

# Integration of Life Care Specialists Into Orthopaedic Trauma Care to Improve Postoperative Outcomes: A Pilot Study

Patients with orthopaedic injuries are particularly vulnerable to experiencing poor pain outcomes and opioid-related risks after an acute injury. This pilot study assessed the feasibility and impact of integrating a Life Care Specialist (LCS) into orthopaedic trauma care settings.

The LCS is a paraprofessional behavior-based "pain coach" who delivers patient-centered opioid safety education, trains patients on nonpharmacologic pain management approaches, conducts opioid risk assessments, and assists with coordinating care.

## Citation:

Giordano, N. A., Seilern Und Aspang, J., Baker, J., Medline, A., Rice, C. W., Barrell, B., Kirk, L., Ortega, E., Wallace, M., Steck, A., Schenker, M. L. (2022). Integration of Life Care Specialists Into Orthopaedic Trauma Care to Improve Postoperative Outcomes: A Pilot Study. *Pain management nursing : official journal of the American Society of Pain Management Nurses*, S1524-9042(22)00100-X. Advance online publication.

<https://doi.org/10.1016/j.pmn.2022.03.010>

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## Methods:

- Prospective feasibility pilot study at a level 1 trauma center.
- Christopher Wolf Crusade, a nonprofit, trained all LCS in an immersive curriculum, which included shadowing multidisciplinary professionals and didactic coursework.
- LCS deliver personalized patient-centered interventions encompassing three main components: 1) Non-pharmacologic pain management strategies; 2) Opioid education; 3) Coordination of care and referrals (Fig. 1).
- Key outcomes included pain scores and morphine milligram equivalents (MME), or opioid dosages, measured from intake, during hospitalization, and at 2-week follow-up.

## Findings:

- Twenty-two percent of 121 total participants met criteria for moderate to severe risk of opioid misuse at initial hospitalization.
- On average, 2.8 LCS pain management interventions were utilized, most frequently progressive muscle relaxation (80%) and sound therapy (48%).
- Mean inpatient MME/day was 40.5, which was significantly lower than mean historical MME/day of 49.7 ( $p < .001$ ).
- Pain scores improved over time from admission to 2-weeks postoperatively ( $p < .001$ ).
- Nearly all participants agreed that the LCS was helpful in managing pain (99%).

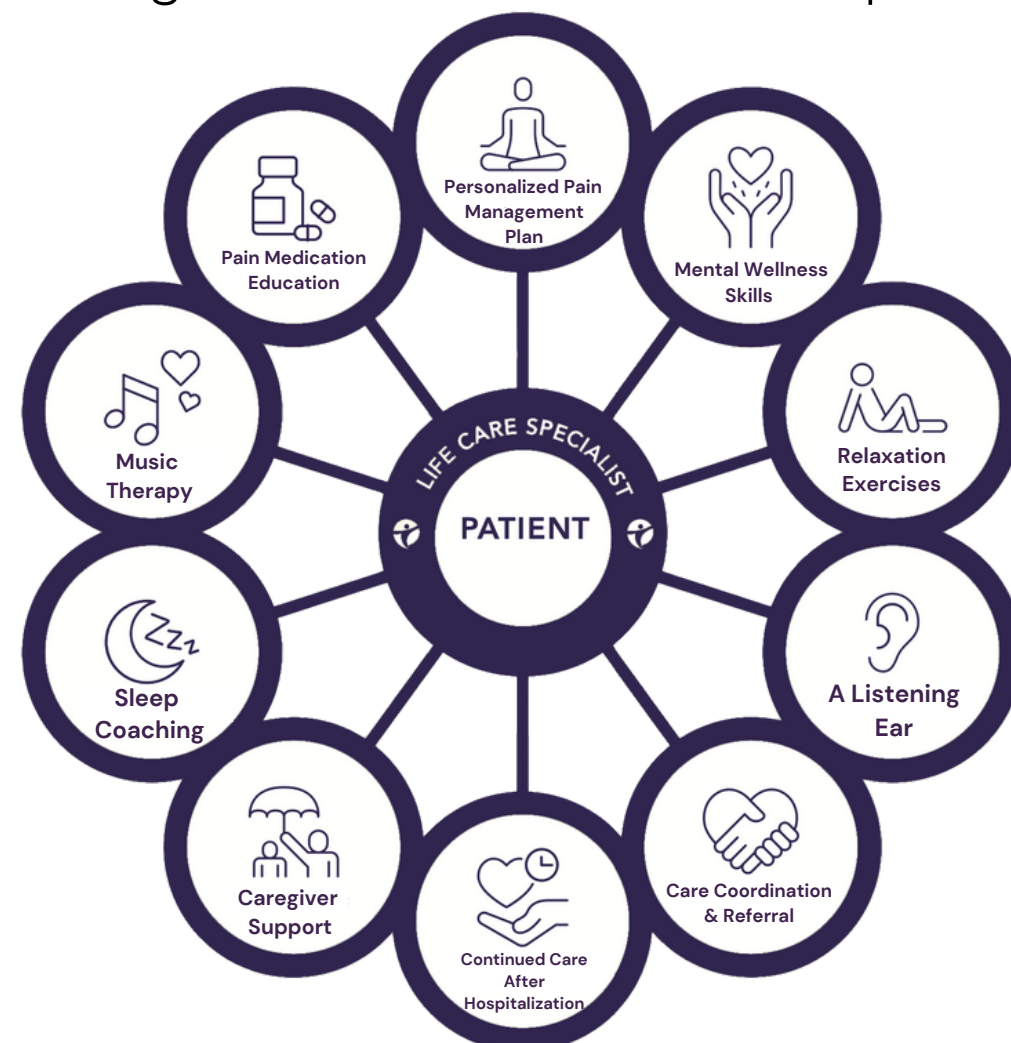


Figure 1. Life Care Specialist Interventions.

## Discussion:

This study found that integrating LCS into orthopedic trauma care is feasible in both inpatient and ambulatory settings. Participants who worked with an LCS reported improved pain and less on-going opioid utilization 2-weeks postoperatively. Participants reported high satisfaction working with an LCS. Collectively these findings underscore both the feasibility and impact of implementing an LCS into orthopaedic trauma care settings.