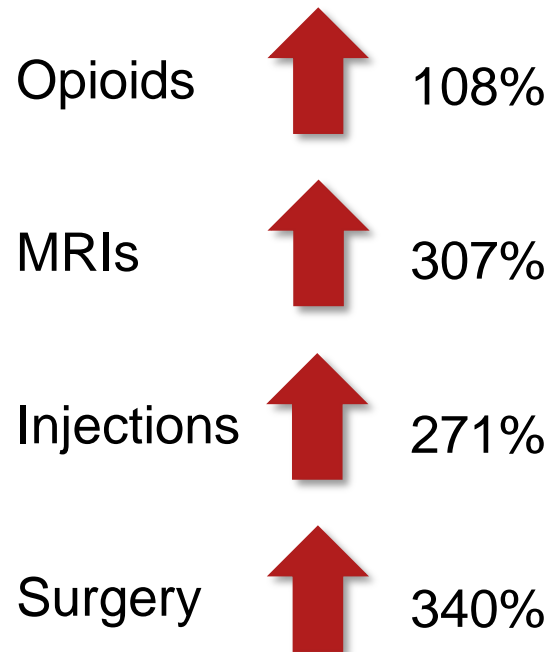
² APTA Move Forward Survey <https://www.moveforwardpt.com/LowBackPain/Infographic>

³ Martin BI, Deyo RA, Mirza SK, Turner JA, Comstock BA, Hollingworth W, Sullivan SD. Expenditures and Health Status Among Adults With Back and Neck Problems. JAMA. 2008;299(6):656–664. doi:10.1001/jama.299.6.656

⁴ IBI Chronic Disease Profile. Low Back Pain. April 2013

20 Years of Frustration

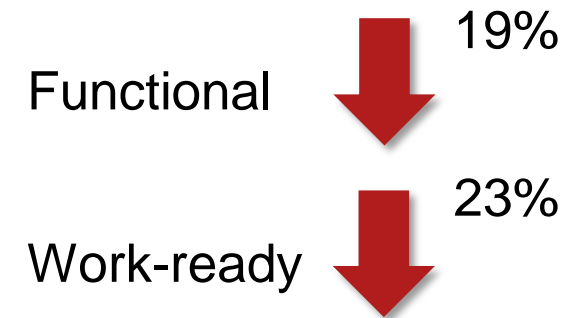
Utilization¹



Costs²



Outcomes³



¹ Deyo, RA, Mirza, S, et al. Overtreating Chronic Back Pain: Time to Back Off?. J Am Board Fam Med. 2009; Vol.22 No.1, 62-68.

² Crow, WT, Willis, D. Estimating Cost of Care for Patients with Acute Low Back Pain: A Retrospective Review of Patient Records. The Journal of the American Osteopathic Association. 2009;Vol.109, 229-233.

³ Martin, BI, Deyo, RA, et al. Expenditures and Health Status Among Adults With Back and Neck Problems. JAMA. 2008; Vol.299 No.6.

Kiio

“Our goal is to engage people in care that is individualized, personal, convenient, and effective ... while also scalable and high-value for the payer.”

- Dave Grandin, CEO, Kiio

Kiio Program – Employer Perspective

Screening & care path optimization

- Determination of multi-dimensional risk profile
 - Medical flags, clinically validated psychosocial risk stratification, symptoms
 - Identifies co-morbidities
 - Capture of baselines & demographics
- Automatically optimizes care path by steering complex cases

Evidence-based care & decision support

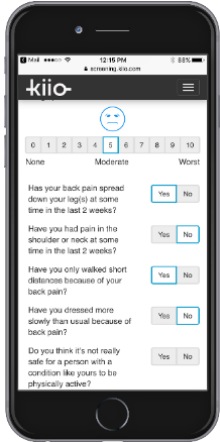
- Care automatically delivered to employee's mobile device
 - Multi-track, multi-level exercise programs
 - Pain education – International Pain & Spine Institute
 - Automated progression based on individual employee response

Monitored Population Management

- Program overseen by RN care managers
 - Automated alerting & proactive outreach
- Participants have access to 1:1 interaction
- Outcome reporting
 - Pain reduction; functional ability; work impact



Kiio Program – Employee Perspective



Screening

- Less than 10 minutes any time, anywhere
- Immediate referral to appropriate care
 - >75% receive mobile care program

Individualized care delivered via mobile

- Individualized home exercise program
- Education on overcoming chronic pain
- Content delivered automatically based on individual progress & response
- Virtual coaching - visual & audio
- Individualization & relevance
 - Preferred routine length (express / complete)
 - Preferred reminder days/times
 - Encouragement & support via secure in-app messaging
 - Progress towards personal goal
 - Access to 1:1 interaction with care managers



Outcomes



8 out of 10 experience
reduction in pain (95% CI)

Pain Reduction

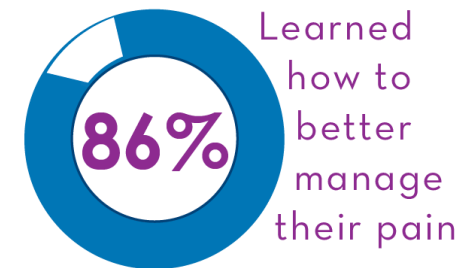
50% Average decrease
in pain score over
all participants

*International benchmark for clinical
significance in low back pain is 30%**

Efficacy & Cost

More or as effective** as opioids,
specialty visits, imaging &
surgery at a fraction of the \$

Program User Empowerment



Value to Employers

Reduction in utilization of expensive services



Physical Therapy
X-rays & MRIs
Epidurals
Surgery

Employment cost reduction

Missed work days
Lost productivity



Disability
Worker's comp

Long term risk reduction

- Improved employee back health reduces injury risk
- Employees learn techniques to manage flare-ups

Value to Employees





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