PEDIATRIC PAIN MANAGEMENT

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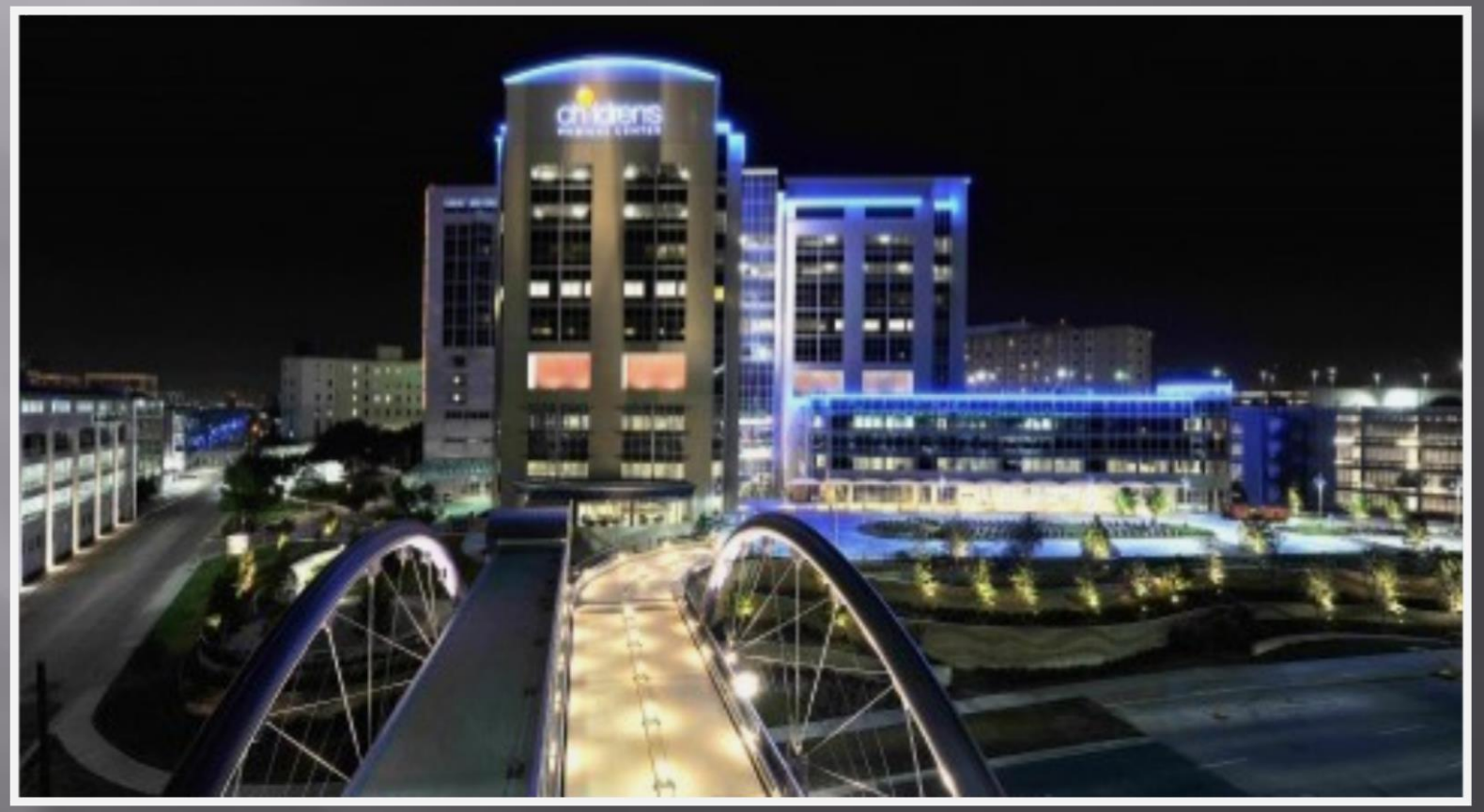


Objectives

- Physiology of pain in children
- Assessing pain in children
- Identify the emotional and financial impact pediatric chronic pain has on families and the community
- Examine the most prevalent diagnoses
- Interdisciplinary, multimodal approach
- Opioid epidemic and use of opioids in pediatrics

Conflict of Interest Disclosure

- Regretably None

MISTAKES

It Could Be that the Purpose of Your Life Is
Only to Serve as a Warning to Others.

Current Knowledge

- At 22 weeks GA all neural components for transmission of a pain signal from the periphery to the brain are intact
- At 29 weeks a pain signal from the periphery to the cerebral cortex can be recognized
- The experience of chronic intermittent pain from heel sticks has been shown to contribute to long term physical effects such as hyperalgesia

Myths about Pediatric Pain

MYTH

- 1. Infants do not feel pain
- 2. They tolerate pain better than adults
- 3. Unable to communicate that they are in pain

TRUTH

- 1. The CNS of 29 week fetus can sense and interpret pain
- 2. Tolerance for pain actually increases with age
- 3. With proper pain scales, pain levels can be determined.

Myths Continued

- 4. Children become accustomed to pain
- 5. Children will tell you when they hurt
- 6. Their behavior reflects the pain intensity

- 4. Increased exposure to pain increases their anxiety
- 5. They may not because of fear of the treatment
- 6. They have unique ways of coping

Pain in Pediatrics

- Pain is "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."
  - International Association for the Study of Pain

Emotional Experience & Potential Tissue Damage

Pain Assessment Scales

SELF-REPORT TOOLS

- 0-10 NUMERIC RATING SCALE (NRS)
- WONG BAKER FACES 0-10 SCALE

BEHAVIORAL TOOLS

- FLACC (FACES, LEGS, ACTIVITY, CRY, CONSOLABILITY)
- N-PASS (NEONATAL PAIN, AGITATION, SEDATION SCALE)

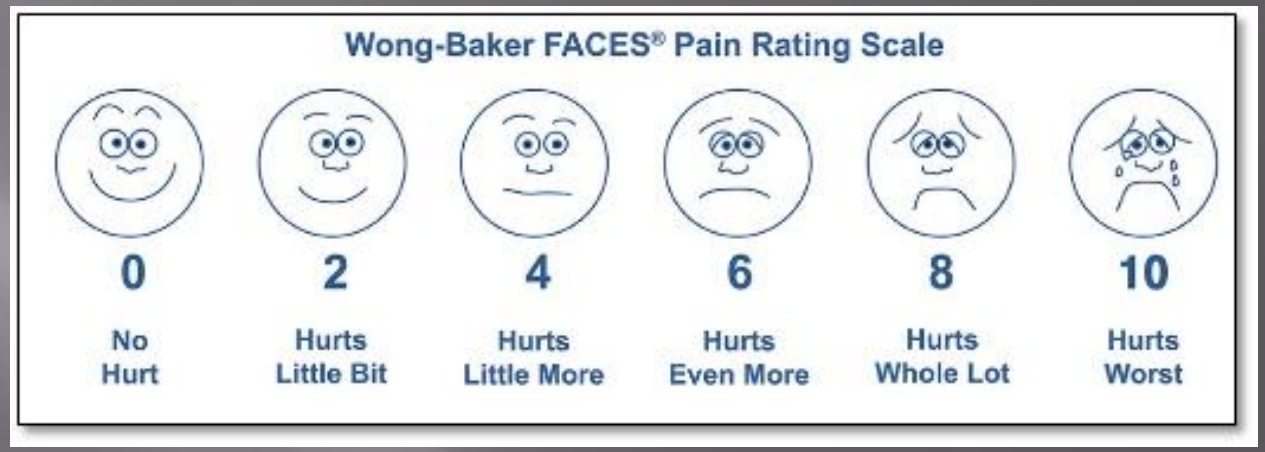
Pain Scales

FLACC scale

Behavioral Observation Pain Rating Scale

Categories	Scoring		
	0	1	2
Face	No particular expression or smile; disinterested	Occasional grimace or frown, withdrawn	Frequent to constant frown, clenched jaw, quivering chin
Legs	No position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid, or jerking
Cry	No crying (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging, or talking to. Distractable	Difficult to console or comfort

Each of the five categories (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolability is scored from 0-2, which results in a total score between 0 and 10.



Incidence in Pediatrics[1]

- Current estimates suggest one in four children will have an episode of chronic pain that lasts 3 months or longer

1 King et al., *Pain*, 2011

Incidence in Pediatrics[1]

- Average of 10% to 30% of adolescents in a community sample reported having weekly abdominal, headache, or musculoskeletal pains
- Functional abdominal pain accounts for 2 - 4% of all pediatric visits
- Headaches and lower extremity pain are frequent precursors to pediatrician and emergency room visits

1 King et al., *Pain*, 2011

Impact on Everyday Life[1]

- Affects quality of life and school attendance
  - decreased participation in recreational activities
- Increase in health care utilization and high costs on the healthcare system
- Impact on Overall Health
- Increased Risk for the Development of Adult Chronic Pain

1 Groenewald et al. *J Pain*, 2014

Financial Impact on Family and Community

- $19.5 billion annually in direct and indirect costs for US children/adolescents
  - Cost of diagnostic exams, hospitalization, doctors' visits, and medications
  - Costs related to taking time off from work, transportation, and additional child care for siblings
- Childhood chronic pain described as "a modern public health disaster"[1]

1 Clinch and Eccleston, Rheumatology, 2009

Emotional impact[1]

- Observed pattern of dysfunctional familial relationships
- Exorbitant stress within the family and child's life is pervasive
- Family might exhibit unhealthy relationship dynamic
- Psychological enmeshment between parent in child

1 Weismann & Uziel, Pediatric Rheumatology, 2016

Emotional Impact[1]

- Often consumed with ongoing medical management and appointments
- Parents will often be frustrated due to receiving unnecessary OR necessary treatments, procedures, or “ectomies” but pt still without relief
- Social restrictions and high levels of parenting guilt, anger, depressive symptoms, and anxiety
- In pediatrics, there is a high rate of comorbid psychological disorders

1 Weismann & Uziel, Pediatric Rheumatology, 2016

Most common Pain complaints at Children's Health

- 1) Headaches
- 2) Amplified musculoskeletal pain
- 3) Abdominal pain
- 4) Back pain

Anxiety

Migraine Without Aura, ICHD-3

- Diagnostic Criteria
  - A. At least 5 attacks fulfilling criteria B-D
  - B. Lasts 4-27 hr (untreated or unsuccessfully treated)
  - C. Two of the following 4 characteristics
    - 1. Unilateral
    - 2. Pulsating quality
    - 3. Moderate or severe intensity
    - 4. Aggravation by or causing avoidance of routine physical activity
  - D. At least one of the following
    - 1. Nausea and/or vomiting
    - 2. Photophobia and phonophobia

Migraine in Peds

- Duration of attacks 2-72 hours
- More often bilateral
  - Unilateral pain emerges in late adolescence or early adult life
- Usually fronto-temporal
  - Occipital is rare and calls for diagnostic caution
- In young children, photophobia/phonophobia can be inferred from behavior.

PIN Criteria

- **P**hotophobia / Phonophobia
- **I**nability to continue with their activities
- **N**ausea or vomiting

Prevalence of Headache in Children

- By age 3, 3-8% of children
- By age 5, 19.5%
- By age 7, 37%-51%

Incidence of Migraine in Children

- Females peak incidence:
  - With aura: 12-13 years old (14.1/1,000 person-years)
  - Without aura: 14-17 years old (18.9/1,000 person-years)

- Males peak incidence:
  - With aura: 5 years old (6.6/1,000 person-years)
  - Without aura: 10-11 years old (10/1,000 person-years)

Childhood Migraine Syndromes

- Cyclic Vomiting Syndrome
  - (N/V, 1 hr to 10 days)
- Abdominal Migraine
  - (+/- N/V, abdominal pain, 2-72 hours)
- Benign Paroxysmal Vertigo of Childhood
  - (+/- N/V, vertigo, minutes – hours)

Tension-Type Headache, ICHD-3

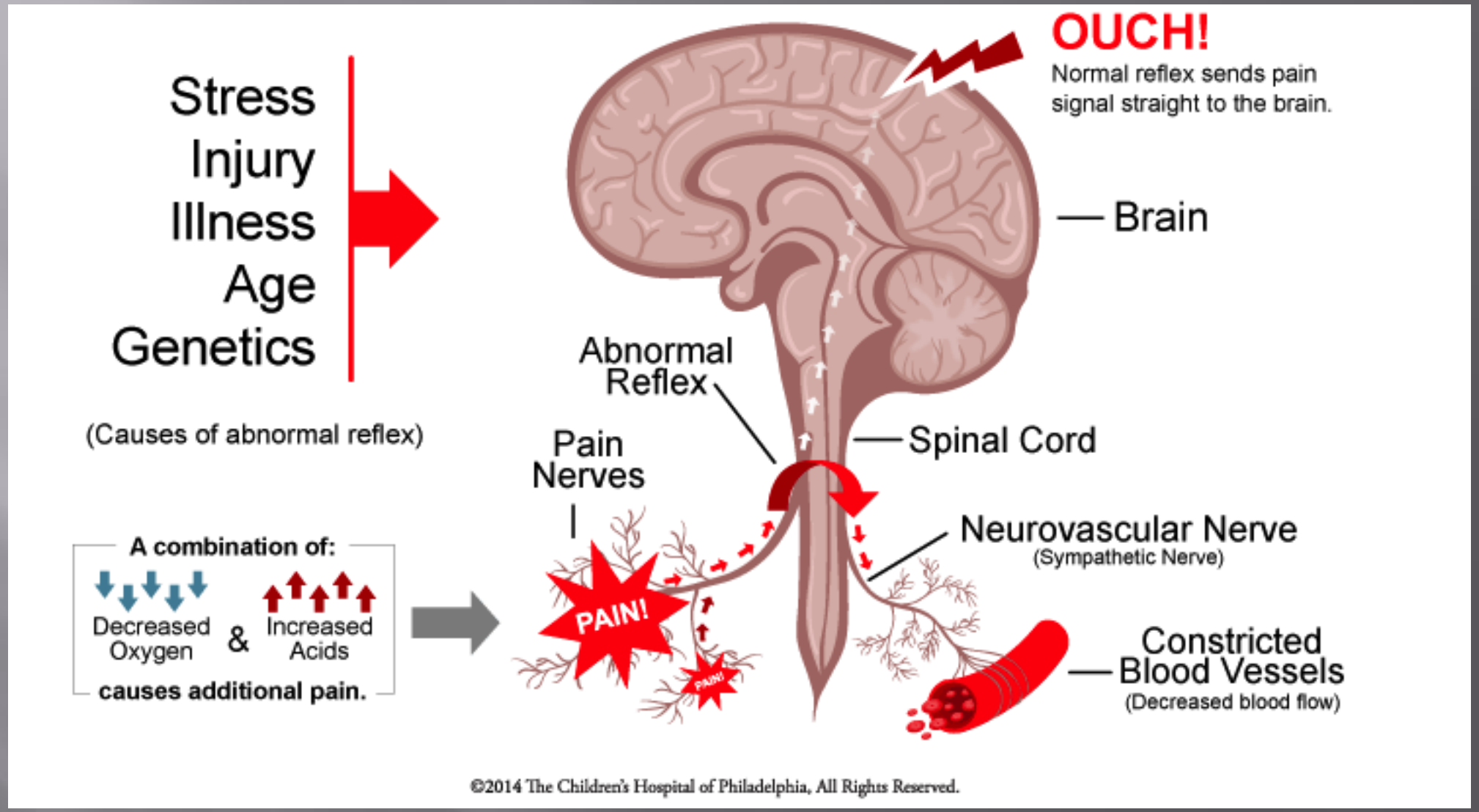
- Infrequent, Frequent, Chronic, or Probable
- Last 30 minutes to 7 days
- At least 2 of the following 4 characteristics:
  - Bilateral location
  - Pressing or tightening (non-pulsatile) quality
  - Mild or moderate intensity
  - Not aggravated by routine physical activity
- Both of the following:
  - No nausea or vomiting
  - No more than one of photo- or phonophobia

Red Flags

- Age of onset prior to 3 years of age
- Occipital Headache
- Headache wakes child up at night
- Headaches in the morning
- Loss of developmental milestones

Amplified Musculoskeletal Pain

- Overactive reflex leads to blood vessel constriction causing oxygen deprivation to tissues, lactic acid build-up, allodynia, temperature, and color changes of affected area.



Amplified Musculoskeletal Pain

- Intermittent or Constant
- Whole body or localized

- Umbrella term for a number of pain disorders:

  - Diffuse amplified pain = Pediatric Fibromyalgia
  - CRPS with autonomic changes
  - Localized amplified pain without autonomic changes
  - Somatoform Pain Disorders
  - Benign Hypermobility Syndrome

Causes of AMPS

- Three primary causes:
  - Injury
  - Illness
  - Psychological Stress
- Hormones and Genetics can play a role as well

Psychological Stress and AMPS

- Stress can be a complicating factor and a trigger
- Stressors – (+) or (-), big/small, not just events – also feelings/personality
- Often negatively affected by peers, school officials, & health care professionals who have dismissed their symptoms
- Family dynamics play a role

- Patient and family can benefit from CBT. Provides patient with coping strategies, also identifies stressors (school, family, friends)

Testing and Diagnosis

- Lab work – normal
- MRI's – normal

- H&P includes listening to child's emotions

- Autonomic changes often not present during visit

The Beighton Hypermobility Score

- 1. Passively dorsiflex 5^{th} MCP joint >90 degrees
- 2. Oppose the thumb to volar aspect of forearm
- 3. Hyperextend elbow > 10 degrees
- 4. Hyperextend knee to > 10 degrees
- 5. Place hands flat on floor without bending knees

- Score: 1 point for each side of maneuvers 1-4, for a total of 9 points possible

Benign Joint Hypermobility Syndrome

- Major Criteria
  - 1.) Beighton score of 4 or greater
  - 2.) Arthralgia for >3 months in 4 or more joints

Benign Joint Hypermobility Syndrome

- Minor Criteria
  - 1.) Beighton score of 1, 2 or 3 (0-3 if aged 50+)
  - 2.) Arthralgia (>3 months) in 1-3 joints or back pain, spondylosis, spondylolysis/spondylolisthesis
  - 3.) Dislocation/subluxation in >1 joint, or in 1 joint in >1 occasion
  - 4.) Soft tissue rheumatism. >3 lesions (e.g. epicondylitis, bursitis)
  - 5.) Marfanoid habitus
  - 6.) Abnormal skin: striae, hyperextensibility, thin skin
  - 7.) Eye signs: drooping eyelids or myopia or antimongoloid slant
  - 8.) Varicose veins or hernia or uterine/rectal prolapse

BJHS Diagnosis

- Two major criteria
- One major and two minor criteria
- Four minor criteria
- Two minor criteria when there is a 1st degree relative affected
- Excluded by the presence of Marfan or Ehlers-Danlos syndrome

Difficulties with Early Diagnosis

- Not all AMPS symptoms present, often evolve over time
- Urgent problems such as infection or musculoskeletal injuries need to be ruled out.
- Wide spectrum of AMPS, so clinicians not well versed in AMPS often don't recognize it.

Treatment Focus: Return to Wellness

- Aerobic Exercise to increase cardiovascular tone
- Desensitization Therapies
- Individualized Psychotherapy (coping strategies/stress mgmt)
- Eliminating medications

- Goal is to break pain cycle and retrain affected nerves

Normalization of Behaviors

- Return to school, sports, and socializing with friends
- ***Function returns before pain resolves***
- Educating children that using their body in normal ways is not damaging often enables them to work through their pain.
- Psychology addresses the mind-body connection

- Benign Hypermobility Syndrome
  - vs
- Ehlers-Danlos Syndrome Type 3
  - vs
- Amplified Musculoskeletal Pain
  - vs
- CRPS

- Does it matter?

- Goal: Function, function, function

Abdominal Pain, Rome IV Criteria

- Irritable Bowel Syndrome
- Functional Constipation
- Functional Abdominal Pain Syndrome

Irritable Bowel Syndrome

- Recurrent abdominal pain or discomfort at least 1 day per week on average in the last 3 months* associated with 2+ of the following:
  - Related to defecation
  - Associated with a change of frequency of stool
  - Associated with a change in form of stool
- *Symptom onset at least 6 months prior to diagnosis
- Often begins with an illness
- Appears to be genetically pre-programmed

Functional Constipation

1. Must include 2+ of the following:
   - Straining with 25%+ of defecations
   - Lumpy / hard stools (Bristol 1 or 2) with 25%+ of defecations
   - Sensation of incomplete evacuation with 25%+ of defecations
   - Sensation of anorectal obstruction for 25%+ of defecations
   - Manual maneuvers to facilitate 25%+ of defecations
   - Fewer than 3 spontaneous defecations per week
2. Loose stools rarely present without laxatives
3. Insufficient criteria for IBS

Functional Abdominal Pain Syndrome

- Must include ALL of the following:
  - Continuous or nearly continuous abdominal pain
  - No or only occasional relationship of pain with physiological events (e.g. eating, defecation, or menses)
  - Some loss of daily functioning
  - Pain is not feigned (e.g. malingering)
  - Insufficient symptoms to meet criteria for another functional GI disorder

Symptom-based Diagnosis

- Rome IV removed the dictum that there is “no evidence for organic disease” has been replaced
- “After appropriate medical evaluation the symptoms cannot be attributed to another condition.”
- Allows clinicians to perform selective or no testing to support a positive diagnosis of a FGID

Constipation in our Abdominal Pain Clinic

- 101 new patients from January 2012 to April 2016
- 86 children had x-ray prompted by H&P
- 82.5% (71 patients) had fecal impaction on x-ray
- Mean age 13, median 13.5, range 4-17 years
- Female to male ratio 2.44:1

Back Pain

- Rarely disk related
- Most commonly mechanical low back pain
- Congenital spondylosis → spondylolisthesis

Anxiety

- Excessive anxiety and worry, occurring more days than not for **at least 6 months**, about a number of events or activities. The anxiety and worry are associated with **three (or more)** of the following 6 symptoms with at least some symptoms present for more days than not for the past 6 months.
  - 1 Restlessness or feeling keyed up or on edge
  - 2 Being easily fatigued
  - 3. Difficulty concentrating or mind going blank
  - 4. Irritability
  - 5. Muscle tension
  - 6. Sleep disturbance

Depression

- **Five (or more) of the following symptoms have been present during at least a two week period and represent a change from previous functioning with at least one of the symptoms being depressed mood or anhedonia.**
  - 1. Depressed mood or irritable mood most of the day, nearly every day
  - 2. Markedly diminished interest/pleasure in many enjoyed activities
  - 3. Significant change in weight or appetite
  - 4. Insomnia or hypersomnia nearly every day
  - 5. Psychomotor agitation or retardation nearly every day

Depression Continued

- 6. Fatigue or loss of energy nearly every day
- 7. Feeling of worthlessness, inappropriate guilt
- 8. Diminished ability to think or concentrate or indecisiveness
- 9. Recurrent thoughts of death

- Rule out mood disturbance d/t substance / medical condition
- Rule out bipolar depression

- Suicidal or Homicidal Ideation

Other questions in Anxiety/Depression

- Impaired functioning
- Significant stressors
- History of abuse
- Suicide attempts in patient or family
- Substance abuse in patient or family
- Psychiatric disorders in patient or family

Social Media Effect on Mood

- Study in 2017 from 2010-2015 of over 500,000 8^{th}-12^{th} grade US students showed an increase of 33% in depression
- Suicide rate in girls increased by 65%

- Smart phones introduced 2007
- By 2015, 92% of teens had smart phones

- Studies so far primarily show correlation, but not necessarily causation.

Twenge, Jean., et al. Journal of Clinical Psychological Science

Social Media Negative Effects

- Increased depression
- Perceived isolation
- Decreased self-esteem
- Less healthy activity
- Disrupted concentration
- Sleep deprivation

Minimizing Social Media's Negative Effects

- Focus on balance
- Turn off notifications
- Look out for kids with higher risk for depression
- Teach mindful use of social media
- Model restraint and balance in your own media diet
- **Phone-free time before sleep**

Bullying

- The bully used to be location dependent
- The bully is with them 24/7

Operant Conditioning[1]

- Operant conditioning is a way of learning due to natural consequences of our actions

- Positive reinforcement
- Example:
  - Social attention by others to soothe the pain
  - Getting picked up from school because of pain
  - Getting out of chores because of pain

1 Celedon et al, Curr Phys Med Rehabil Rep, (2014)

Operant Conditioning[1]

- Avoidance learning (negative reinforcement)
  - When frequency of a certain behavior increases after that behavior enabled the individual to escape or avoid aversive stimulation
  - Example:
    - Limping, bracing, activity avoidance cause decreased pain sensation
    - The anticipation of pain causes patients to avoid activities and by avoiding the activity they do not experience the pain

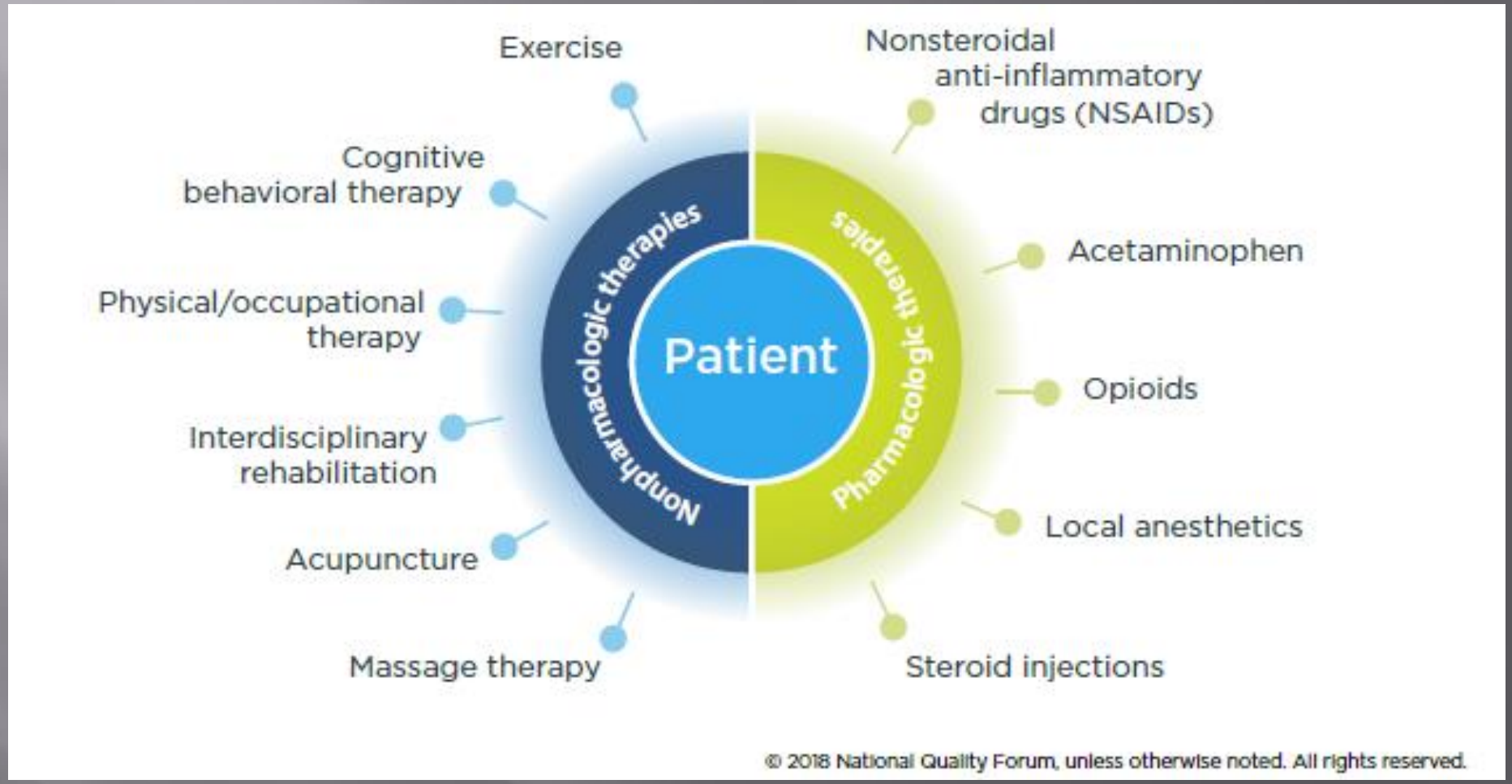
1 Celedon et al, Curr Phys Med Rehabil Rep, (2014)

Goal of Multimodal Treatment[1]

- If a child does not develop positive coping strategies, maladaptive behaviors may develop.
- To avoid operant conditioning, normative physical activity should be encouraged and positively reinforced
- The multi-modal approach allows children and family to accept pain as a symptom they can learn to manage, rather than focusing on complete elimination of pain

1 Celedon et al, Curr Phys Med Rehabil Rep, (2014)

Multimodal Flow Process



Goals of Multi-modal Treatment Plan

- Optimize function
- Address anxiety
- Improve physical strength
- Sleep hygiene
- Return to normal eating habits
- Getting out of the sick role
- Back to school
- Resume athletics or band
- Address comorbid conditions

Current State of Pain Management at Children's Health

- Multidisciplinary Chronic Pain Clinic
  - 3 new patients, 2 days per week
  - 3 Providers on the same day
    - Pain MD
    - Psychologist
    - Physical Therapist
  - 4 hour appointment
    - 1 hour for each provider
    - 1 hour wrap-up session with all providers, patient, and family
  - Follow up
    - Pain APP for 1 hour appointment
    - Psychology through our clinic or in the community
    - PT through CHST (OCH locations) or in the community
- Chronic Abdominal Pain Clinic
  - 3 new patients, 1 day per month
  - Same format as chronic pain clinic
  - GI MD replaces Physical Therapy portion
  - Patient follows up with either Pain or GI APP based on patient needs
- Chronic Headaches
  - Monday through Friday
  - 1 hour appointments
  - Seen by MD or APP as new patient and follow up

Results of Multi-modal Experience in Dallas

- Quality of life measurements for chronic patients ONLY
- 75% of our NEW pain patients who follow up show improved QOL at their first follow up visit
- By second visit, they have had time to practice shifting from pain relief to focusing on function. The multidisciplinary apt is an intervention because psychology and PT show exercises and give homework until they are established with other providers if needed.
- 40% of our patients do not follow up after their initial appointment
- Of those, ~75% of them report improvement in symptoms and no need for follow up

Pilot Program

- 3 weeks Monday – Friday
  - 5 female patients
  - Avg age : 15 years
  - Avg time with pain: 3.3 years
  - Insurance: Commercial
- Diagnoses
  - Amplified musculoskeletal pain
  - Reflex sympathetic dystrophy
  - Complex regional pain syndrome
  - Headaches

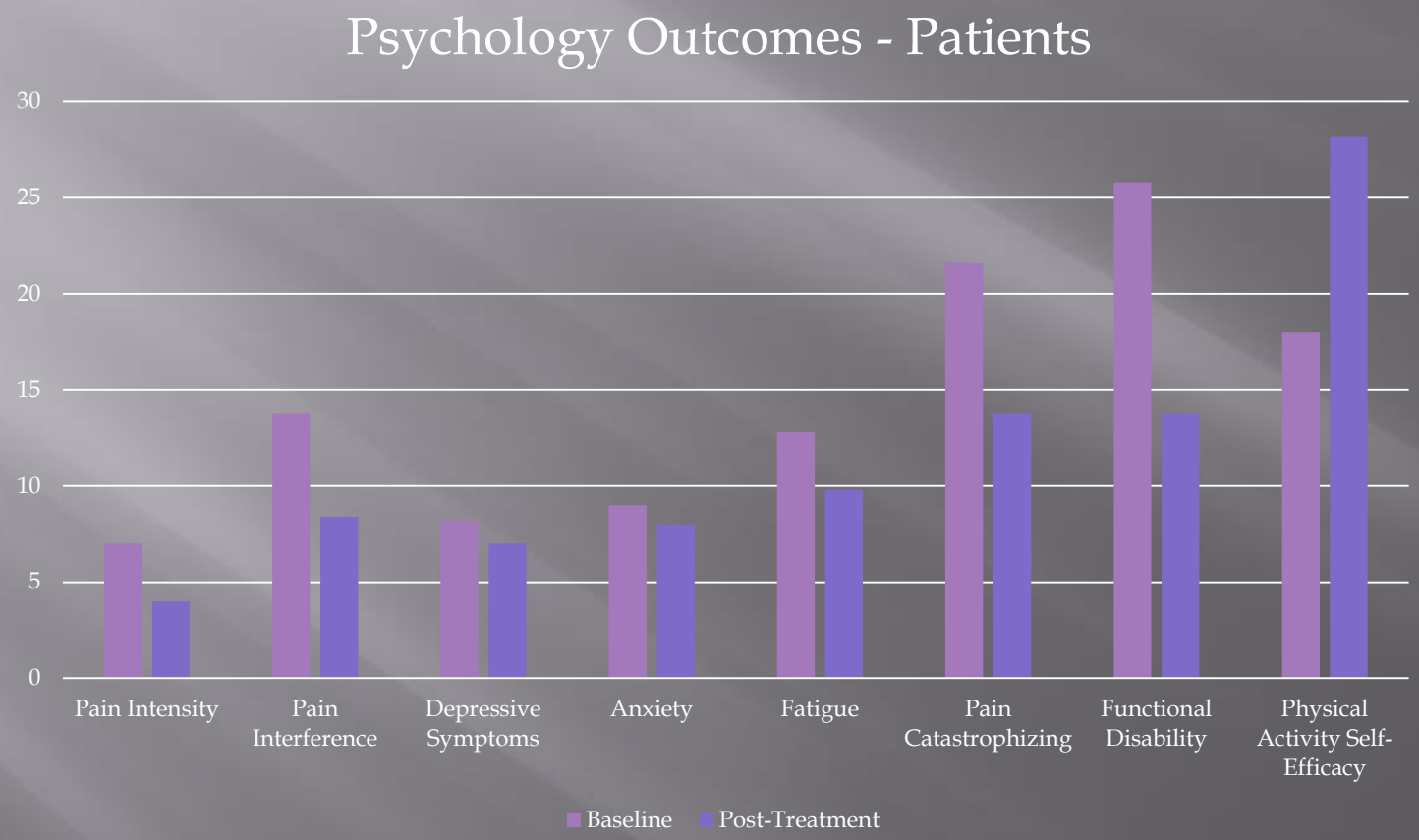
Services Provided

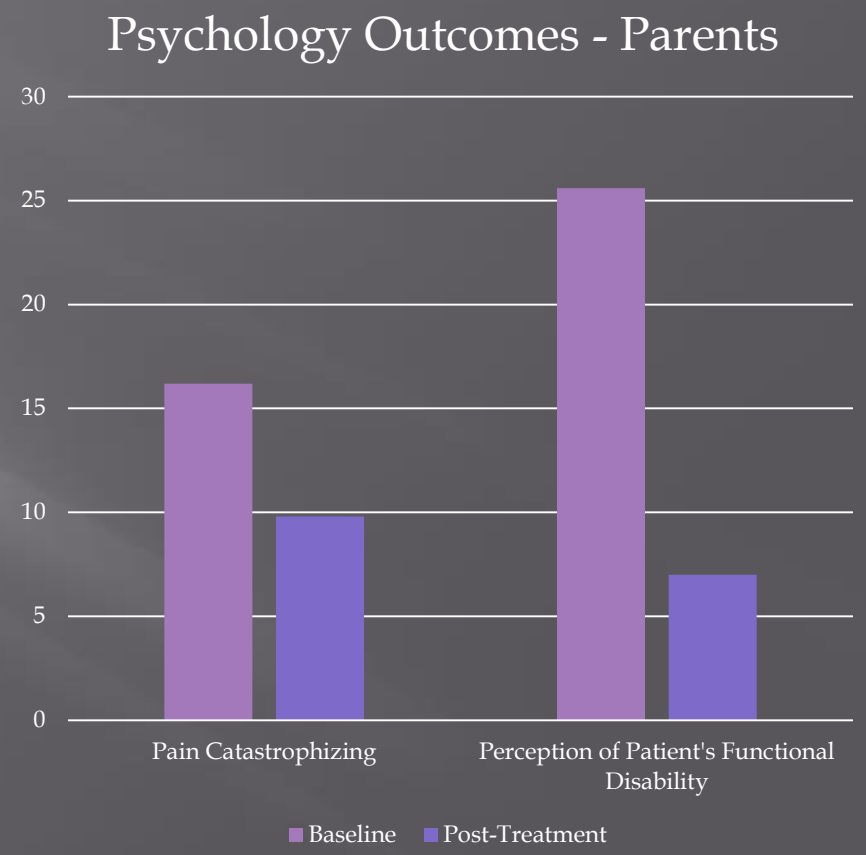
- Physical Therapy
- Occupational Therapy
- Aquatic Therapy
- Psychology – Indiv.
- Psychology – Family
- Child Life
- Music Therapy
- Pet Therapy
- Massage Therapy
- Recreational Therapy
- Nutrition counseling
- School Services

Patient and Parent Experience (Quality)

- Goal: Restore function for pediatric patients suffering from chronic pain
- Improvements not accounted for in data
  - 6 minute walk post-test → "Can I run?"
  - Improved form with activities
  - Improved perception of function
- They are not alone – talk with peers, other parents, shared experiences
  - Parents and patients are seeking identity, to know they are not defined by pain
  - Peer engagement is key; different child with peers vs parent
  - Parental support and education - If you change the child without changing the parent, the parent will undo all of your work
- Comments:
  - You gave us our time back!
  - She isn't her diagnosis.
  - We have done all of these things before but having them at the same time with the same message changed everything.

Psychology Outcomes (Clinical)



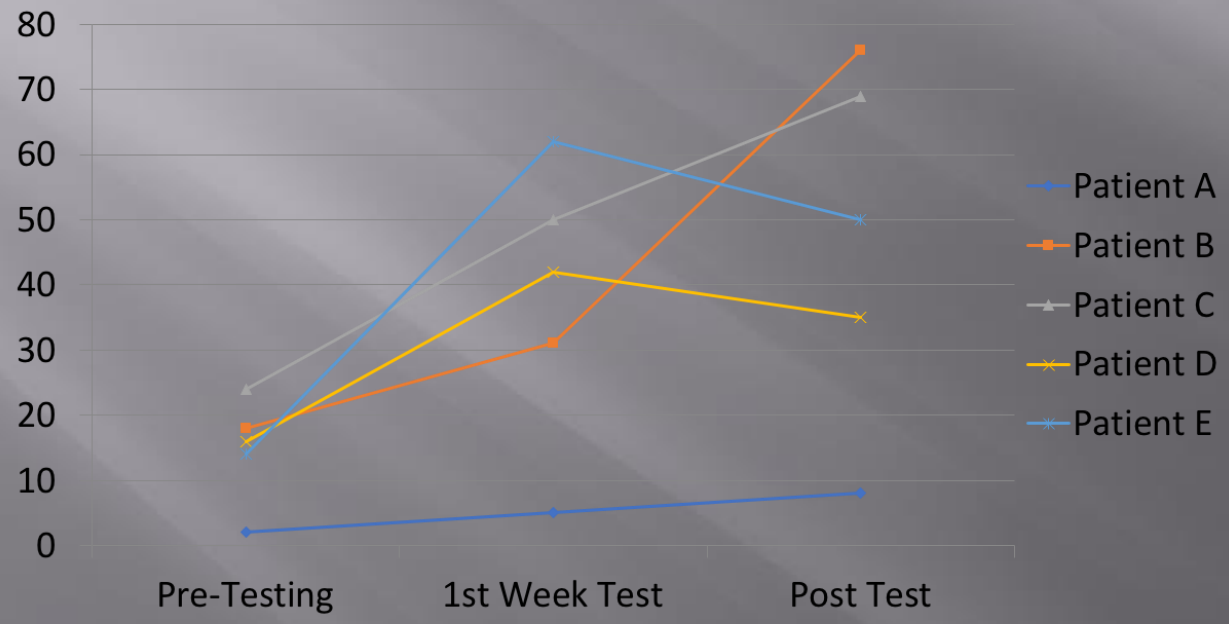


Psychology measures above also include: The Patient-Reported Outcomes Measurement Information System (PROMIS®) - 29

Functional Outcomes (Clinical)

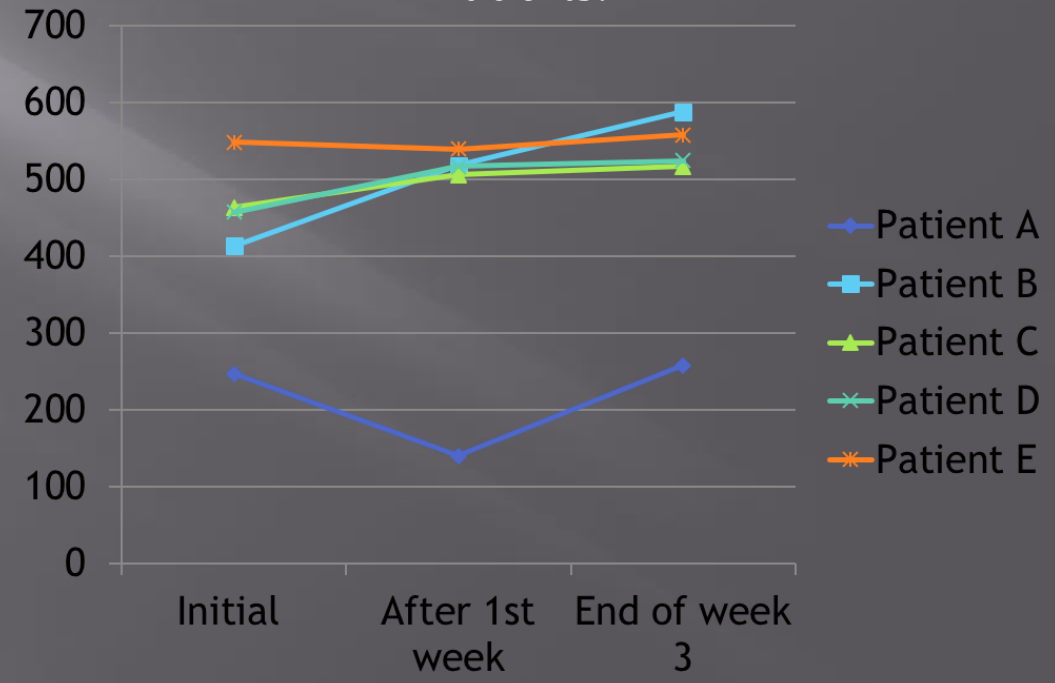
Occupational Therapy – BOT 2

Assesses functional improvement in all extremities, balance and speed/agility.

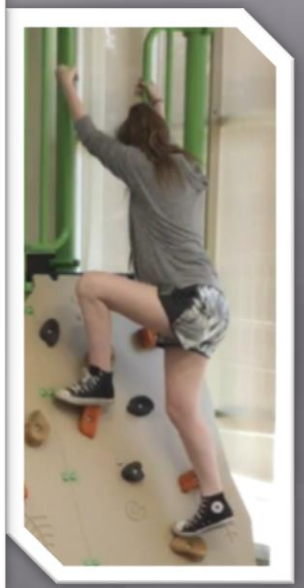


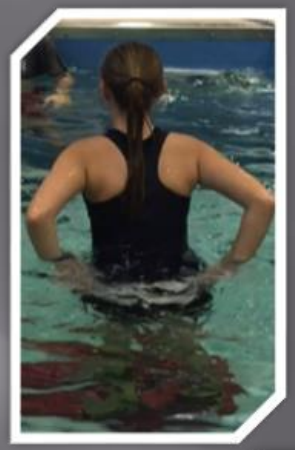
Physical Therapy – 6 Minute Walk Test

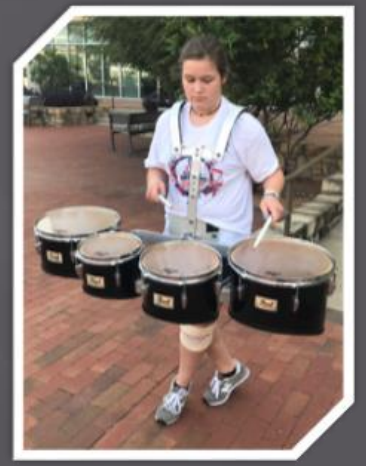
Distance walked with consistent pace in 6 minutes. Independent predictor of morbidity and mortality in adults.



Pilot Program Photos

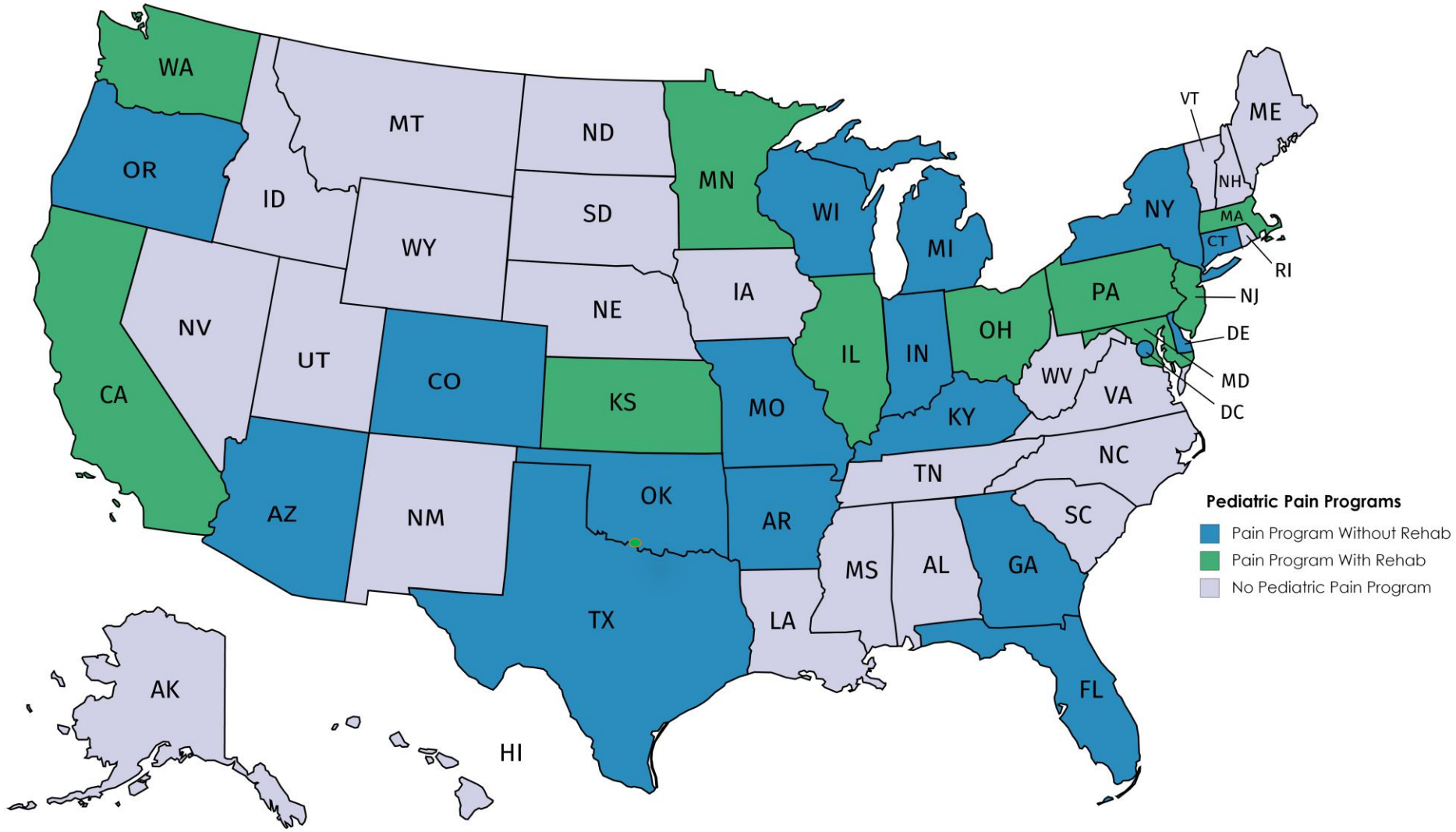






Cleveland Clinic's Financial Results

Estimated Annual Cost Pre-Admission				Estimated Annual Cost Post-Admission				Program Cost		Estimated Savings
Healthcare	+	*Missed Work*	-	*Healthcare*	-	*Missed Work*	-	$31,720	=	$27,119
$61,988		$12,229		$14,189		$1,189				



[APS Pediatric Pain Programs by State]

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The Wean Team

- At Children's Health the Acute Pain Service is often equated with the The Wean Team
- PICU induced opioid and benzodiazepine habituation
- WAT-1, updated Withdrawal Assessment Tool

WAT-1

Information from patient record, previous 12 hours	
Any loose /watery stools	No = 0 Yes = 1
Any vomiting/wretching/gagging	No = 0 Yes = 1
Temperature > 37.8°C	No = 0 Yes = 1
2 minute pre-stimulus observation	
State	SBS[1] ≤ 0 or asleep/awake/calm = 0 SBS[1] ≥ +1 or awake/distressed = 1
Tremor	None/mild = 0 Moderate/severe = 1
Any sweating	No = 0 Yes = 1
Uncoordinated/repetitive movement	None/mild = 0 Moderate/severe = 1
Yawning or sneezing	None or 1 = 0 ≥2 = 1
1 minute stimulus observation	
Startle to touch	None/mild = 0 Moderate/severe = 1
Muscle tone	Normal = 0 Increased = 1
Post-stimulus recovery	
Time to gain calm state (SBS[1] ≤ 0)	< 2min = 0 2 - 5min = 1 > 5 min = 2
Total Score (0-12)	

Opioid & Benzodiazepine Dependence

- Fentanyl 1 mcg/kg/hr = Methadone 0.1 mg/kg/dose PO Q6
- Midazolam 0.1 mg/kg/hr = Diazepam 0.1mg/kg/dose PO Q6

Concerns with Weaning

- Age of the patient is paramount
- Infusion days in PICU. 95% withdraw after 5 days
- Underlying medical history (HLHS, etc.)

Wean Process

- Only wean one medication per day
- 10% of original dose
- Alternating days

Opioid Use for Acute Pain In Peds

- In the acute pain setting, opioids continue to be indicated and utilized.
- At Children's Health, opioid utilization has decreased 40% in the inpatient setting over the last year.
- Unclear if this is an over-correction or appropriate prescribing.

Pasero Opioid-Induced Sedation Scale (POSS)

Sedation Level	Assessment of Level	Required Interventions If Using Opioids
S = Sleeping, easy to arouse	Sedation level acceptable	None needed
1 = Awake and alert	Sedation level acceptable	None needed
2 = Slightly drowsy, easily aroused	Sedation level acceptable	None needed
3 = Frequently drowsy, arousable, drifts off to sleep during conversation	**Sedation level unacceptable**	**Notify provider. Monitor respiratory levels closely until stable at POSS <3. Consider MET**
4 = Somnolent, minimal or no response to verbal or physical stimulation	**Sedation level unacceptable**	**Stop opioid. Notify provider. Activate MET**

Opioids for Chronic Pain in Pediatrics

- Used sparingly
- Currently no more than 10 total patients using opioids chronically
- Sickle cell, degenerative joint disorders, neuromuscular diseases, spastic tetraplegia

Are opioids indicated for these pediatric complaints?

- Headaches: “Opioid are never indicated for pediatric migraine.” Contemporary Pediatrics, June 2018.
- AMPS: “Have not been safely studied in children with musculoskeletal syndromes in children” Journal of Pediatric Rheumatology, 2016.
- Joint pain: “Limited studies in children with arthritis. NSAIDs are medication of choice, not opioids.” Pediatric Drugs, 2014.
- Back pain: “Opioids should be used sparingly and done only with assistance from pain specialist.” Pediatric Clinics of North America, 2018.
- Abdominal pain: “Opioids can aggravate chronic abdominal pain, have side effects, and should be avoided.” Physical Medicine and Rehabilitation, 2015.

Opioids in chronic non-malignant pain?

- Pharmacologic interventions currently employed are primarily extrapolated from adult trials without efficacy in children[1]
- Children with chronic pain are best cared for with interdisciplinary assessment and management with combination of medicine, psychology, and rehabilitation services[1]
- Given comorbidity of anxiety and depression in adolescent chronic pain population, at greater risk of opioid misuse later in life[2]

1 Assessment and management of children with chronic pain American pain society, 2012 & 2 Volkow & Mclellan, Nejm, 2016

Mismatch of opioids prescribed vs used

- There is a mismatch between the amount of opioids needed to treat pediatric acute pain, with children using <50% of prescribed opioids
- Leading source of RX opioids among adolescent non-medical users are from their peers and from their own previous opioid prescriptions
- Left over prescription opioids account for a substantial source of nonmedical use of RX opioids among HS Seniors

American Academy of Pediatrics, 2017

What providers can do

- Minimize use of ER/LA
- Have appropriate amount of opiate number for problem (ie: don't write for #100 hydromorphone tablets for a broken arm)
- Non-pharmacologic therapy and non-opioid medications
- Talk to the young people about the dangers of opioids
- When patient is discharged, educate on appropriate storage and disposal
- Arrange treatment for opioid use disorder if needed
- Please call pain management team if you need assistance, resources, etc

Opioid Risk Tool

This tool should be administered to patients upon an initial visit prior to beginning opioid therapy for pain management. A score of 3 or lower indicates low risk for future opioid abuse, a score of 4 to 7 indicates moderate risk for opioid abuse, and a score of 8 or higher indicates a high risk for opioid abuse.

Mark each box that applies	Female	Male
Family history of substance abuse		
Alcohol	1	3
Illegal drugs	2	3
Rx drugs	4	4
Personal history of substance abuse		
Alcohol	3	3
Illegal drugs	4	4
Rx drugs	5	5
Age between 16—45 years	1	1
History of preadolescent sexual abuse	3	0
Psychological disease		
ADD, OCD, bipolar, schizophrenia	2	2
Depression	1	1
Scoring totals		

References

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John 14:6

- Jesus said to him,“I am the way, and the truth, and the life. No one comes to the Father except through me.”