Objective and Methods

In an effort to decrease the facility’s costs without compromising clinical outcomes for these patients, the facility introduced the Dolphin Fluid Immersion Simulation (FIS) mattress system into the postoperative protocol. Under the Dolphin FIS protocol, the flap incision is assessed daily, and the HOB elevated 10 - 20° for meals post-operatively as soon as 24 – 48 hours. The HOB is gradually increased to 30° after 48 hours post-op if the incision is free of complications. After two weeks at 30° is tolerated, and flap healing continues to progress, the HOB can then be raised to 45° in week 3. By week 4 post-op, the patient is placed in a sitting position for meals, and is out of bed for 15 minute increments by week five. Discharge planning occurs during week six, with the patient advancing to being out of bed for 1 - 2 hour increments. All other components of the protocol, including nutritional support, were unchanged.

Clinical outcomes for these patients and costs of this new therapy were tracked over the next year to determine if the Dolphin FIS system was effective.

Conclusions

Implementation of the Dolphin FIS mattress system into the post-operative care protocol for patients in the facility’s postoperative flap patients, led to incisional healing, successful flap closure, and improved patient comfort post- operatively during the study period.

Based on the clinical outcomes and ease of clinician use, as well as the significant cost savings documented, the Dolphin FIS mattress system has become the surface of choice in the facility's postoperative flap protocol. The plan is to move toward expanding use of the Dolphin FIS to other facilities in the system.
Cost Effective Care without Clinical Compromise: Incorporating the Dolphin Fluid Immersion Simulation® Mattress System into the Postoperative Care of Patients undergoing Myocutaneous Flaps

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