Prehabilitation Program – Evidence Review

The AHS Prehabilitation (Prehab) Program aims to reduce surgical risk and improve perioperative outcomes. The model developed draws from:

- Evidence that supports the use of preoperative interventions
- Strategies used in existing prehabilitation programs.

Evidence for Prehabilitation

Prehabilitation addresses key areas of risk before, during and after surgery using a coordinated multimodal and multidisciplinary approach [1, 2]. Based on prehabilitation studies, these programs are effective in reducing post-operative:

- Complication rates [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]
- Pulmonary complications [6, 10, 14, 15]
- ICU admissions [6]
- Length of stay in hospital [3, 6, 10, 11, 12, 13, 14, 16]
- Readmissions to acute care [17]
- Mortality [9]
- Non-home discharge [18]
- Declines in functional ability and impairment [3, 14, 18, 19]
- Declines in quality of life [3, 18, 19]

Integrating prehabilitation into current preoperative models offers a novel approach to perioperative care in line with population health management concepts [20, 21]. Traditional efforts to enhance recovery focus on the postoperative period, which might not be the ideal time for promoting behavior and lifestyle changes. The preoperative phase presents a unique 'teachable moment' when patients may be more open to structured behavioral interventions[22].

Conclusion

The AHS Prehabilitation Program enhances preoperative care pathways for Albertans preparing for surgery. Surgeons and perioperative teams are invited to collaborate in advancing prehabilitation practices for improved surgical outcomes. Contact us to contribute to this transformative approach in perioperative care.

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