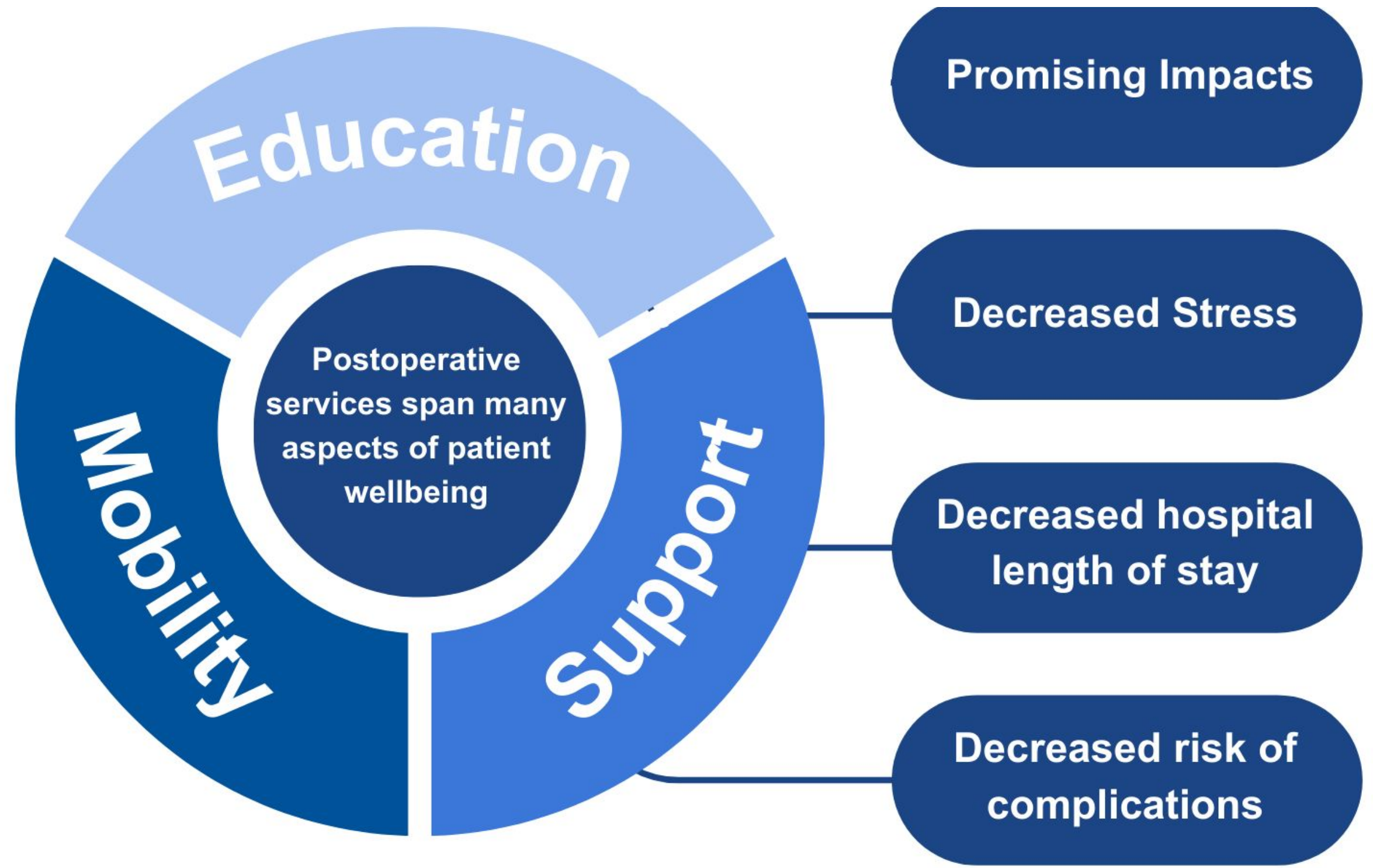


# BASS CONNECTIONS 2023-2024: SPINE SURGERY PATIENT NAVIGATORS

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## BACKGROUND

This project aims to improve access to services and outcomes of spine surgery patients through a multidisciplinary patient navigator program.



## GOALS & STRUCTURE

This innovative project investigates the effectiveness of education, social support, and mobility in alleviating postoperative burdens.

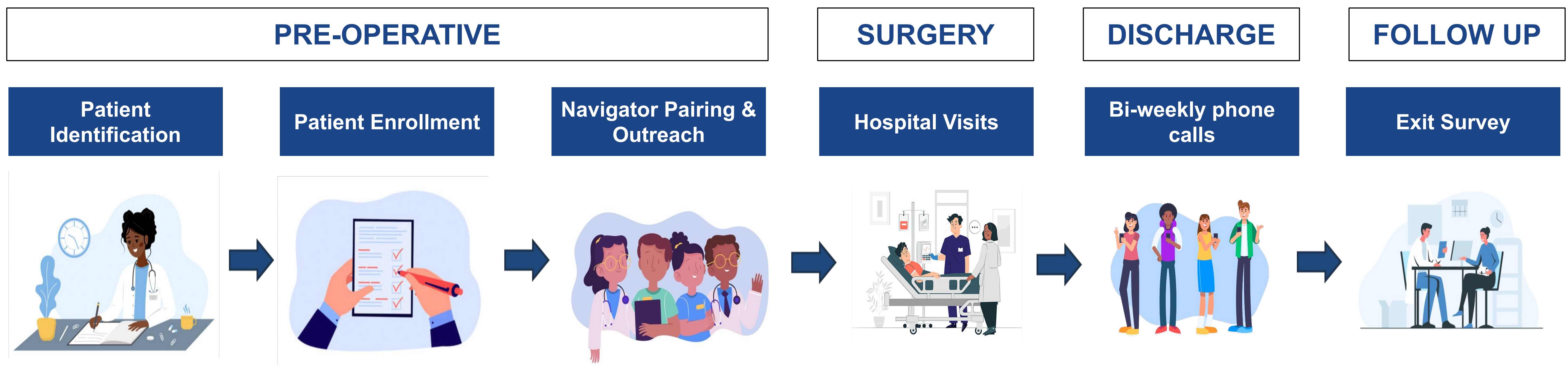
### Patient Engagement

- Teams of undergraduate and graduate students serve as liaisons between the patient and providers.
- Navigators enhance access to healthcare resources, expand social networks, and provide immediate postoperative mobility support through postoperative patient visits and biweekly patient calls to address mental and physical health concerns.

### Systematic Review

- Pods complete a thorough systematic or scoping Review of educational, social, and mobility barriers to care among spine patients in the U.S.
- Abstracts submitted for poster or oral presentation at a relevant conference and Duke Orthopaedic Surgery Departmental Research Day.

## PATIENT ENGAGEMENT



## SYSTEMATIC REVIEW

| EDUCATION  | SOCIAL SUPPORT  | MOBILITY   |
|--|---|--|
| <p><b>What is the impact of preoperative patient education on postoperative outcomes for spine surgery patients?</b></p> | <p><b>What is the impact of social support on post-operative outcomes in patients undergoing spine surgery?</b></p> | <p><b>What are prognostic factors associated with postoperative ambulation and lower extremity motor outcomes after cervical spinal cord injury?</b></p> |

→ **Background:** The spectrum of these preoperative spine surgery education materials in spine surgery is diverse and multimodal, yet their effect on postoperative outcomes is unclear.

→ **Screening:** Analyzed 20 studies based on 3,640 patients that met inclusion criteria.

→ **Findings:** Educational modalities were predominantly in-person. Pain was the most commonly reported clinical outcome, followed by costs & rates of surgery. Racial and ethnic demographic information and cost-effectiveness analyses were underrepresented.

→ **Conclusion:** Patient education increases patient satisfaction, but benefits on postoperative outcomes are not conserved across studies.

→ **Background:** Social support has been shown to improve outcomes (ie. LOS, pain, ED visits) after various surgeries, but to date there has been no review of the impact of social support on outcomes in spine surgery patients.

→ **Screening:** Analyzed 22 studies based on 11,702 patients reporting on the role of social support in spine surgery.

→ **Findings:** Being married, living with a roommate, or receiving a social support intervention has been linked to reduced length-of-stay and costs, lower readmission rates, and higher likelihood of home discharge.

→ **Conclusion:** Social support systems for spine surgery recovery may be an impactful resource for beneficial postoperative outcomes.

→ **Background:** To date, there has been no summative review of factors that predict functional recovery following cervical spinal cord injury (cSCI). Therefore, the review acts as a guide for the optimization of cSCI care.

→ **Screening:** Analyzed 69 studies based on 11,655 cSCI patients for factors that predicted functional motor recovery.

→ **Findings:** Longer intramedullary lesion length, older age and longer time to surgery, are associated with decreased postoperative ambulation. A few studies found conflicting results for the impacts of predictive factors like time to surgery and somatosensory evoked potentials.

→ **Conclusion:** Initial functional score, imaging findings, and patient specific factors should be carefully considered in patient care.