

# Survey: SCD Pain Indirect Evidence Survey

## SCD Pain Indirect Evidence Survey

Dear SCD Pain Panel,

As a panel, we need to determine the most appropriate populations from which to draw the indirect evidence for our PICO questions. To achieve this goal, I have created a survey that I am asking each of you to complete to assist with reaching consensus for these questions and populations. Not all questions require indirect evidence and I have marked these in the survey. If you disagree about the need for indirect evidence, please state this and the reason why under that question.

Indirect evidence refers to research that does not align with and inform all four elements of the intended PICO question posed for a systematic review and/or guideline: population, intervention, comparator, outcome. Indirect evidence is research where the PICO question addressed by that indirect study is substantially different from the intended question in at least one of the four PICO elements, most commonly population.

Thank you very much for your time and support. Please start with the survey now by clicking Next below.

Amanda and Eddy

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\* Please enter your name:

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## Acute Pain

\* Question #1:

**Population: Children and adults with sickle cell disease who seek treatment for acute pain**

**Intervention:**

- reduced time to first dose (<1 hour from arrival)
- more frequent reassessment and dosing of pain medication (<30 minutes)
- tailored dosing

**Comparison: >1 hour (for time to first dose); >30 min (for reassessment and dosing)**

**Outcomes:**

- Number of analgesic doses administered
- Time to first analgesic dose
- Time to second analgesic dose
- Total morphine equivalents administered
- Rate of hospitalization
- Rate of discharge home from the ED
- Length of stay in ED
- Rate of admission to observation unit
- Improved pain intensity defined as: percent of patients who achieve  $\geq 30\%$  reduction in pain score or  $\geq 2$  point reduction in pain score or  $\geq 20\text{mm}$  reduction in VAS score from first score to last score
- Percent of patients who achieve reduction in pain score back to 'baseline' at disposition
- Satisfaction with care
- Adverse Events
- Rate of respiratory depression events (defined as RR below X requiring intervention by MD)
- Rate of hypoxic events
- Rate of naloxone administrations

**Indirect evidence does not apply to this question.**

- Agree
- Disagree

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If you disagree, please use this space to explain why.

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**\* Question #2:**

**Population:** Children and adults with sickle cell disease who seek treatment for acute pain

**Intervention:** Non-opioid pharmacologic therapies

- NSAIDs
- NMDA Antagonists
- Mixed ARI/Opioid (e.g. Tramadol, Tapentadol)
- Adrenergic agonists (Clonidine) • Cannabinoids
- Local anesthetics

**Comparison:** opioids alone

**Outcomes:**

- Decrease in total morphine equivalents consumed
- Improved pain intensity defined as: percent of patients who achieve  $\geq 30\%$  reduction in pain score or  $\geq 2$  point reduction in pain score or  $\geq 20$ mm reduction in VAS score from first score to last score
- Decreased length of stay
- Decreased time to reduction in pain intensity
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Improved acute functional outcome (YAPFAQ)
- Patient satisfaction
- Reduction in opioid-related side effects

**Does indirect evidence apply to this question?**

Yes

No

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**If yes, please select all appropriate indirect populations from the list below and describe any others.**

Post-surgical

Other

**Please suggest any specific indirect evidence that may be applicable below.**

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**Question #3:**

**Population:** Children and adults with sickle cell disease who seek treatment for acute pain

**Intervention: non-pharmacologic therapies**

- psychological interventions (distraction/Virtual reality, guided imagery, relaxation, mindfulness, spirituality)
- complementary and alternative medicine (acupuncture, other)

**Comparison: Pharmacologic therapy (opioids, NSAIDs, other)**

**Outcomes:**

- Improved pain intensity defined as: percent of patients who achieve  $\geq 30\%$  reduction in pain score or  $\geq 2$  point reduction in pain score or  $\geq 20\text{mm}$  reduction in VAS score from first score to last score
- Improved pain coping strategies
- Decrease in total morphine equivalents consumed
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Decreased length of stay
- Return to baseline pain

**Does indirect evidence apply to this question?**

Yes

No

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**If yes, please select all appropriate indirect populations from the list below and describe any others.**

Post-surgical

Other

**Please suggest any specific indirect evidence that may be applicable below.**

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**\* Question #4:**

**Population: Children and adults with sickle cell disease who seek treatment for acute pain**

**Intervention: Treatment in an acute pain center (i.e, day hospital, observation unit, etc.)**

**Comparison: Regular emergency department care**

**Outcomes:**

- Wait times for care
- Time to first analgesic dose
- Time between analgesic doses
- Need for emergency department care
- Hospitalizations
- Missed school/work days
- Improved pain intensity defined as: percent of patients who achieve  $\geq 30\%$  reduction in pain score or  $\geq 2$  point reduction in pain score or  $\geq 20\text{mm}$  reduction in VAS score from first score to last score
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Cost
- Patient satisfaction with care

**Indirect evidence does not apply to this question.**

- Agree
- Disagree

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If you disagree, please use this space to explain why.

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**\* Question #5:**

**Population:** Children and adults with sickle cell disease hospitalized for treatment of acute pain

**Intervention:** Basal opioid (IV/oral long acting) in addition to on demand dosing

**Comparison:**

- on demand opioid dosing alone
- scheduled intermittent opioid dosing

**Outcomes:**

**Clinical Outcomes**

- Improved pain intensity defined as: percent of patients who achieve  $\geq 30\%$  reduction in pain score or  $\geq 2$  point reduction in pain score or  $\geq 20$ mm reduction in VAS score from first score to last score
- Decreased length of stay
- Decreased time to reduction in pain intensity
- Patient satisfaction with care
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Improved acute functional outcome (YAPFAQ)
- total opioid consumed in 24 hr period (i.e., either oral or parenteral mg opioid equivalents)
- PGIC (Pt global impression of change)
- CGIC (Clinician global impression of change)

**Adverse Events**

- Rate of respiratory depression events (defined as RR below X requiring intervention by MD)
- Rate of hypoxic events
- Rate of naloxone administrations
- Rate of acute chest events

Indirect evidence does not apply to this question since patients with SCD are not opioid naïve.

- Agree
- Disagree

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If you disagree, please use this space to explain why.

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## Chronic Pain

**\* Question #6:**

**Population: Children and adults with sickle cell disease who suffer from chronic pain with NO identifiable cause defined as:**

- chronic pain
- non-crisis pain
- headache
- back pain
- widespread pain
- neuropathic pain
- inflammatory pain
- nociceptive pain
- ischemic pain

**Intervention: Non-opioid drugs**

- Amine reuptake inhibitors
- Membrane stabilizers
- NSAIDs
- NMDA antagonists
- Adrenergic agonists
- Amine reuptake inhibitor mixed
- cannabinoids
- local anesthetics
- opioid antagonists
- oral steroids
- nutraceuticals (vitamins C,D,A)

**Comparison:**

- Opioids alone
- Usual care

**Outcomes:**

- Health care encounters for pain
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Functional Outcomes
- Sleep
- Mood (Anxiety, depression)
- Reduction in chronic opioids (daily dose oral morphine equivalents)
- Pain Intensity
- PGIC (Pt global impression of change)
- CGIC (Clinician global impression of change)

**Does indirect evidence apply to this question?**

- Yes
- No

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**If yes, please select all appropriate indirect populations from the list below and describe any others.**

- Fibromyalgia
- Neuropathic pain
- Migraines
- Chronic low back pain
- Other

Please suggest any specific indirect evidence that may be applicable below.

**\* Question #7:**

**Population:** Children and adults with sickle cell disease who suffer from chronic pain with an identifiable cause defined as:

- avascular necrosis
- leg ulcers
- bone infarction
- other

**Intervention:** Non-opioids drugs

- Amine reuptake inhibitors
- Membrane stabilizers
- NSAIDs
- NMDA antagonists
- Adrenergic agonists
- Amine reuptake inhibitor mixed
- cannabinoids
- local anesthetics
- opioid antagonists
- oral steroids
- nutraceuticals (vitamins C,D,A)

**Comparison:**

- Opioids alone
- Usual care

**Outcomes:**

- Improved pain intensity
- Pain coping strategies
- Reduction in chronic opioids (daily dose oral morphine equivalents)
- Health care encounters for pain
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Functional Outcomes
- Sleep
- Mood (Anxiety, depression)
- PGIC (Pt global impression of change)
- CGIC (Clinician global impression of change)

**Does indirect evidence apply to this question?**

- Yes
- No

**If yes, please select all appropriate indirect populations from the list below and describe any others.**

**Avascular Necrosis**

- Osteoarthritis
- Avascular necrosis in cancer
- Other

### **Bone Infarction**

- Osteoarthritis
- Other

### **Leg Ulcers**

- Venous ulcers
- Diabetic ulcers
- Other

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**Please suggest any specific indirect evidence that may be applicable below.**

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### **\* Question #8:**

**Population: Children and adults with sickle cell disease who suffer from chronic pain**

**Intervention: Non-pharmacologic therapies**

- **Self-management interventions**
- **Coping skills**
- **psychological interventions (Cognitive behavioral therapy, Acceptance and commitment therapy)**
- **mindfulness/meditation**
- **Passive therapies (TENS unit, heat)**
- **Active therapies (Physical therapy/exercise)**
- **complementary and alternative medicine (acupuncture)**

**Comparison:**

- **Opioids alone**
- **Usual care**

**Outcomes:**

- **Improved pain intensity**
- **Pain coping strategies**
- **Reduction in chronic opioids (daily dose oral morphine equivalents)**
- **Health care encounters for pain**

- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Functional Outcomes
- Sleep
- Mood (Anxiety, depression)
- PGIC (Pt global impression of change)
- CGIC (Clinician global impression of change)

Does indirect evidence apply to this question?

- Yes
- No

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If yes, please select all appropriate indirect populations from the list below and describe any others.

- Fibromyalgia
- Neuropathic pain
- Migraines
- Chronic low back pain
- Other

Please suggest any specific indirect evidence that may be applicable below.

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**\* Question #9:**

**Population: Children and adults with sickle cell disease who suffer from chronic pain**

**Intervention: Chronic opioid therapy**Chronic opioid therapy defined as: patients receiving 70 days or more supply of opioids in a 90-day period (PMID: 26476264) index opioid prescription in past 4 months followed by at least 2 more opioid prescriptions and had at least 60 days'supply of opioids within the 4-month period. The index prescription had to follow a period of at least 3 months without an opioid prescription fill (PMID: 27643834)

**Comparison:**

- No opioids
- Periodic opioids

**Outcomes:**

- Long-term benefit (pain relief)
- Long-term harm (defined broadly)
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Functional outcomes
- Risk stratification
- Opioid induced hyperalgesia (OIH)
- Health care encounters for pain
- Hospitalization rate



- Sleep
- Mood (Anxiety, depression)

Does indirect evidence apply to this question?

- Yes
- No

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If yes, please select all appropriate indirect populations from the list below and describe any others.

- Fibromyalgia
- Neuropathic pain
- Migraines
- Chronic low back pain
- Other

Please suggest any specific indirect evidence that may be applicable below.

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**\* Question #10:**

**Population:** Children and adults with sickle cell disease who suffer from chronic pain

**Intervention:** Chronic monthly transfusions to suppress HbS<30%

**Comparison:**

- No transfusion
- HDU

**Outcomes:**

- Health care encounters for pain
- Health-related quality of life (general domains and pain specific domains including Pain Interference and Pain Behavior)
- Functional Outcomes
- Sleep
- Mood (Anxiety, depression)
- Reduction in chronic opioids (daily dose oral morphine equivalents)
- Pain Intensity
- PGIC (Pt global impression of change)
- CGIC (Clinician global impression of change)

Indirect evidence does not apply to this question.

- Agree
- Disagree

**If you disagree, please use this space to explain why.**