PRN Program: Chronic Pain

Materials: Flip chart or whiteboard & Markers
Provide participant guide at least one week in advance
Room Setup: In tables of 4 or 6-8 depending on number of participants

- Display slide as participants walk in
- This session is 45 minutes

Welcome and Introductions: *Introduce facilitator if necessary*

READ: The learning objectives for this module are to:

- Describe the prevalence and costs of chronic pain experienced by children and adolescents.
- Explain the difference between an acute and chronic pain management plan, including the unique challenges of managing chronic pain.
- Outline at least 5 realistic treatment goals and different corresponding treatments to help achieve those goals.

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ASK: How many children have chronic pain? What do you think is the biggest challenge when caring for children with chronic pain?

Select participants willing to share their answers to this question.
Write on flipchart or whiteboard 1-5 word summary for each participant

[Limit discussion to 4 minutes]

READ: *these Key points (**if not included by participants**):*

- Chronic pain may also be episodic with recurrent bouts of pain at least every 3 months.
- Uncontrolled acute pain has been recognized as a significant risk factor for the development of chronic pain.
- Disease-related pain: Sickle cell disease, Epidermolysis Bullosa, Osteogenesis Imperfecta, Rheumatological conditions, Cancer and treatment related pain (e.g. chemotherapy).
- Injury-related pain: Burns, Fractures, Post-surgery (e.g. phantom limb pain, scar tissue, nerve damage), Complex regional pain syndrome (e.g. post-fracture or sprain).
- Non-specific (Unexplained/Chronic Benign Pain):Headache, Recurrent abdominal pain, Pain Amplification syndrome, Complex regional pain syndrome, Low back pain, Widespread chronic pain, Chronic fatigue syndrome, Fibromyalgia.
- Adjustment Disorders: Somatoform disorder, Pain Disorder, Conversion Disorder (very rare).
- Prevalence and significance Estimates suggest that 20-46% of US children & adolescents suffer from chronic pain; but
- Reported prevalence rates vary from 4–88%, with the highest pain prevalence rates for headaches (up to 83%), abdominal pain (up to 53%), and musculoskeletal pain (up to 36%)
- More common in females; most common in early teen years
- Cost of pediatric chronic pain in the U.S. has been calculated at >$19.5 billion/year (Groenewald, et al., 2014)

[5 MINUTES of 45 minute session is complete]

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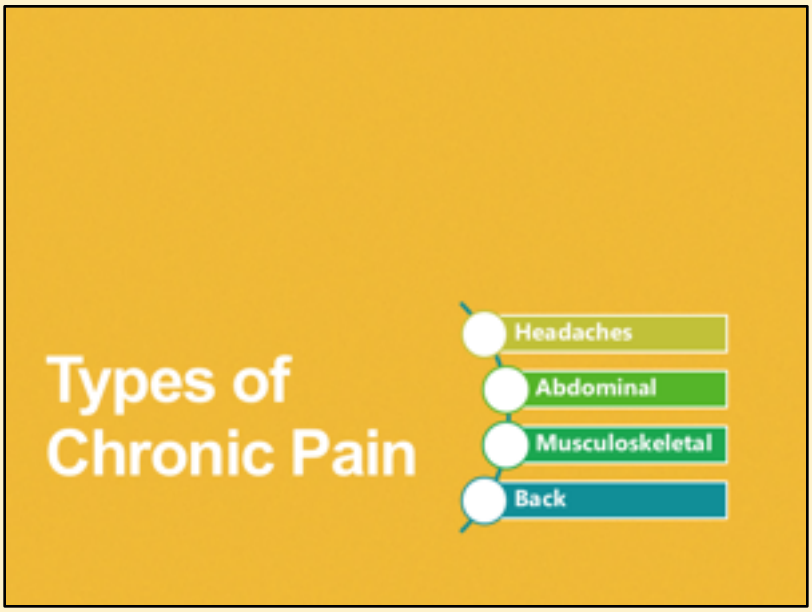

ASK: How does type of pain dictate the treatment plan?

Select participants willing to share their answers to this question.
Write on flipchart or whiteboard 1-5 word summary for each participant

[Limit discussion to 4 minutes]

READ: *these Key points (**if not included by participants**):*

Headaches: The etiology of the headache should dictate the treatment plan. Therefore, the goal of treating migraines and other headaches without known cause is pain relief or reduction to minimize associated functional disability. Types: Tension, Migraine, Pseudo Tumor Cerebri, Persistent >15 days/month for >3 months

Abdominal: Episodic or continuous abdominal pain >3 months; Typically described as nonradiating pain around umbilicus that lasts 1-3 hours; accompanying symptoms may include pallor, diaphoresis, nausea, vomiting, sleep disturbances, and changes in oral intake

Musculoskeletal

- Injury-related, illness-related, or Primary musculoskeletal pain. Pain can be localized to specific joints or muscle groups, like ankle injuries or back pain, or in multiple joints or muscle groups, like arthritis.
- Non-inflammatory Musculoskeletal Pain Syndromes: Growing Pains, Patello-Femoral Syndrome, Benign Joint Hypermobility Syndrome
- Neuropathic Pain Syndromes, like Complex Regional Pain Syndrome: Ongoing burning of limb after an injury or immobilization, leading to allodynia, hyperalgesia and autonomic nervous system dysfunction Important to diagnose and start treatment early
- Inflammatory musculoskeletal pain, like Juvenile arthritis (JA) effects nearly 300,000 US children and includes oligoarthritis, polyarthritis, systemic, enthesitis-related, juvenile psoriatic arthritis or undifferentiated.

Back: Important to complete a good pain assessment, musculoskeletal and neurological exam to diagnose: Tumor of the spine, Infection of the spine, Spondylosis

[10 MINUTES of 45 minute session is complete]

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ASK: What is the difference between an acute and chronic pain management plan?

Select participants willing to share their answers to this question.
Write on flipchart or whiteboard 1-5 word summary for each participant

[Limit discussion to 4 minutes]

READ: *these Key points (**if not included by participants**):*

At risk groups for under recognition and inadequate treatment of chronic pain include:

- Infants and children
- Certain racial and ethnic groups
- Females
- Patients with a current or past history of substance abuse
- Cognitively impaired, nonverbal patients

[15 MINUTES of 45 minute session is complete]

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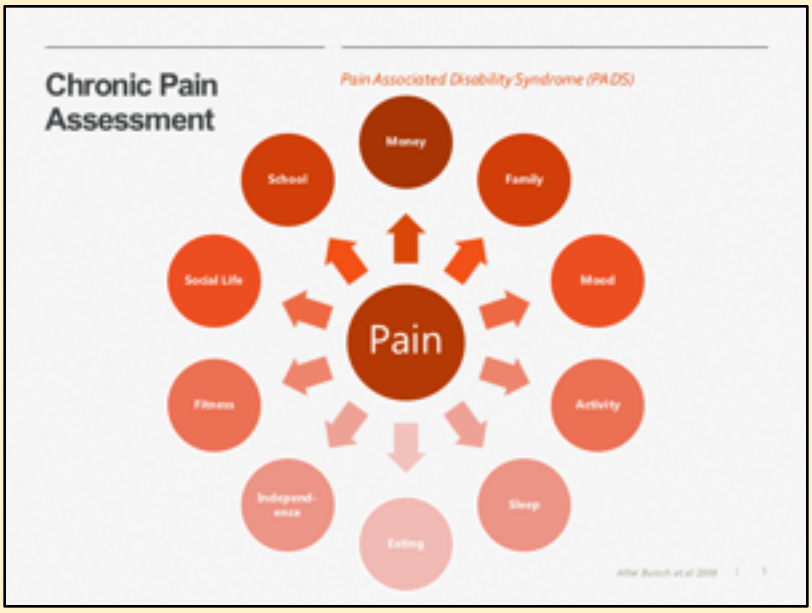

READ:

- Pain is not just a number on an intensity scale, but how the pain impacts the child and family.
- Multidimensional assessment tools are used to assess chronic pain and include items about pain intensity, location, quality and the impact of pain on function and mood.
- The PADS model (1998) addresses many areas that can put a child at risk for disability with chronic pain.
- It is important to monitor risk factors and have safety nets in place for children to achieve optimal health behaviors.

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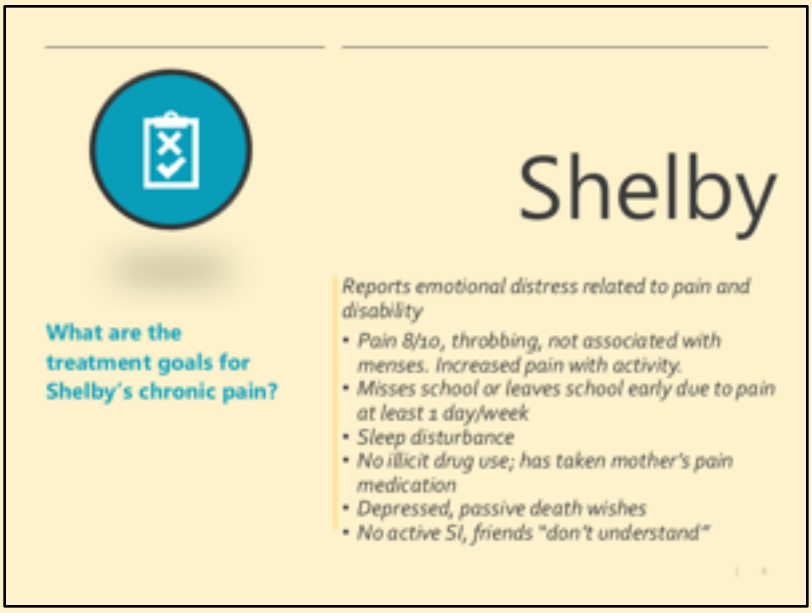

READ: Shelby is a previously healthy 15-year-old obese female with 2 years of back pain without history of trauma. Slight scoliosis $<15^0$ Menarche at 12 years, regular menses, She denies sexual contacts both voluntary and unwanted. Her mother has fibromyalgia, and is home on disability. Her sister is a freshman at a College 500 miles from home

- Her physical exam is unremarkable, other than the deconditioning common with chronic pain. Shelby stands with most of her weight centered over her right foot, with the left hip and shoulder elevated and the left knee and hip slightly flexed. There is exaggerated lumbar lordosis (swayback).
- Her abdominal muscles are weak, and there is marked tenderness to palpation over her lumbar region and lumbar paraspinal muscles.
- She has a negative Straight Leg Raise test.
- Shelby reports emotional distress related to her pain and disability.
- She enjoyed school and socializing with friends, but now really only has one friend who also has chronic abdominal pain from IBD.
- She is very worried about her future. She denies suicidal ideation or plan, but she does report some passive death wishes.
- Her sleep is poor: she has difficulty falling asleep, awakens in the night from pain, and has difficulty awakening in the morning.
- She doesn't use alcohol or any medications except ibuprofen and acetaminophen, which don't work for her. She has been treated with Flexeril in the past and her mother has given her one of her hydrocodone pills, but it didn't work either. ***[20 MINUTES of 45 minute session is complete]***

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READ: Pair up for this "Pair and share activity." You have 5 minutes to outline at least 5 realistic treatment goals and different corresponding treatments to help achieve these goals for Shelby.

[Limit discussion to 5 minutes]

Select participants from each group willing to share their answers . Write on flipchart or whiteboard ***[Limit discussion to 5 minutes]***

Place a ✓ by those items that are repeated by the groups.

ADD: *this Key point (****if not included by participants):*** Although the typical goal of pain treatment is to relieve or significantly reduce pain intensity and severity, the primary goal for the patient and family suffering with chronic pain is to **restore function**. Even when treatments do reduce pain intensity, they may not improve physical, emotional, and social function. Chronic pain treatment requires a coordinated, comprehensive, interdisciplinary approach to address all the dimensions of the child's condition and family functions. Active patient and family participation is needed to identify and attain individualized pain treatment goals.

- Restore function: Physical, emotional, & social
- Decrease pain
  - Reduce or eliminate underlying cause of pain when possible
  - Use individualized, multimodal, interdisciplinary, pain treatment plans
- Correct secondary consequences of pain
  - Postural deficits, weakness, overuse
  - Maladaptive behavior, poor coping

[30 MINUTES of 45 minute session is complete]

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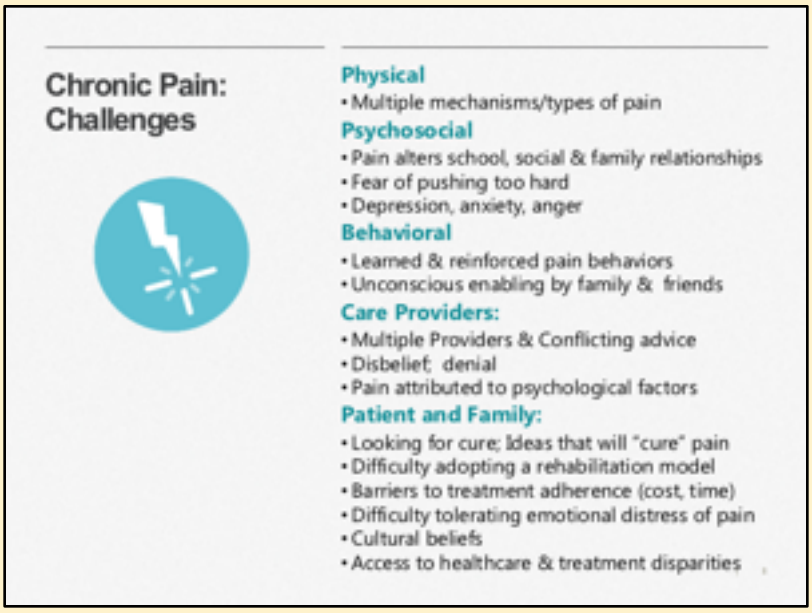

READ: Chronic pain treatment presents a complex challenge. Limiting physical activity to prevent or protect the child from pain leads to decreased physical activity, deconditioning, and secondary pains that leads the child and family to further limit physical activities.

- It is counterintuitive to the child or family to consider the benefits of increasing physical activity as a pain treatment and therefore it takes time to unlearn previously reinforced behaviors.
- Just as pain alters family & social interactions, changing these interactions will be difficult but necessary to encourage more positive coping patterns.
- Providers may have been slow to refer to a specialist and therefore reinforced an acute pain treatment model with repetitive diagnostic tests and multiple trials of medications and/or a wait and hope she grows out of it treatment plan.
- Families with lower resources and limited social supports have more difficulty accessing affordable care and a harder time adhering to care recommendations

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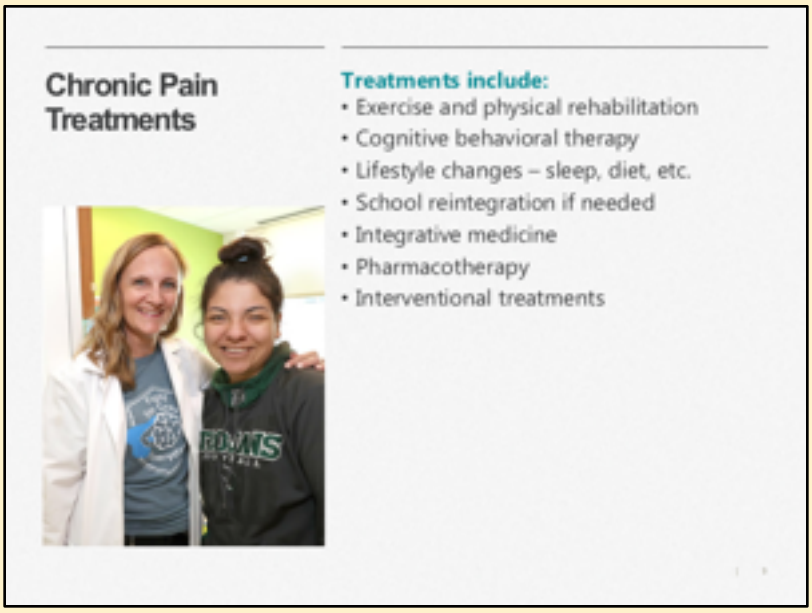

READ: Treatments for chronic pain are multimodal; but the results of studies of various treatments for chronic pain are sobering.

"The best evidence for pain reduction averages roughly 30% in about half of treated patients, and these pain reductions do not always occur with concurrent improvement in function."

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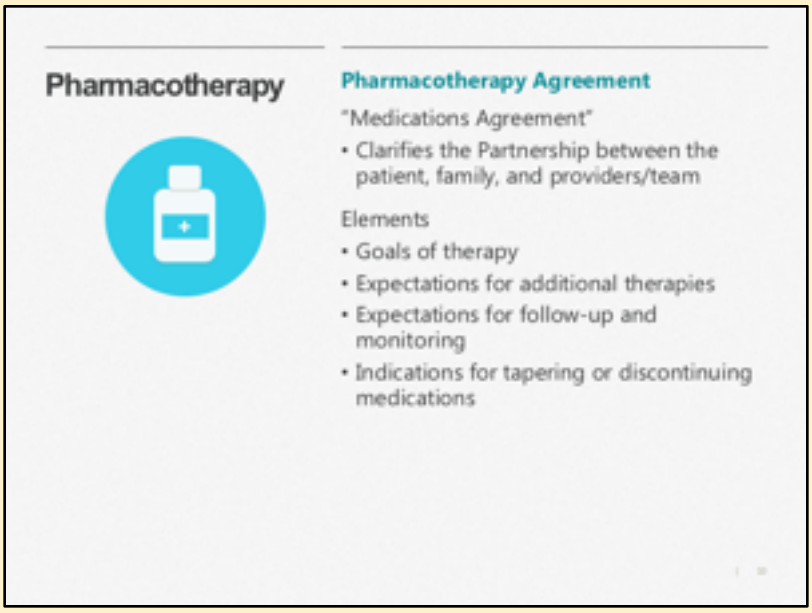

ASK: Who is familiar with a Pharmacotherapy Agreement and uses one in your clinical practice?

Select participants willing to share their answers to this question.

[Limit discussion to 2 minutes]

ADD:** this Key point (**if not included by participants):

A Pharmacotherapy Agreement is a written agreement to help outline chronic pain treatment plan.

- Analgesics are NOT primary treatment for pediatric chronic pain.
- Instead, medications may target depression, anxiety, & insomnia. Medication use may be off label for pediatric patients.
- Opioids are rarely used to treat chronic pain in children, unless there is an organic cause and strong evidence to support opioid therapy (for example, repeated disruptions in skin integrity with epidermolysis bullosa or fractures with osteogenesis imperfecta)
- The CDC guidelines for chronic opioids use were not intended for patients under 18 years of age due to lack of evidence.

[35 MINUTES of 45 minute session is complete]

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READ: Biobehavioral interventions are the mainstay for pediatric chronic pain management. Treatments address the affective, cognitive, behavioral, sociocultural & spiritual dimensions of pain to diminish pain and focus on restoring function, supporting positive coping, and help to relieve suffering associated with chronic pain.

- A chronic pain flare is a sudden increase in pain that may last hours to days or weeks. It is distinct from "breakthrough pain."
- Management of pain flares should focus on identifying and addressing triggers: Stress, injury, lack of sleep, exercise, hormones, weather changes are common triggers.
- Educate your patients about: the complexities of chronic pain and the limitations of medical treatments
- Empower your patients and families with knowledge to actively participate in managing pain rather than being a victim of pain.

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ASK: Which of the treatments you use in clinical practice would you recommend for Shelby?

Select participants willing to share their answers to this question.

[Limit discussion to 2 minutes]

ADD:** this Key point (**if not included by participants):

- Collaboration is essential: Clear communication among health care team members is critical, including an accurate pain diagnosis and appropriate treatment plan that includes realistic goals.
- Multidisciplinary treatment with cognitive retraining is necessary for Shelby to make progress with both her functional and pain management goals especially since earlier therapies which included nonopioids and taking her mother's opioids were not effective.
- Modifying lifestyle activities is an integral part of treatment plan: such as rolling back pack, extra set of books at school, allow to stand in class, non-contact, physical education activities, like walking, swimming, yoga, dance, rather than basketball or gymnastics. Bedtime, wake-time – even on weekends. Pace return to school and physical education.
- When after 6 weeks, Shelby reports she still has back pain and it is still worse during her menstrual period, but her pain is less, and she has improved mobility, consistent school attendance, improved mood, positive social interactions, and reports a better quality of life- You next focus on flare plans and stress plans.

[40 MINUTES of 45mins complete]

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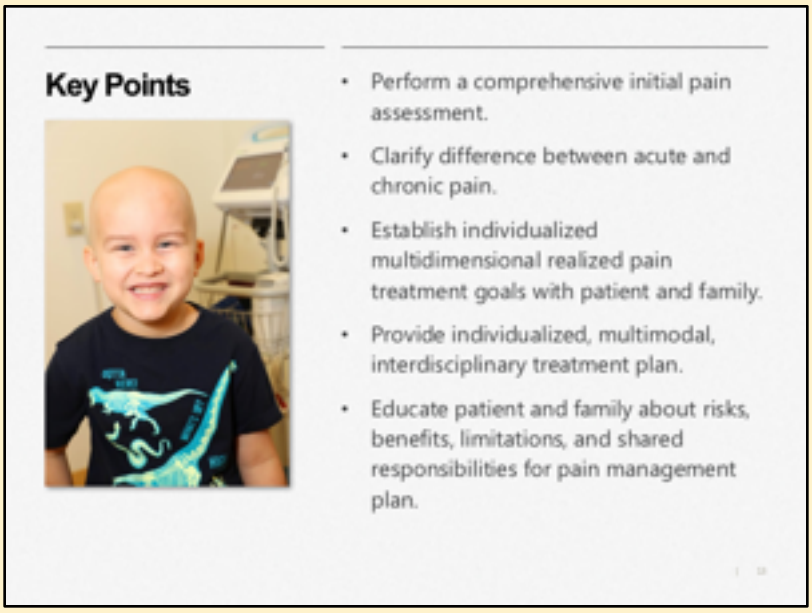

READ: *The key points on the slide*

ASK: Are there any questions?

[45 MINUTE SESSION COMPLETE]