

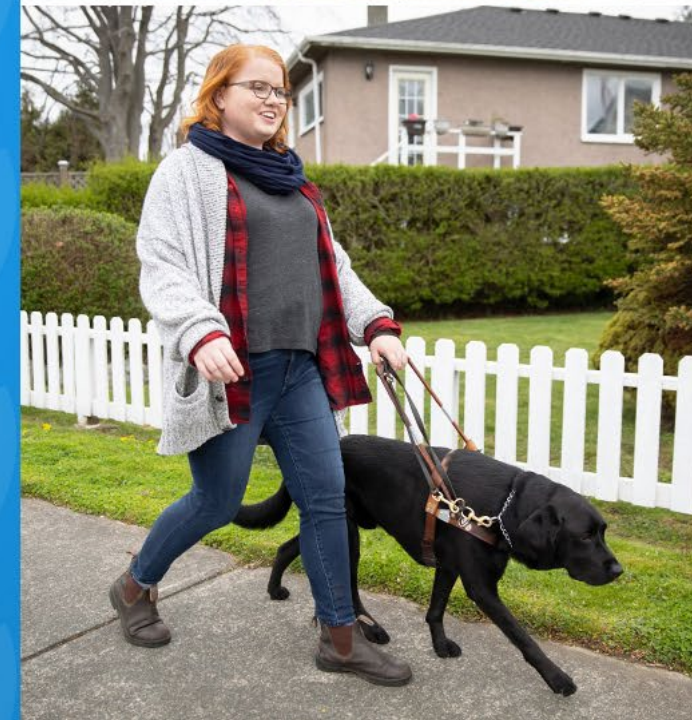


A Unique Collaborative Community Health Initiative: Using Back Pain as a Catalyst to Change

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A nonprofit independent licensee of the Blue Cross Blue Shield Association



AGENDA

- A Tale of Twins
- Current challenges in health care
- Spine Health Program
- From waste to harm
- Spine pain as springboard to wellness
- Community based spine health
- A community health vision

Bob



The Story Of Twins



Gary

Demanding Patient, Busy Doctor

"I need an MRI to see what's going on"
"I need an opioid to control my pain"
"I need to see a surgeon to get this fixed"

"Return to work when 100%"

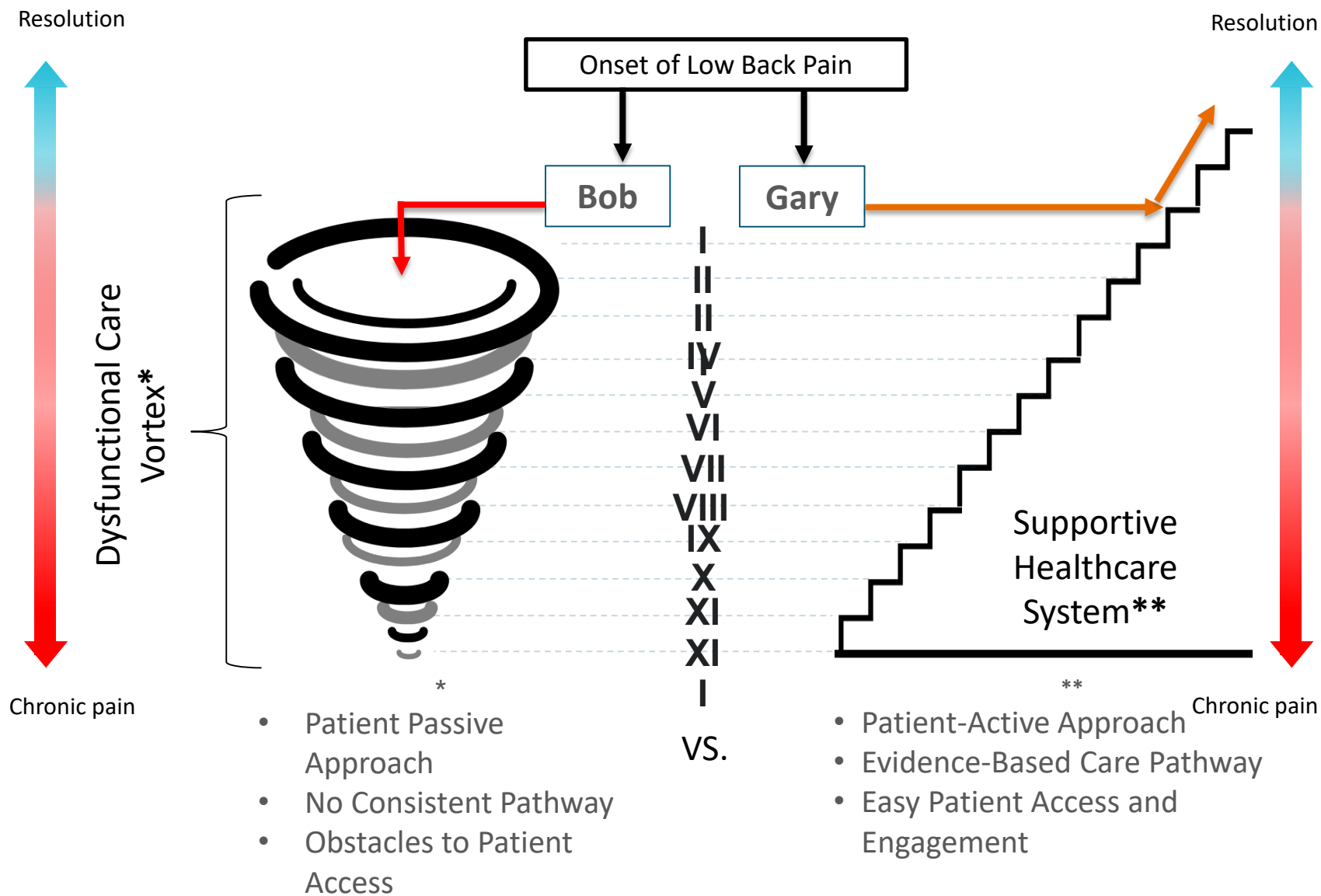
Fear + Inactivity => Chronic Pain

Educated Patient, Busy Pathway Adherent Doctor

Concise, meaningful history
Functional, pain reproducing exam
Clear diagnosis and care plan
Patient engaged and active
Return To Work/Light Duty option

Understanding + activity => Quick Recovery

The Twins Journeys



How Common is Bob's Poor Care Path?

PCPs who are most confident in their approaches to spine care are the LEAST evidence based

Buchbinder R, et.al. Spine 2009 May

Biggest catalyst in driving which acute pain patients become chronic are decisions made by the PCP, especially regarding:

- Inappropriate imaging
- Opioid prescription
- Early specialist/surgical referral

Stevens J, et al. JAMA 2021

Systematic review of care to 195K patients seen by PCP and ED for low back pain:

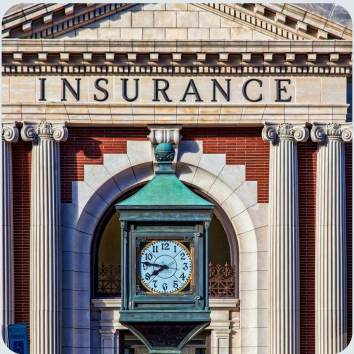
- Only 20% received evidence-based care
- 25% received imaging referral from PCP
 - 33% received imaging from ED
- Overuse of opioid prescribing

Kamper SJ, et al. Pain. 2020

“It takes a village...” to create a Bob

Many stakeholders in the health care system play a role

Insurers



Hospitals



Providers



Employers



US Health Care System Ranks Distant Last Among 11 High Income Nations

Joan Stephenson, PhD, JAMA Health Forum. Aug. 25, 2021

- Despite spending the highest **proportion of its gross domestic product** on health care compared with 10 other high-income nations, the **United States ranks last overall in providing equitably accessible, affordable, high-quality health care**
- the authors examined 71 performance measures across 5 domains—**access to care, care process, administrative efficiency, equity, and health care outcomes.**
- The United States has **consistently ranked last overall** in each of the 7 editions of the report published since 2004

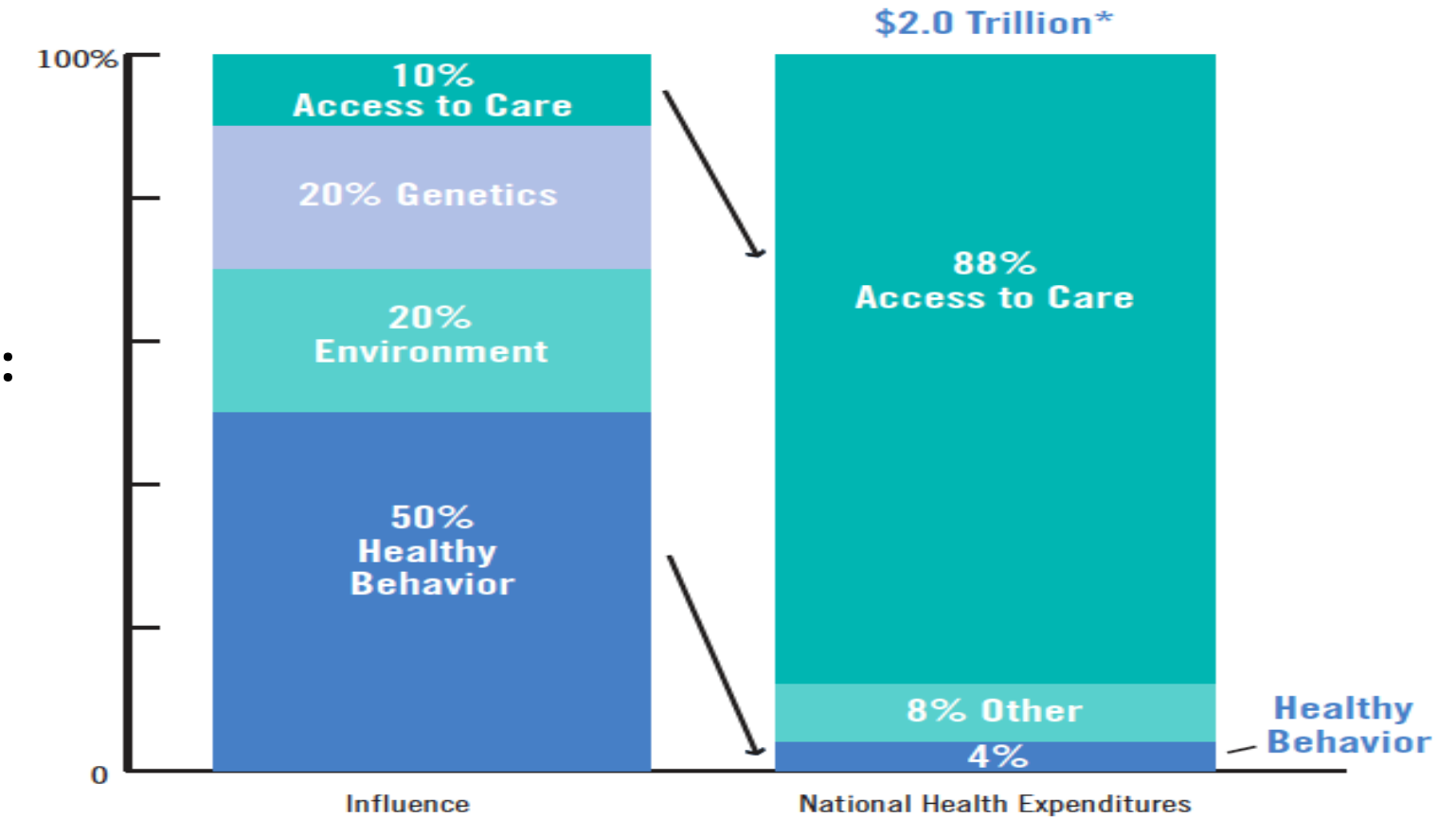
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- US health care system “**delivers too little of the care that’s most needed—and often delivers it too late**—especially for people with complex chronic illness, mental health problems, or substance use disorders, many of whom have faced a lifetime of inequitable access to care...”
- The top-performing countries invest in programs that **target factors beyond health care** and that boost equitable access to **education, child care, community safety, housing, nutrition, transportation, and worker benefits** that result in a **healthier population** and fewer avoidable demands on health care.

Are We Spending Our Dollars Wisely?

Key Determinants of Health: The Power of Behavior

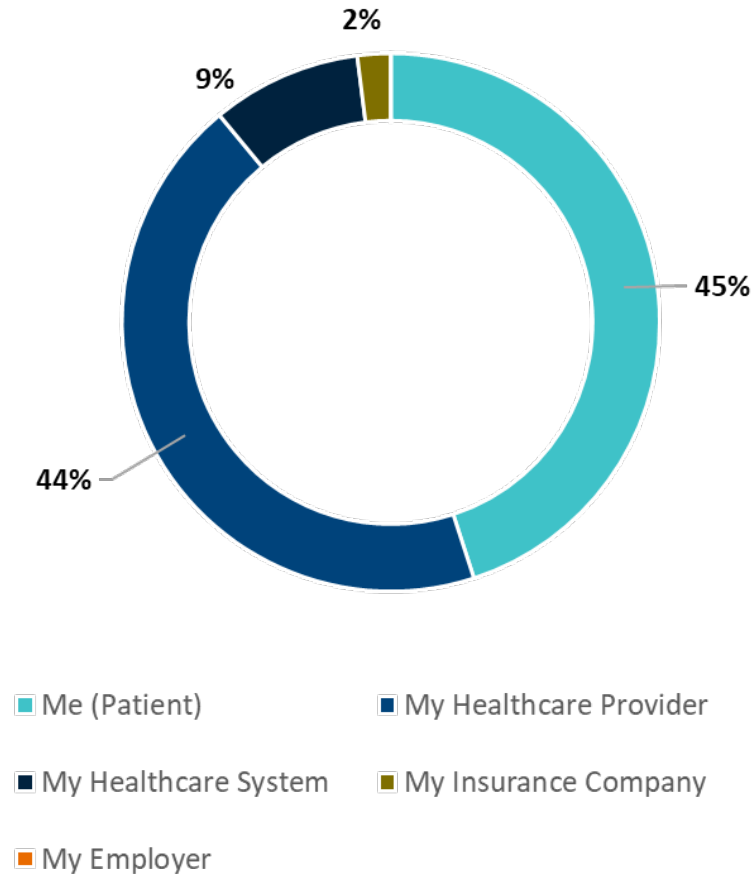


* Total US Personal Health Care Expenditure 2005

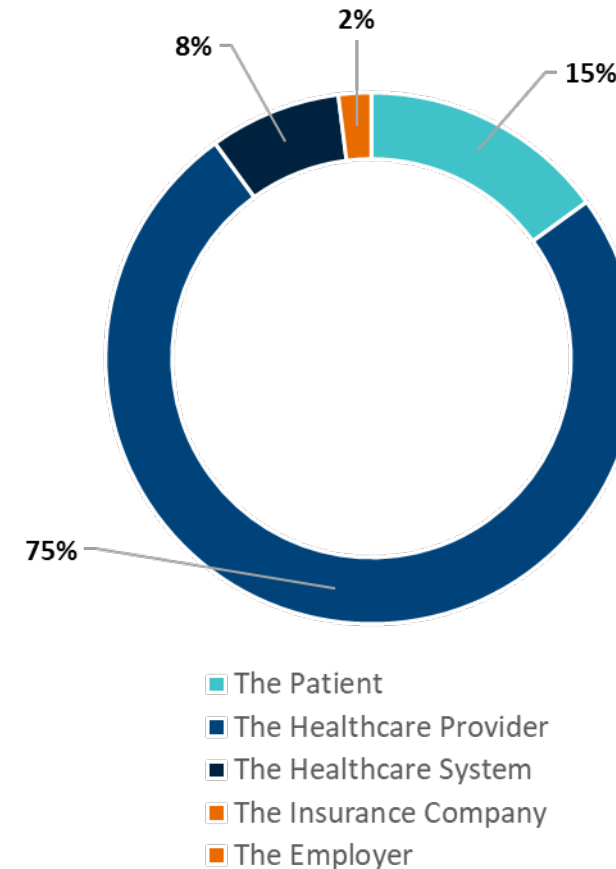
Source: New England Health Care Institute

Who Is Primarily Responsible for Health Improving?

Patient Perspective

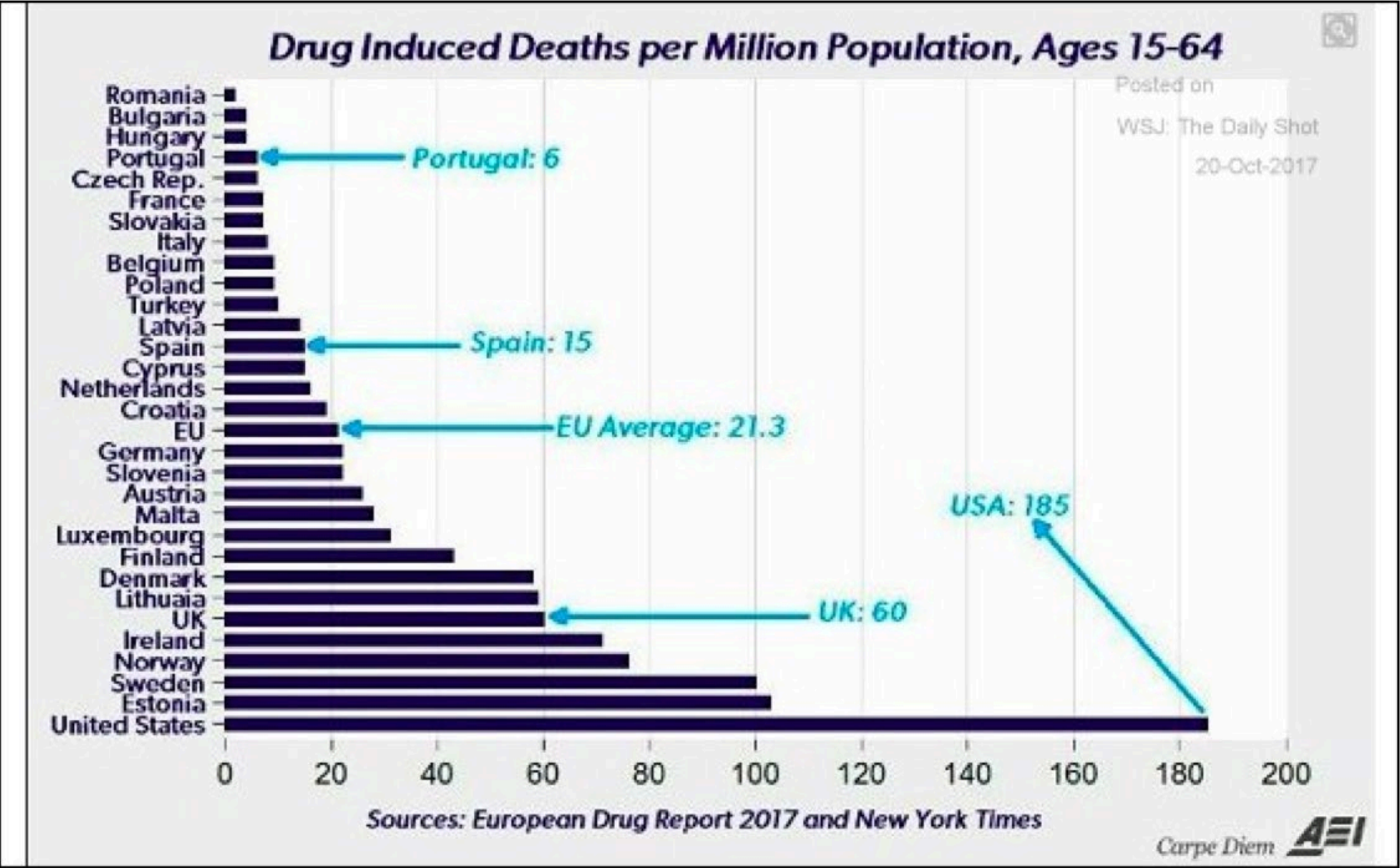


Physician Perspective



University of Utah (2017), Bringing Value Into Focus, The State of Value in U.S. Health Care

A United States problem



“The Culture of Relief”

Between 1997 and 2014, the number of U.S. adults experiencing **non-cancer pain increased by 25 percent**, and...a large increase in the use of opioids, especially strong opioids.

18-Year Trends in the Prevalence of Non-Cancer Pain in the United States
The Journal of Pain. Feb 2019

Seeking relief of pain in lieu of improved function actually increases pain by:
Facilitating hypervigilance for pain, Increasing pain perception

Notebaert L, et al. Attempts to control pain prioritize attention towards signals of pain: an experimental study. Pain



Pain Opioids

'High Impact Chronic Pain' (HICP)

- 2011 Institute of Medicine report: 40% US adults have chronic pain (time dependent)
- Two recent studies on HICP: How often do you have pain and **how often did pain limit your work or life activities?**
- 8% US adults have HICP
- Shifts focus to **active care**, function and quality of life
- Changes focus of research, policy and care from pain management to life management

Dahlhamer, Morbidity and Mortality Weekly, 2018 Pitcher, The Journal of Pain, 2018

The Risk of Passive-Only Care

- >40,000 CVD-free, surveyed for four years
- During the study >8,800 started on an anti-hypertensive or lipid lowering Rx
- Two unfavorable lifestyle changes:
 - BMI increased
 - physical activity declines

Lifestyle Changes in Relation to Initiation of Antihypertensive and Lipid-Lowering Medication: A Cohort Study - Korhonen, JAHA Feb. 2020



Countering a Passive Health Culture

- The need for active patient engagement
- “Does this person need to become a patient?”
- Creating an environment where the body can heal ... not be dependent on the health system or provider unilaterally healing the patient
- A pill, procedure or surgery should never be administered in isolation, but ALWAYS accompanied by supporting actions done by the patient
- ACP, CDC, AHRQ, JACHO, NIH... – non-pharmacological care first

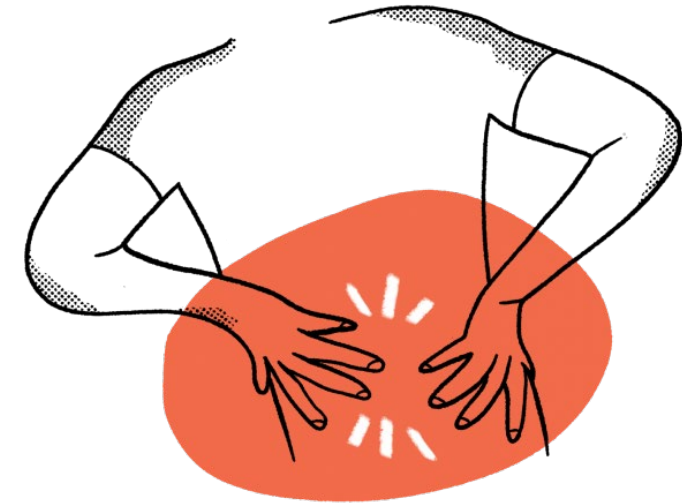
CDC – Low Back Pain

Low Back Pain (LBP) is Very Common, Causing More Global Disability Than Any Other Condition

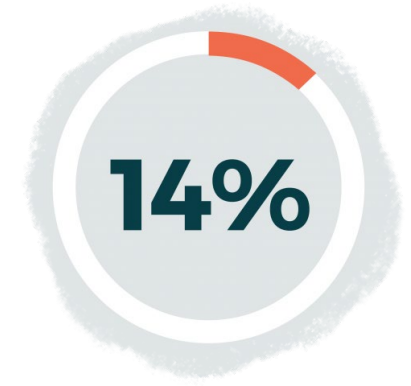
In one study, it was the most common type of pain reported by patients, with 25% of U.S. adults reporting LBP in the prior 3 months.

Opioids Continue to be Prescribed for LBP, Despite an Overall Lack of Evidence to Support its Efficacy

Despite an overall lack of evidence to support its efficacy, opioids continue to be prescribed to treat acute LBP when patients seek medical evaluation. In one study, 13.7% of 2017 visits for acute LBP covered by private insurance were associated with an opioid prescription.

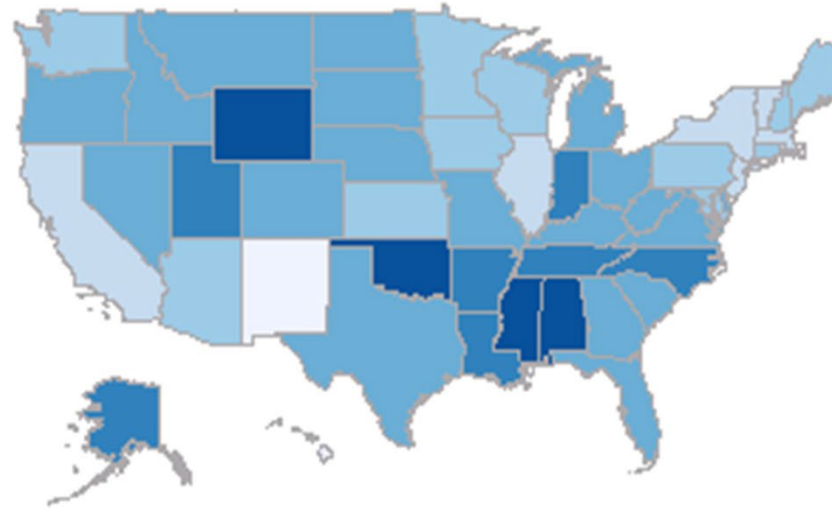


25% of U.S. adults report having low back pain in the last 3 months. It is the most common pain reported.

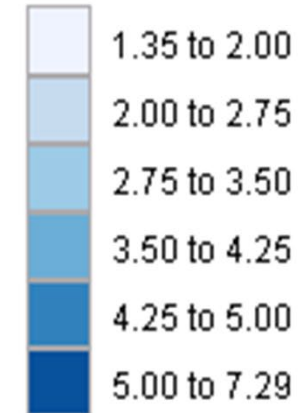


Almost 14% of insured patients who sought care for low back pain, were prescribed opioids

The Problems of Back Pain

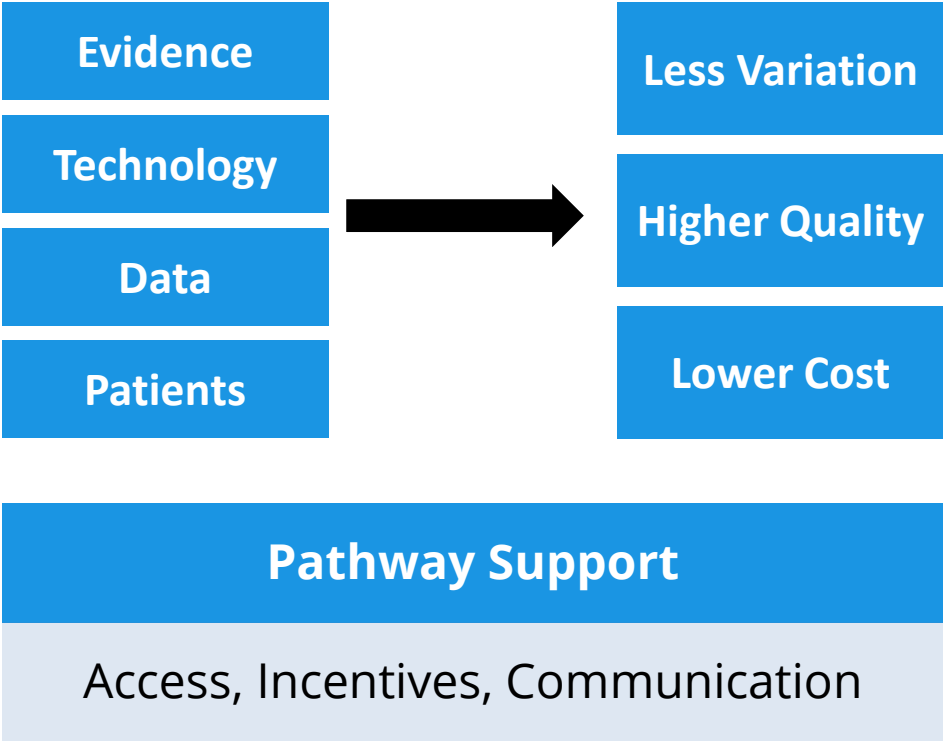
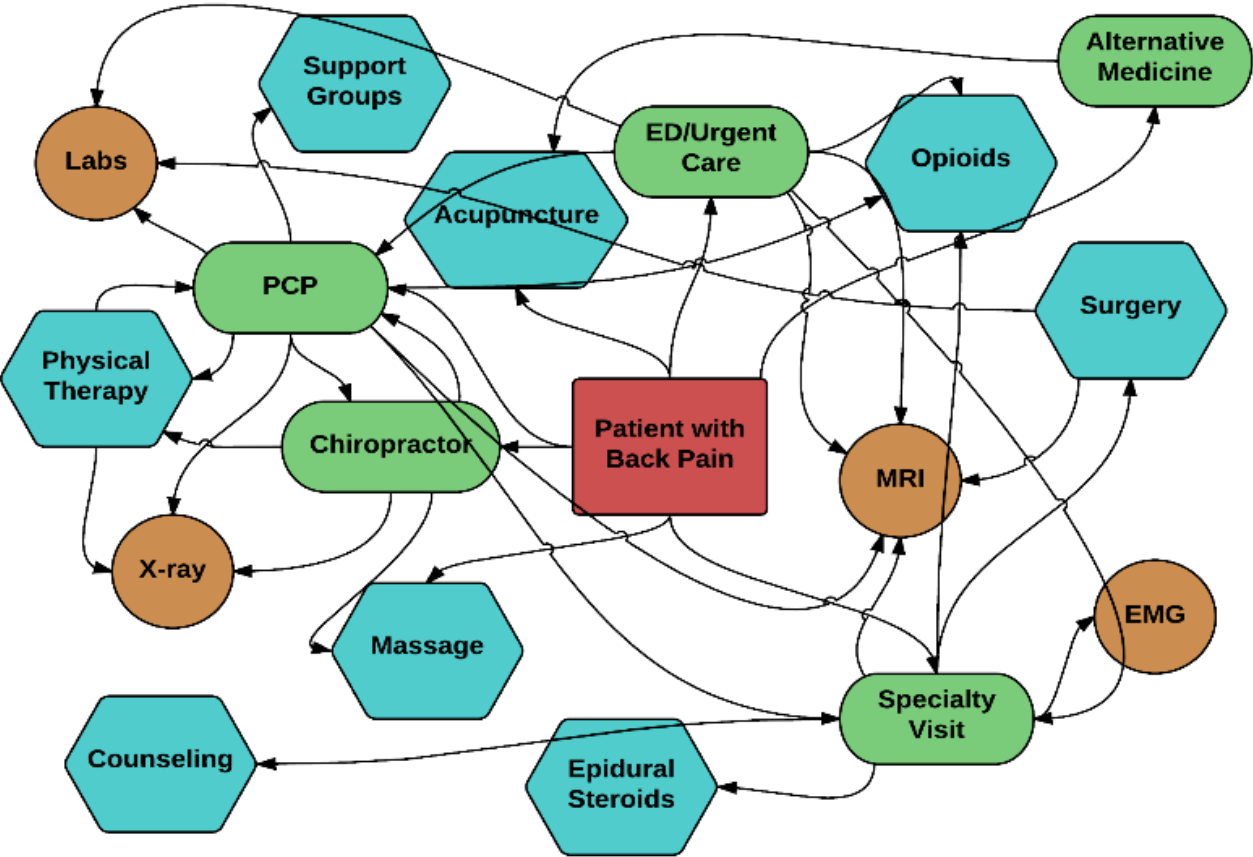


Spine surgeries per
1,000 members

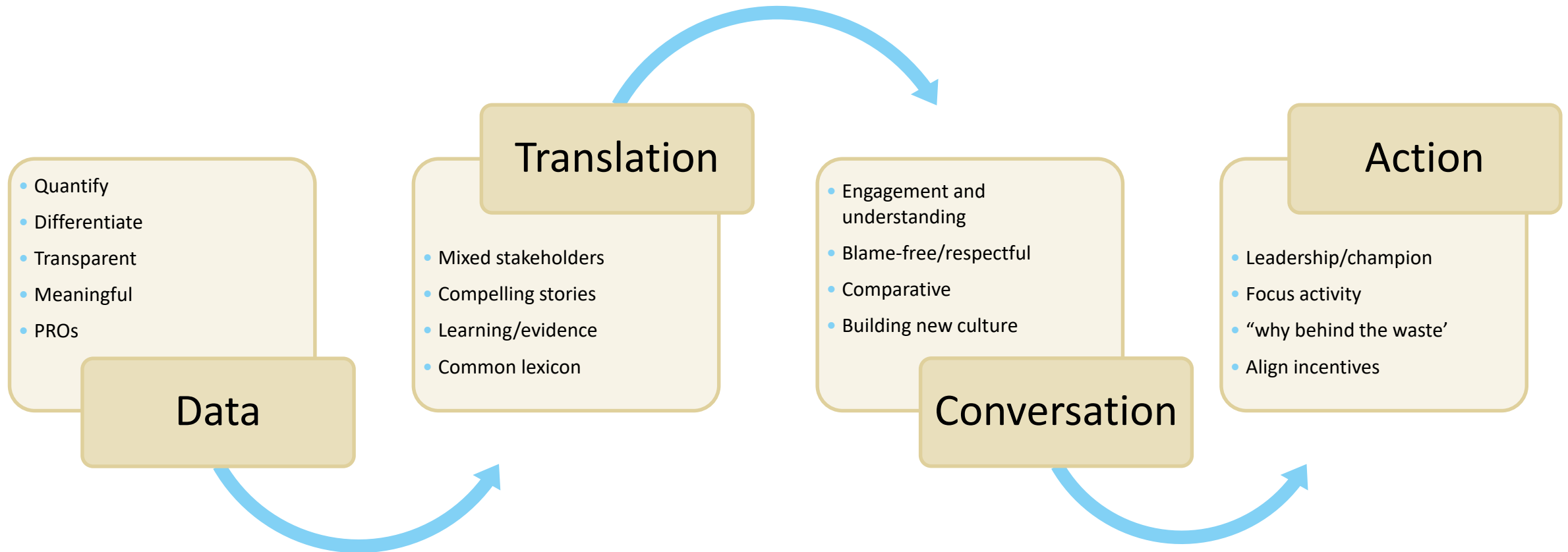


- In 2017, over **\$5.3 billion** was spent on spine surgeries alone and **\$250 premium dollars for spine care per member per year**.
- Low back pain was one of the **top avoidable ED utilization** drivers nationally, accounting for **\$250 million in avoidable cost**.

Care Pathways as a Conduit to Change



Translating Data and Evidence into Action



Excellus Spine Health Program Summary

Problem	Solution	Advantages
<ul style="list-style-type: none"> •Rising costs •Worsening outcomes •Inefficient and ineffective spine care •Huge variation •Confused and disengaged consumer / patients 	<ul style="list-style-type: none"> • Improve stakeholder outcomes • Decrease episode cost through pathway guided testing, triage and self care • Focus on early contact providers • Change spine culture: from 'passive' to 'active', from 'disease' to 'part of life' 	<ul style="list-style-type: none"> • Rapid implementation • Long lasting benefit • Engages providers, patients and communities • Refines clinical reasoning • Decreases variation • Pathway as conduit (data, outcomes, education) • Focuses on quality and patients • Multiple touch points create momentum • Sustainable • Marketing tool for employers, ACOs, PCMHs, individuals

Excellus Spine Health Program Development and Refinement

Spine Program Creation

- Founders: 150+ years integrated spine practices, authored >100 peer reviewed articles
- Developed multiple industrial and hospital-based spine care departments
- Co-developed NCQA Back Pain Recognition Program
- Co-developed Spine Health Program for Beth Israel Deaconess Plymouth Hospital (ESJ)
- Entered joint development relationship with Excellus BCBS (2012)

Vetting of Spine Program Nationally

- Employers: PBGH, employer groups, chamber
- Professional societies: NASS, ABIM, ACA, APTA, AANS
- Consumers: Consumer Reports, patient advocates
- Academia: Stanford, Dartmouth, U Pitt, U Roch, UCSF , Duke
- BCBSA: BCBS Summit, Spine Demo Day, FAST Network, wellness, innovation, BCBS Plans:
- Publications: 6 peer reviewed articles to date. (JGIM, JCJQPS, TSJ...)

Excellus BCBS Spine Health Program

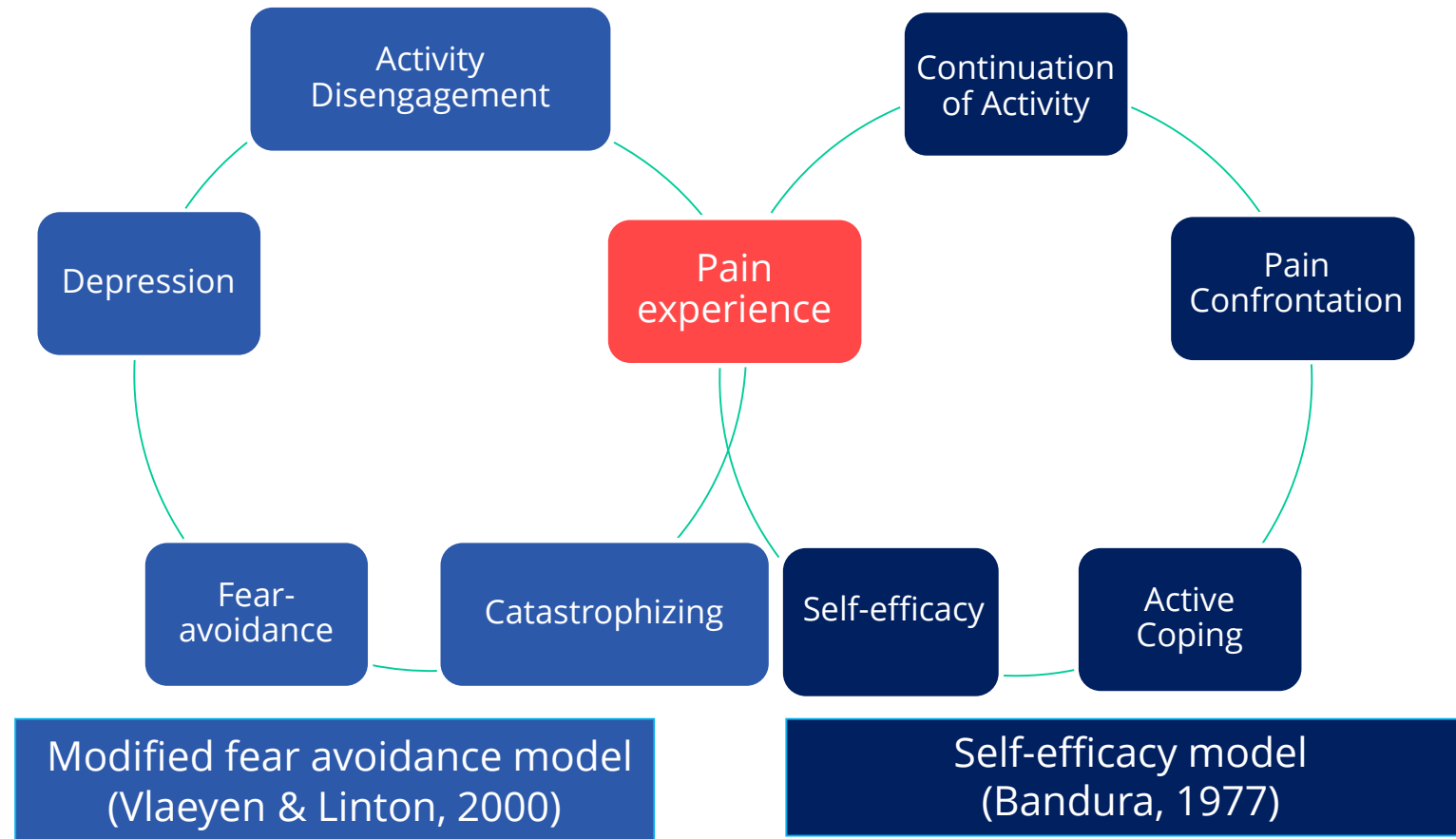
Key Components

- **Live or on-line pathway engagement** for PCP's and early contact providers using biopsychosocial approach
 - 90 minute, 1.5 CME (MD, DO, NP, PA)
36% Delta in Spine PMPM (JGIM 2020)
 - 12 hour, 12 CE's (DC, PT, some MD, DO, NP, PA)
41% decrease in episode cost when patients saw a trained PT or DC in first half of spine episode
 - Ongoing support through on-line, free learning collaborative
- Pathway supports all stakeholders:
 - Patients: value, engagement, consistency
 - Providers: efficiencies, best evidence support
 - Employers: decreased cost, early return to work
 - Plans: increased member/provider experience, relationship builder, increase quality, decreased cost

Benefits

- Support community via standardized approach
- Evaluate and manage most spine patients with single provider
- More appropriate referral to specialists
- Improved work-flow and efficiencies
- Improved all stakeholder's satisfaction
- Improved outcomes/reduced cost
- Engage patients, less recidivism
- Common language and 'tool box' triggers culture change...Same message!
- Improved communication: patients, providers, employers, payers

Embracing a Biopsychosocial Model: *Expectations Influence Recovery*



Slide used with permission from: Sherri Weiser NYU School of Medicine

Training Snippets: *Language Matters*

Pathoanatomically-Based Communication

What you say:	What the patient hears:
Your MRI shows degenerative changes/disc herniations/arthritis	I will never get better
There's nothing wrong with your back	He/she thinks it's all in my head
Stop when you feel pain	Activity will harm my back
Take it easy and rest	I should stay in bed
If chiropractic or physical therapy doesn't work you may need surgery	I need surgery
You should be able to work	He/she thinks I am faking
Pain is normal for someone your age	I'm going to get worse

Psychologically-Based Communication

What you say:	What the patient hears:
Your MRI doesn't show anything to worry about	There is nothing seriously wrong with my back
The cause of your pain may not show up on an MRI	My pain is real
You should increase activity as tolerated	Activity is good for me
Your back problem should respond to chiropractic or physical therapy	I probably won't need surgery
Working will not cause damage to your back	I will be able to return to work
There are many things you can do on your own to control your pain	I can learn to handle my pain

Slide used with permission from: Sheri Weiser NYU School of Medicine

When Waste ('low value') Becomes Harm: ex. imaging

Choosing Wisely:

Don't do imaging for low back pain within the first six weeks, unless red flags are present

Measure	Total Services	Waste Services	Total Waste \$	Quality Index	Waste Index
Lower Back Pain Image	1613	1102	\$409,907	32%	68%

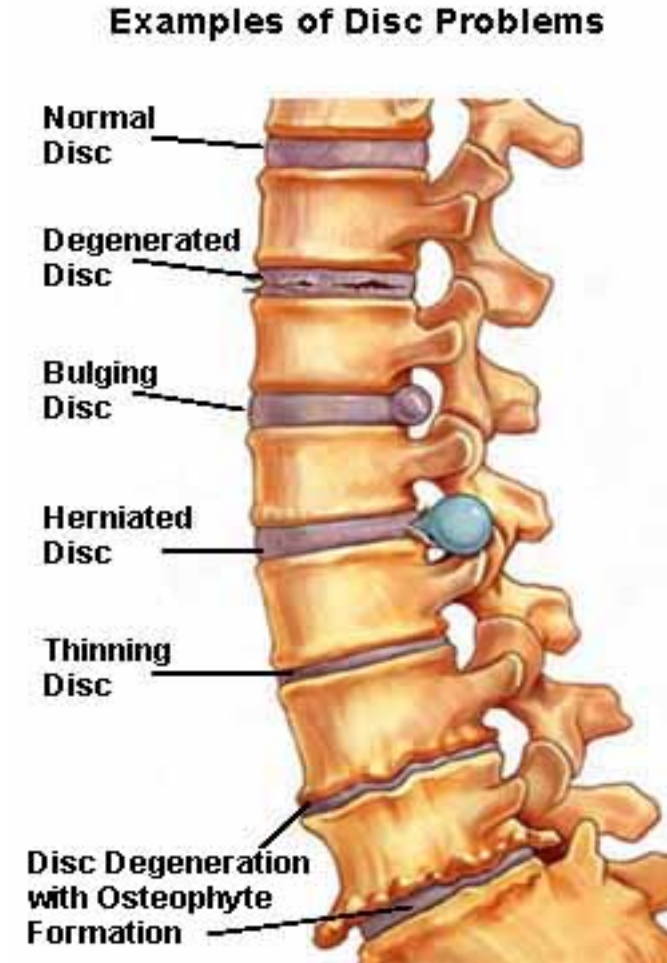
Independently recommended by:

- American Academy of Family Physicians
- American College of Physicians
- American College of Occupational & Environmental Medicine
- North American Spine Society
- American Association of Neurological Surgeons
- American Chiropractic Association

MedInsight Health Waste Calculator results for Excellus BlueCross BlueShield ACQA

“I Have A Degenerating Spine!”

- Degenerative Disc Disease
- Bulging Disc
- Herniated disc
- Osteophyte Formation
- IVF Narrowing
- Spinal Stenosis
- Modic Endplate Changes
- Spondylolisthesis



Impact of imaging wording on patients *and* practitioners

- **LBP patients** given *anatomical description of MRI findings* had:
 - Greater catastrophizing
 - Lower self-efficacy
 - Worse outcome
- Vs those given context-specific description (e.g. “normal age-related changes”).
- **Practitioners** given an *anatomical description of MRI findings* (e.g., disc degeneration) had:
 - Greater perceived severity
 - Greater perceived need for invasive intervention
- Vs those given context-specific description

Rajasekaran S et al. The catastrophization effects of an MRI report on the patient and surgeon and the benefits of 'clinical reporting': results from an RCT and blinded trials. Eur Spine J. 2021 Mar 21.

The *Why* Behind the Waste

Imaging can trigger waster & harm

Two randomized controlled trials: MRI or plain film imaging for back pain versus no imaging

Results: Imaging group scored **lower on self-perceived health status, higher persistent pain, higher number of office visits**

Imaging Strategies for Low Back Pain: Systematic review and meta analysis Chou, Deyo, Lancet, 2009

Patient misconceptions concerning lumbar spondylosis diagnosis and treatment, Franz, Neurosurg Spine 2015

Early MRI without indication has a **strong iatrogenic effect** when not indicated, it **provides no benefits, worse outcomes, more disability**, on average **\$13,000** higher medical costs

Iatrogenic consequences of early magnetic resonance imaging in acute, work-related, disabling low back pain. Webster, Spine 2013

More than **50%** of patients indicated that they would undergo spine surgery based on abnormalities found on MRI, **even without symptoms**

Radiography of the lumbar spine in primary care patients with low back pain: randomized controlled trial., Kendrick, BMJ 2001

Regional MRI Insert Impact

Joint Commission Journal on Quality and Patient Safety
June, 2020

Weeks, Pike, Schaeffer, Devine, Ventura, Donath, Justice
Integrating epidemiological information into MRI reports
reduces ensuing radiologic testing costs among patients
with low back pain: a controlled study.

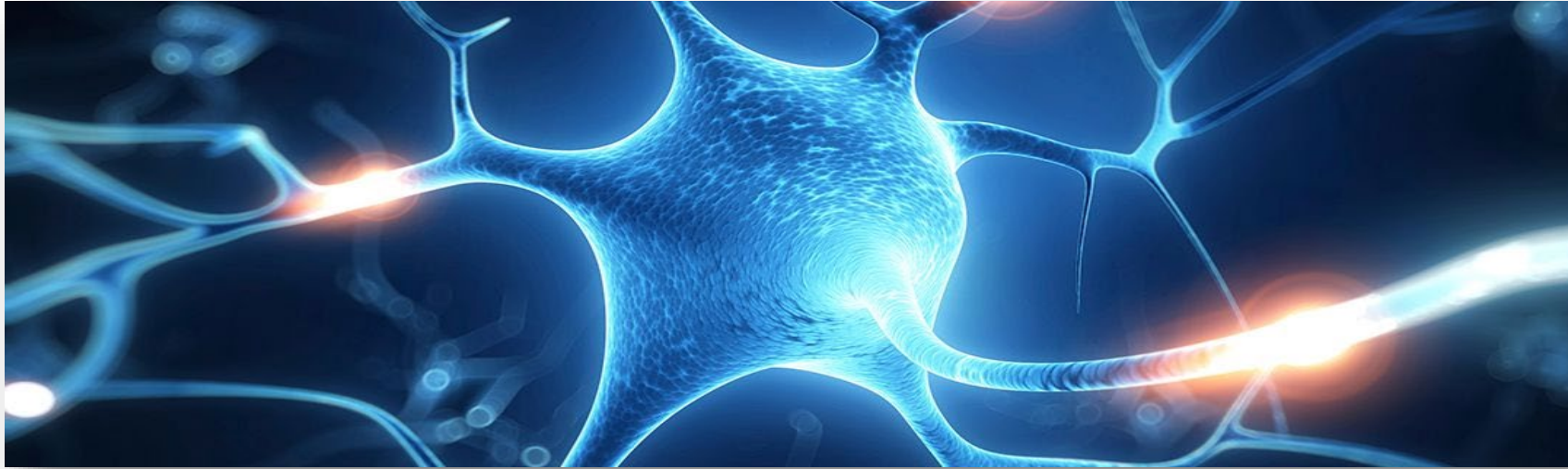
- Diminished patient/worker fear (prime driver in WC)
- Lessens provider fears/catastrophizing as well
- Less unnecessary interventions
- Saves PCP visit time (expedites education)
- Very popular with all spine providers
- Significant difference in re-imaging, injections and total spine costs (**~\$330 in savings per individual MRI report** after 12 months)
- **We need your help! (insert and language)**



Imaging Finding	Age (yr)						
	20	30	40	50	60	70	80
Disk degeneration	37%	52%	68%	80%	88%	93%	96%
Disk bulge	30%	40%	50%	60%	69%	77%	84%
Disk protrusion	29%	31%	33%	36%	38%	40%	43%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

Brinjikji, Deyo, et al AJNR 2014

Neuroplasticity: Preventing and Addressing Chronic Pain



“Neurons that fire together, wire together.”

- Our brains love patterns
- This affinity for patterns can **create chronic pain**...time, fear, pain, inactivity
- **...or cure it:** rewire chronic pain via Cognitive Behavioral Therapy and graduated activity
- Using neuroplasticity is key in preventing and treating chronic back pain!

A Dangerous Catalyst?

Prescription Opioids in Adolescence and Future Opioid Misuse

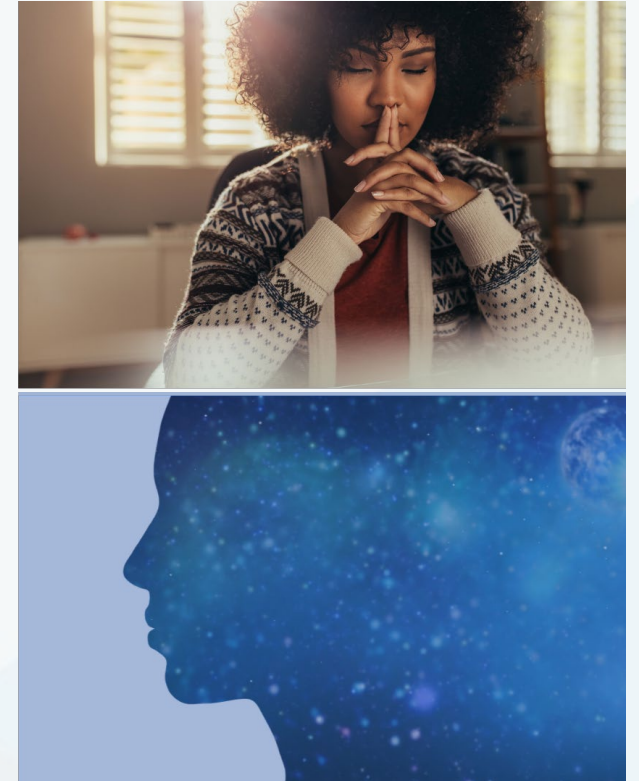
Richard Miech, PhD^a, Lloyd Johnston, PhD^a, Patrick M. O'Malley, PhD^a, Katherine M. Keyes, PhD^b, Kennon Heard, MD^c

RESULTS: Legitimate opioid use before high school graduation is independently associated with a 33% increase in the risk of future opioid misuse after high school. This association is concentrated among individuals who have little to no history of drug use and, as well, strong disapproval of illegal drug use at baseline.

PEDIATRICS Volume 136, number 5, November 2015

Mindfulness-Meditation-Based Pain Relief Is Not Mediated by Endogenous Opioids

- Mindfulness meditation during naloxone produced significantly greater reductions in pain intensity and unpleasantness than the control groups.
- These findings demonstrate that mindfulness meditation does not rely on endogenous opioidergic mechanisms to reduce pain.



The Journal of Neuroscience, March 16, 2016

Consumerism, Non-Pharm Approaches, Choice and Trust

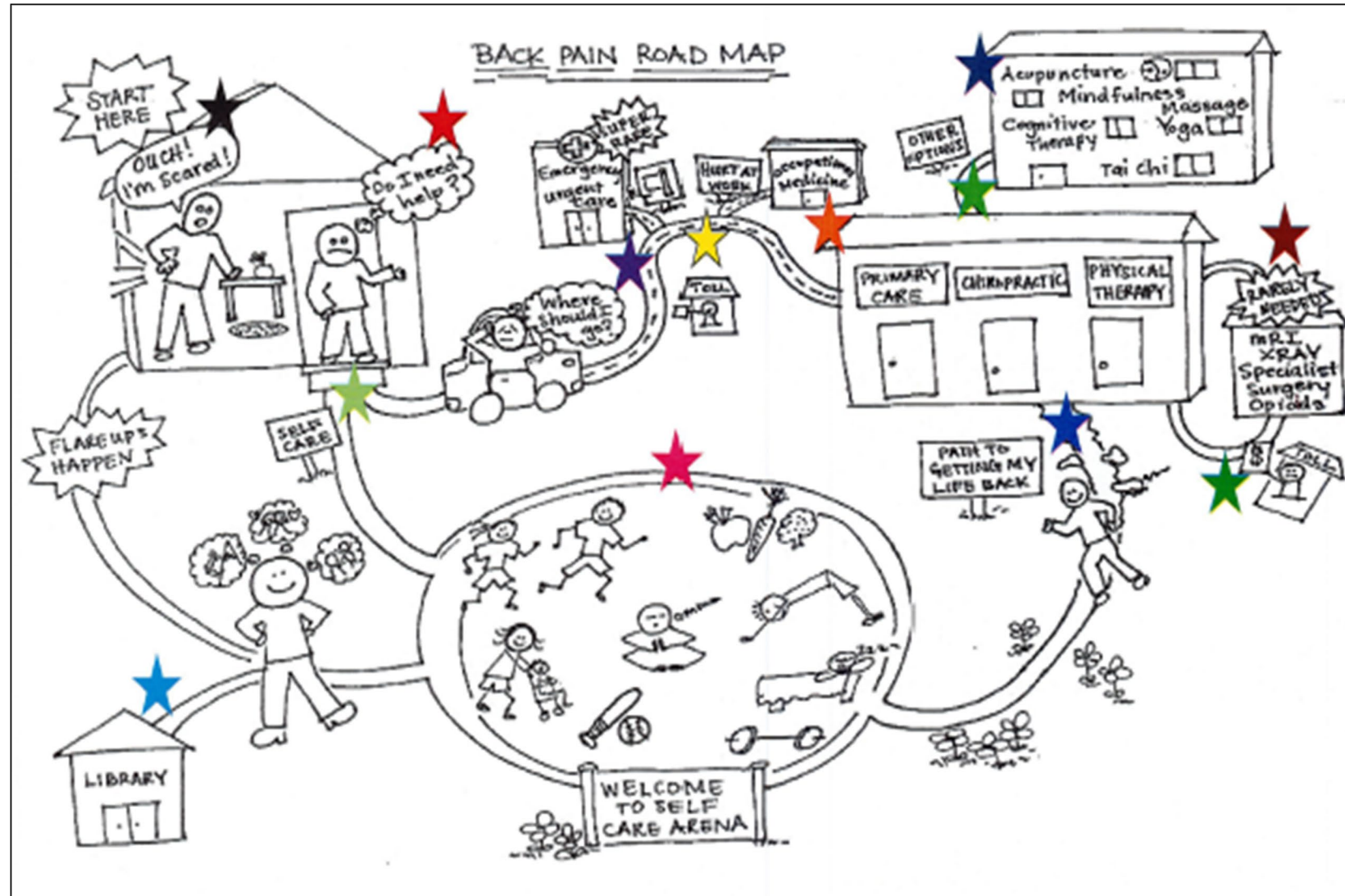
Based on a nationally representative Consumer Reports survey of back-pain sufferers who said they had consulted with the professional for advice or treatment.

Yoga or Tai Chi Instructor	89%
Massage Therapist	84%
Chiropractor	83%
Physical Therapist	75%
Neurosurgeon	67%
Acupuncturist	66%
Orthopedist or Orthopedic Surgeon	65%
Primary Care Doctor	64%
Rheumatologist	61%

Patient Decision Guide App

Potential Approaches*

- Systematic integration of patient journey
- Self Triage
- Employer group support
- Member / provider education
- Member / patient as consumer
- Provider care pathways access
- **PROMIS directed exercise therapy**
- **PROMIS data shared with providers**
- **PROMIS data shared with payers?**
- **PROMIS data shared with employers?**
- **Collect PROMIS on healthy population?**
- Support registry for outcomes reporting
- Long term patient reported outcomes
- Vehicle to introduce tele-triage, physical therapy at home, collecting data from wearables...community data!

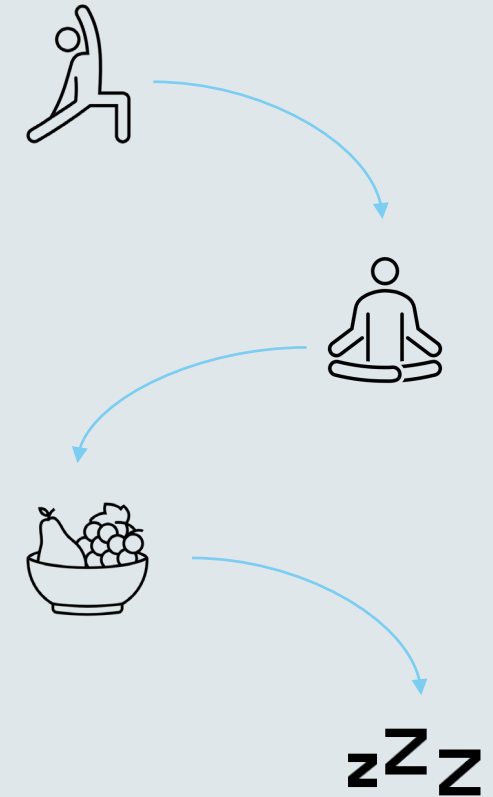


Source: Brian Justice, DC, Medical Director, Excellus BlueCross BlueShield
*Subject to further business/legal analysis

Back pain as a springboard to wellness

Medical Areas with the Highest Level of Spending, 2016*

Low back and neck pain	\$134.5 billion
Other musculoskeletal disorders	\$129.8 billion
Diabetes	\$110.2 billion
Ischemic heart disease	\$89.3 billion
Falls	\$87.4 billion
Urinary diseases	\$86.0 billion
Skin and subcutaneous diseases	\$85.0 billion
Osteoarthritis	\$80.0 billion
Dementias	\$79.2 billion
Hypertension	\$79.0 billion



* Adapted from Dieleman et al., 2020.

Problem

- Prior to 2000, < 50% of medical schools had any musculoskeletal training
- 20% PCP spine visits are evidence based, a key driver toward creating chronicity
- Most PCPs don't like managing back pain and don't feel confident in their MSK training
- Surge of telemedicine use overall, but lagging in MSK ('virtual PT', monitoring codes...)

Solution

- Conduct **virtual** provider training focused on developing motivational language skills and performing distance exam
- Support **virtual** spine visits utilizing best evidence pathway principles
- Support **virtual** physical therapy, leveraging digital tools and treatments
- Support educational and data collecting decision apps and wearables
- Maintain relational coordination between patient/provider
 - shared goals, shared knowledge, mutual respect
 - timely, frequent, accurate, problem solving communication

Many stakeholders in the health care system played a role:

Insurers

- Financial barriers
- Delayed access
- Wrong incentives (FFS)

Hospitals

- Encourage procedures
- Encourage imaging
- Discourage 'leakage'

Providers

- Lack of a BPS model
- Wrong incentives
- Poor education

Employers

- No light duty RTW
- High risk work environments
- Job satisfaction

We (the system) have just created a chronic pain patient!

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Joan Stephenson, PhD, JAMA Health Forum. Aug. 25, 2021

- US health care system “**delivers too little of the care that’s most needed—and often delivers it too late**—especially for people with complex chronic illness, mental health problems, or substance use disorders, many of whom have faced a lifetime of inequitable access to care...”
- The top-performing countries invest in programs that **target factors beyond health care** and that boost equitable access to **education, child care, community safety, housing, nutrition, transportation, and worker benefits** that result in a **healthier population** and fewer avoidable demands on health care.

Community based health is the best approach

- Employer group problem (#1 health care cost, #1 cause of disability)
- Necessitates community-wide data
- Impact of social determinants of health / disparities
- Stakeholder engagement (patients, providers, employers, systems, payers....)
- Rural and urban both have strong beliefs that trusted care must be local...so need local data with similar national benchmarks
- Measuring and caring for the immediate community are paramount to best practices, appropriate stakeholder engagement and embracing cultural norms

“All politics is local”

- Tip O'Neill, former Speaker of the House of Representatives

What if...

- All providers who are on same best evidence care pathways
- All stakeholders (providers, employers, community-based organizations, payers, government, education...) all supported the same patient active approach to health
- We had a trusted community wide resource app where people can become healthcare consumers in making optimal decisions on if, when and how to seek care (Does a person need to become a patient?)
- Community support on providing best care options and dispelling common myths
- Data (PROMIS) collected directly from the community, with each individual deciding permission to share that data with providers, payers, employers...
- The teachable moment of back pain can be used to trigger optimal self-care that will impact many of the biggest cost drivers and chronic diseases of a community

Advantages and opportunities for early adopting communities

- A happier / healthier community
- a more productive community
- less chronic pain, opioid addiction and disability
- **engaging volunteers** in the community to support each other
- **research and grant opportunities** in data collection, care approaches, community initiatives (Health care dollars flowing into the community)
- The **catalyst** for further needed cultural changes in healthcare

The Power of Collaboratives

- Best solutions rarely arise from isolated thinking
- Full understanding of the problem, from all sides
- Use of diversity of perspective and knowledge to arrive at best solutions
- The power of synergy
- Success builds momentum and trust
- Is there a forum for multistakeholder model: community approach?
 - First, we need good data (PROMIS +)
 - True health arises from full and all stakeholder engagement
 - Collaboration between stakeholders is essential to identify and implement best approaches
 - Collaboration is essential to true health

Is there a 'think/action tank' of regional researchers (grants?), clinicians, patients, employers, insurers, CBOs...to work through the roadblocks to large and rapid data gathering, interpretation and community based solutions and implementation?

What's needed?

- Identification of key stakeholders
- identification of key resources (Excellus: Spine Health Program)
- identification of gaps
- data
- viability analysis
- Relationships
- Research interest
- Funding (COVID, Opioids, Community Health data, NIH...)
- ???

Bob



The Story Of Twins



Gary

Bob is Back!

Demanding Chronic Pain Patient,
Very Busy Doctor

It's never too late!

Fear + Inactivity => Chronic Pain

Address Fear:

- Education
- Language

Address Pain Induced Inactivity:

- Graduated exposure/activity
- Motivation
- MAT and mindfulness

Gary is NOT back!

Educated Person,
Busy Pathway Adherent Doctor

Gary has a flair up of similar pain, but now
tries learned self-care FIRST

....and maybe his BP, Chol, diabetes and
depression are more controlled

Understanding + activity => Quick Recovery
Understanding + activity => Self Care

THANK YOU

brian.justice@excellus.com

