Study Question:
What are the functional and pain outcomes of patients lost to follow up in a pediatric pain management clinic?

Introduction:
Pediatric patients with chronic pain can have severe disability and impaired functionality. These children are at risk for continuing on into adulthood with physical and psychologic complaints affecting their daily lives. Intensive multidisciplinary pain management focused on functionality has shown promise in improving outcomes. We created a survey to evaluate our patient’s current functional outcomes and pain levels after attending at least one multidisciplinary evaluation and being lost to follow up for subsequent evaluations. We hypothesize that these patients would have continued pain, disability and still be seeking new diagnoses and treatments.

Methods:
A phone survey was created to assess pain, sleep, school attendance, functionality, pain management techniques, and barriers to follow up. Patients/parents who’d attended the pain clinic for at least one evaluation, but who had not been seen in > 6 months were contacted by phone. Exclusion criteria: recently inpatient, followed by adult specialists, or recent surgery/new injury. 55 children were evaluated, 45.5% male and 54.5% female. Ages 6-22 years. Self-report was used for patients > 15 years old. Primary goal was to evaluate current pain and functionality. A secondary goal was to compare patient outcome with specific diagnoses.

Figure 1: Patient pain groups and comorbid diagnoses

Results:
- While 73% of the patients still had pain, pain only worsened in severity in 11% and increased in frequency in 13%.
- Pain severity was improved in 42% and pain was less frequent in 33% of patients.
- Patients with postoperative pain were most likely to report resolved pain and patients with CRPS were most likely to report improved pain.
- Appointments:
  - Minimum = 1 visit, Maximum = 8 visits
  - Mean = 2, Median = 1, Mode = 1
- 76% were attending school full time.
- 35% saw improved school attendance and only 7% had worsened school attendance.
- Missed an average 2.2 days per month (26 children -0 days).
- 7.5 hours of sleep per night on average.
- 29% saw improved sleep, 15% had worse sleep.
- 65% said pain did not interfere with any daily activities.
- Patients were active 4.3 days/week on average.
- 60% of patients followed up with a counselor/psychologist, 27% found the visits helpful.
- Distraction techniques such as deep breathing and music therapy were the most beneficial.
- 91% were prescribed medications, but only 13% were still taking those medications when surveyed.
- A significant finding was decreased use of medical resources.
- Reasons for loss to follow up included: pain improvement or resolution, seeking other treatments, or time conflicts.

Discussion:
- Short-term outcomes following multidisciplinary therapy in pediatric chronic pain patients lost to follow-up have not been well studied.
- Most still had pain (73%), however the pain was reduced, the patients were functional, attending school full time, seeking less medical resources and using less pain medications.
- The majority participated in physical therapy, but 40% did not see a psychologist/counselor beyond initial assessment.
- Postoperative pain patients were most likely to report pain resolution and patients with comorbid neurobehavioral and mood disorders continued to be the most affected by their pain.
- Further studies are warranted to evaluate whether outcomes are due to multidisciplinary pain management versus the natural course of pediatric chronic pain.

References: