

The role of psychology in the management of pediatric pain:

Translating Current Science into Practice

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Healthy Adelaide
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Overview



Pediatric pain

Scope

Impact

Burden



CBT

What is it?

How does it help?

Access to care



Provider Tips

How to engage patients

What gets lost in translation

Moving forward





Insomnia

Missed over 80 days of school junior year

Mom lost her job

Lost contact with friends

Onset of neck and back pain

Anxiety

Depression

Lost chance for sport scholarship





*THE LONGER
PAIN PERSISTS,
THE GREATER
THE DISABILITY
AND THE
HARDER IT IS
TO TREAT*



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A COMMON AND EXPENSIVE PROBLEM

Prevalence 11-38%

- 20% of children will have an episode of chronic pain
- About 1.7 million children diagnosed annually in US

Cost

- \$19.5 billion/year in the United States alone
- As costly as the treatment of asthma and ADHD



ENORMOUS BURDEN

	Agree
Multiple areas of pain	69.4%

Physical Components of Pain

Difficulty falling/staying asleep	63.6%
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	Agree
Fear about physical activity	45.9%

Emotional Components of Pain

Unable to have as much fun as before	61.7%
Pain has been problematic	79.2%

Simon, LE, Smith, A., Ibagon, C., Coakley, RM., Logan, D., Schechter, N., Borsook D., Hill, J. (2015) Journal of Pain.



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OPIOID RISK IS HIGH

- 20% of adolescents with prescribed opioid medications report using them intentionally to get high [McCabe SE, West BT, Boyd CJ (2013). Pain]
- Use of *prescribed* opioid pain medication before high school graduation is associated with a 33% increase in risk of opioid misuse in adulthood [Miech R, Johnston L, O'Malley PM, Keyes KM, Heard K. (2015). Pediatrics]
- Misuse of opioid pain medications in adolescence predicts later onset of heroin use [Cerdá M, Santaella J, Marshall BD, Kim JH, Martins SS. (2015) J Pediatr 2015]
- In 2014 study assessing over 8K adol (ages 13-17) with headache; 50% received a prescription for an opioid and 30% received refill.
[DeVries, Koch, Wall, et al (2014). J Adolesc Health]



Culture Shift in Pediatric Pain

I. Investment in Early Intervention/Prevention

Risks of untreated pain + burden of entrenched difficulties



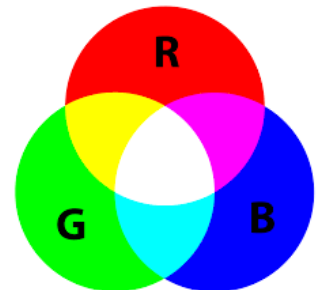
II. Shift Away from Pain Medications:

CDC Guidelines in 2016: Nonpharmacologic therapies are preferred first line.



III. Pediatric Pain as (General) Specialty:

“Primary Pain Disorder” conceptualization





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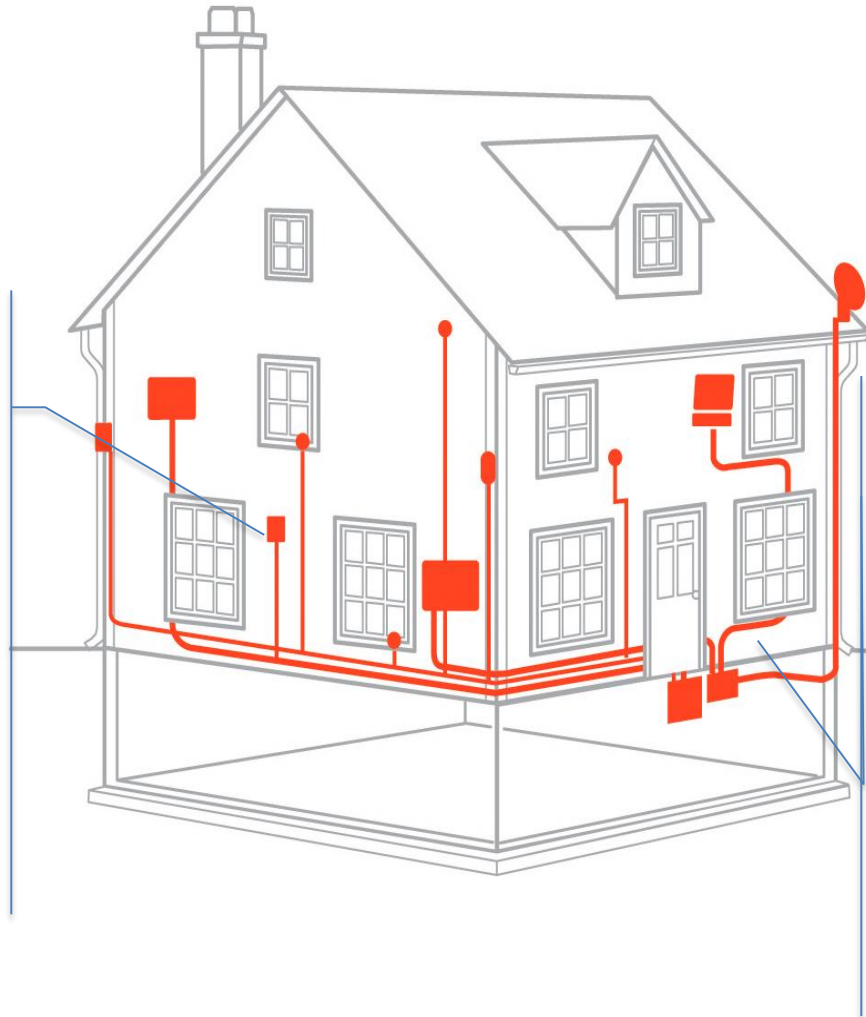


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CBT SKILLS

DIMMER SWITCH

Decrease pain sensitivity/
nervous system arousal



CIRCUIT BREAKER

Behavior changes that break the habit cycle of chronic pain



Pain Management is not Intuitive

KIDS:

- Function first
- It hurts, but it's not harmful
- Getting back to school can help
- Thinking about pain makes it worse

PARENTS

- More rest = more pain
- Overprotecting your child can make it worse
- Asking about pain can make pain worse
- Setting goals and keeping a steady pace toward them can help



Treatment effects are evident in the brain



IASP[®]

PAIN[®] 155 (2014) 1727–1742

PAIN[®]

www.elsevier.com/locate/pain

The responsive amygdala: Treatment-induced alterations in functional connectivity in pediatric complex regional pain syndrome



L.E. Simons^{a,b,c,*}, M. Pielech^a, N. Erpelding^{a,b}, C. Linnman^{a,b}, E. Moulton^{a,b}, S. Sava^a, A. Lebel^{a,b}, P. Serrano^a, N. Sethna^{a,b}, C. Berde^{a,b}, L. Becerra^{a,b}, D. Borsook^{a,b}

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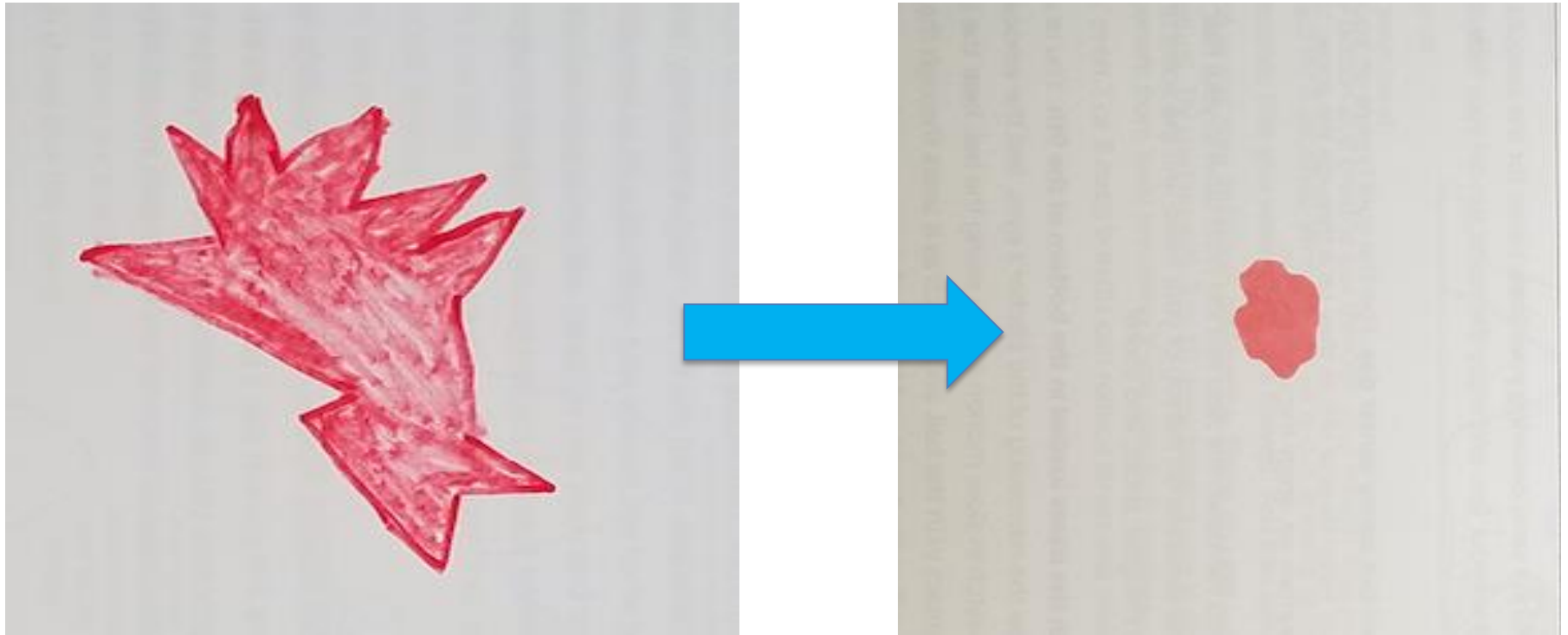


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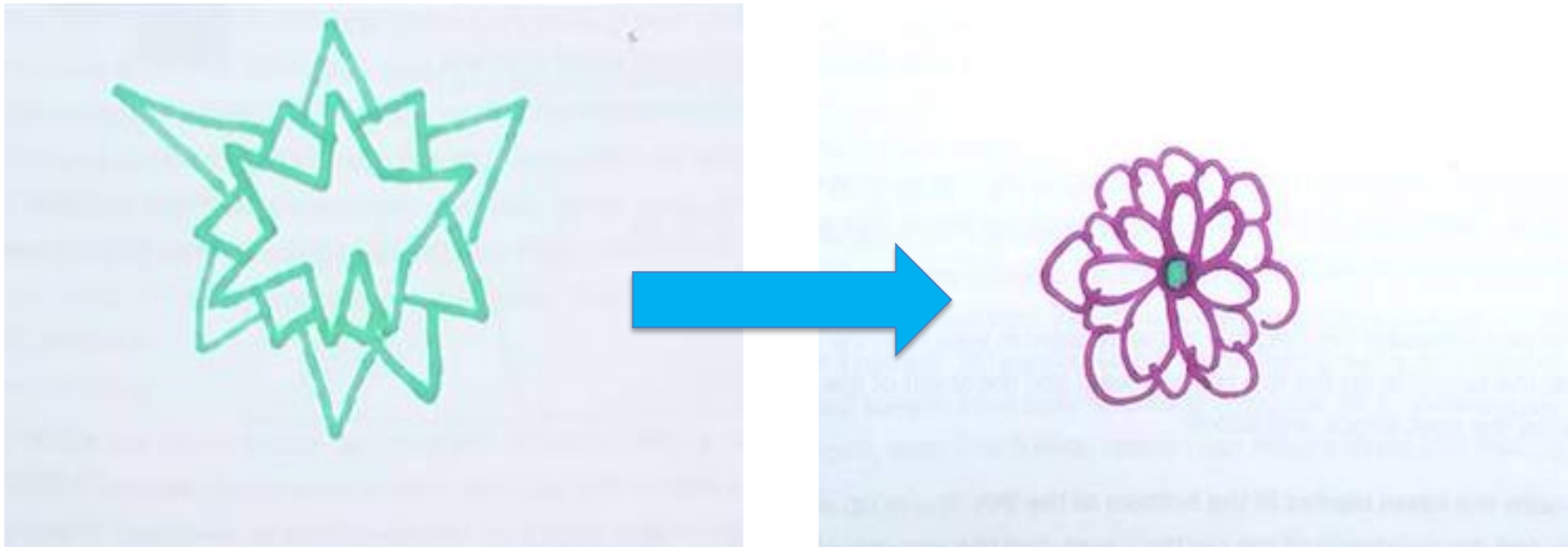


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GUIDED IMAGERY



GUIDED IMAGERY



THE CHALLENGE

**TREATMENT IS ONLY
EFFECTIVE IF IT CAN
BE ADMINISTERED.**



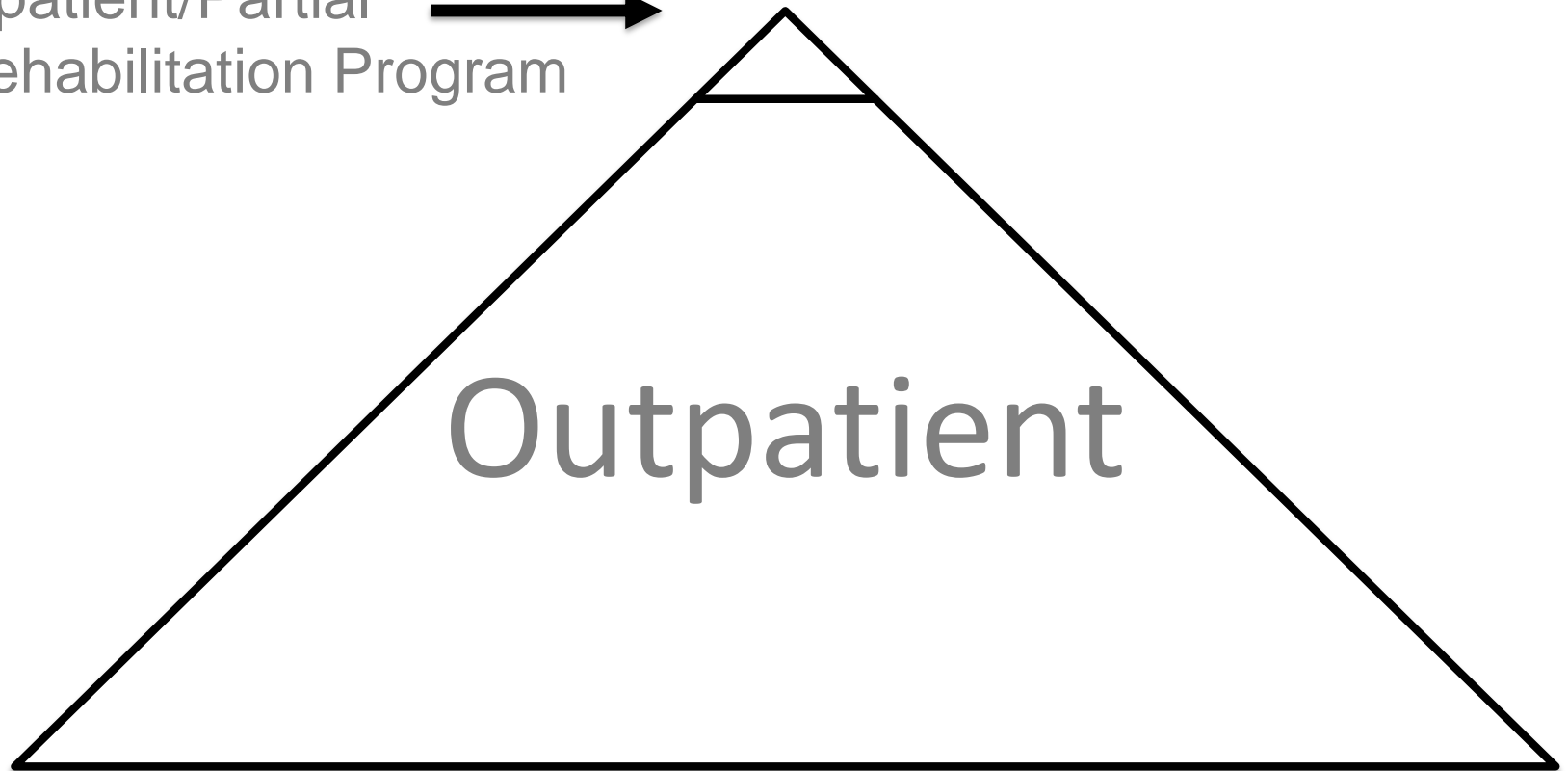
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MODELS OF CARE

Inpatient/Partial
Rehabilitation Program →



LIMITED ACCESS

ORIGINAL ARTICLE

Engagement in Multidisciplinary Interventions for Pediatric Chronic Pain: Parental Expectations, Barriers, and Child Outcomes

Laura E. Simons, PhD, Deirdre E. Logan, PhD, Laura Chastain, BA, and Madelin Cerullo, BA



- ~~Financial or insurance constraints~~
- Insufficient knowledge of efficacy
- Feeling stigmatized by mental health referrals



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GET IT TOGETHER

Create a evidence-based, first-line psychological intervention that addresses the time, cost, and resource barriers.

Provide widespread access in a non-stigmatizing format.

Teach patients and parents that psychological interventions are a primary treatment for pain and associated stress.

Make the interventions educational, experiential, and meaningful to deeply engage families and encourage additional service acquisition as needed.



Factors that make a difference:

- Create minimal interference with schedules
- Are held outside of a mental health setting
- Use non-diagnostic titles

[June & Brown, et al 1999; 2004]

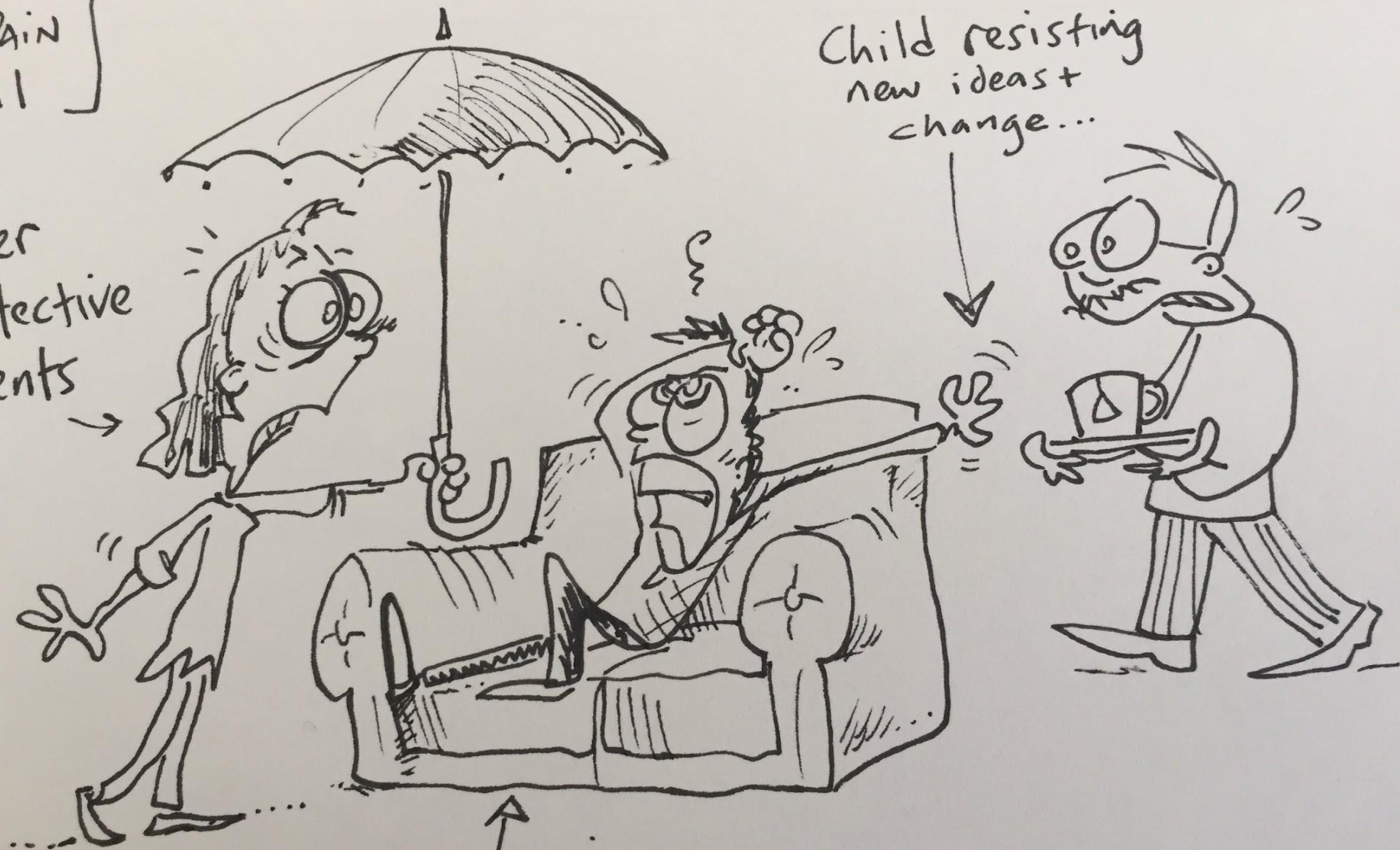
- Within pediatrics, **parents matter**:

Across all treatment types, psychological therapies that included parents significantly improved child symptoms for painful conditions [Ecleston, Palermo, Fisher, Law, (2012) Cochrane Review]



THE PAIN
Spiral]

Over
protective
parents



Child resisting
new ideas +
change...

Catastrophizing
by the child

Thank you!
Jack. ma



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Parent-child interaction





The Comfort Ability Program

MISSION:

Teach kids and their parents the evidence-based psychological tools needed to manage chronic or recurrent pain

GOALS:

Engage, Educate, Support, Empower

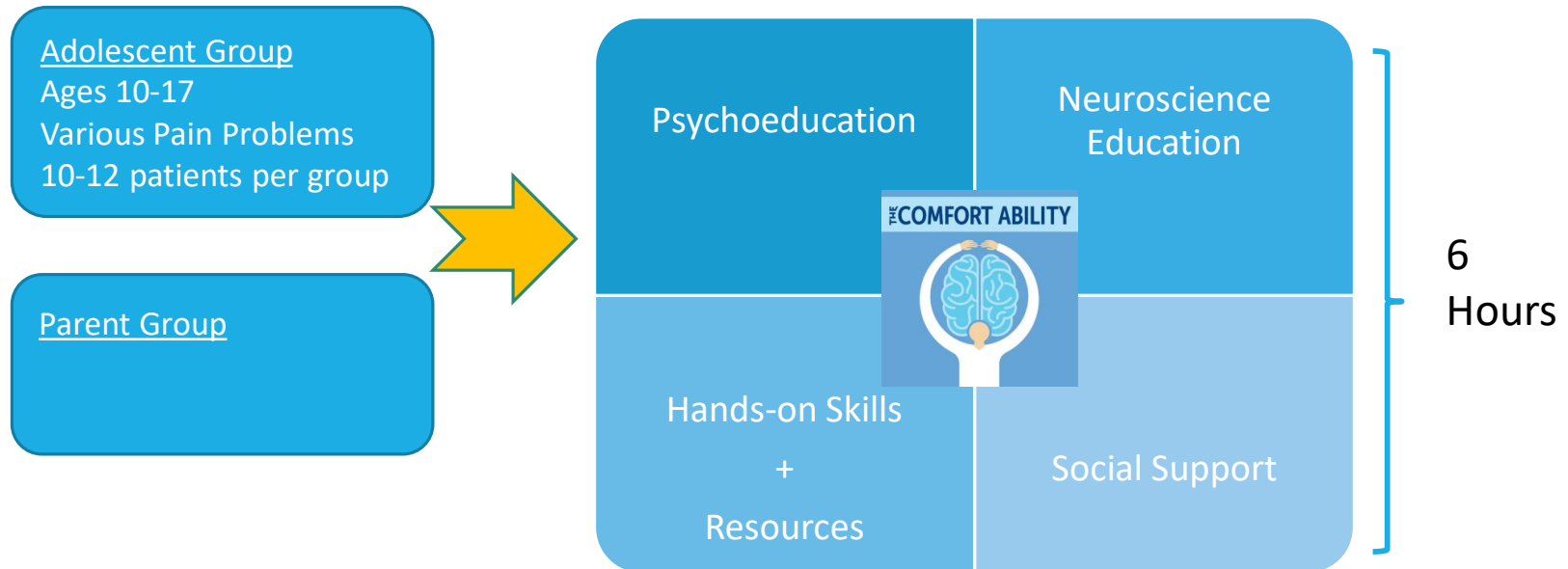
VISION:

Reduced disability and comorbidity associated with persistent pediatric pain through enhanced access to care, improved parent and child self-efficacy, and connection to science-backed resources.



What happens at The Comfort Ability?

Manualized treatment includes:
Leader's Manuals, Patient Workbooks, Interactive Video Content





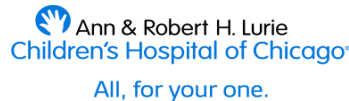
CAP Treatment Sites



YALE-NEW HAVEN
CHILDREN'S HOSPITAL



Lucile Packard
Children's Hospital
AT STANFORD



Promising Outcomes:

Parents:

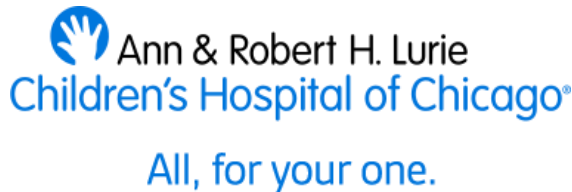
- ✓ Very high rates of patient satisfaction
- ✓ Excellent feasibility
- ✓ Reduced over-protectiveness
- ✓ Reduced pain catastrophizing
- ✓ Increased pain self-efficacy
- ✓ Reduced healthcare utilization
- ✓ Improvements at 1-week and maintained to 3-months

Adolescents:

- ✓ Improved pain self-efficacy
- ✓ Reduced catastrophizing
- ✓ Improved function
- ✓ Reduced pain
- ✓ Improvements at 1-month with additional gains through 3-months



MAKE IT ACCESSIBLE



Alberta Children's Hospital



MAKE IT ENGAGING



What can I do?

- Validate
- Provide a positive diagnosis
- Educate
- Guide patients towards multidisciplinary interventions
- Provide positive expectations
- Offer written materials to enhance function in the community



Summary

Need to integrate psychological skills and strategies early:

- Reduce overreliance on medication
- Address **primary pain** features
- Identify psychological comorbidities

The Comfort Ability Program offers:

- First line intervention (primary prevention)
- Low family burden
- Non-stigmatizing format
- Education, basic skills training, resources

All providers have a role to play in helping patients to move forward:

- Validation and education are key
- Address parenting beliefs and behaviors
- Move patients towards evidence based resources





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For more information:

RACHAEL COAKLEY, Ph.D.

When Your Child Hurts

Effective Strategies
to Increase Comfort,
Reduce Stress, and Break
Cycle of Chronic Pain



YALE UNIVERSITY PRESS HEALTH & WELLNESS

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TheComfortAbility.com

- Patient stories
- Education
- Guided exercises
- Online chats for teens & parents



[@CoakleyRachael](https://twitter.com/CoakleyRachael)

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