1. **Hospital Name**  
   Abington Hospital-Jefferson Health

2. **Title Of Initiative**  
   Reducing Postoperative Complications using Evidence Based Practice: An Interdisciplinary Approach to Early and Consistent Ambulation

3. **Abstract (Please limit this description to 250 words.)**  
   Early mobilization after surgery decreases pulmonary and thrombotic complications, improves bowel function, prevents decubitus ulcers, and reduces length of stay. Lack of a specific ambulation protocol created confusion amongst caregivers regarding appropriate ambulation goals for postoperative patients, difficulties in documentation and scarce accountability. Thus, the “Ambulation Program” with distinct protocols, incentive programs, and adjunct support was designed to delineate exact expectations, assist in documentation, and engage all members of the team, including the patient, to ensure adequate ambulation.

   To implement the Ambulation Program, protocol worksheets were designed by an interdisciplinary working group which outlines patient-specific ambulation requirements. These worksheets are posted in patient rooms so patients, families, and staff can regularly record and track the patient’s mobility progress. Comparison of pre- and post-intervention data demonstrated improvement in fulfillment of appropriate mobilization and compliance with nursing documentation.

   In conjunction with the worksheets, an incentive program was also developed utilizing game theory. The rewards program fosters collaboration, peer support, and accountability in promoting postoperative activity. Bi-weekly nominations by nursing staff and managers are made to an “Awesome Ambulator” (patient) as well as an “Awesome Ambulation Assistant” (staff member).

   A second incentive program, called W.A.G.S. (Walking after General Surgery), utilized Animal Assisted Therapy (AAT) dogs as motivation to increase patient compliance. In the year since the Ambulation Program’s implementation, no pneumonia or thrombotic events have been reported in the cohort; however, the long-term impact remains to be seen.

4. **What were the goals of your initiative?**  
   The Ambulation Program was developed with the goals of delineating exact expectations for each individual patient, assisting in accurate nursing documentation, and engaging all members of the team, including the patient, to ensure adequate, early ambulation and prevent postoperative thrombotic and pulmonary complications.
5. **What were the baseline data and the results of your initiative?**

Fortunately, for FY 2016, there have been no pneumonia occurrences on this particular unit. However, for FY 2016 the data showed that eleven (11) lower extremity DVTs occurred in the patient cohort. Interviews conducted with patients and review of nursing documentation revealed that most patients ambulated in the hallway between 1.3 and 1.8 times per day. This is <25% of what was determined to be expected by protocol. Audits are performed weekly to measure floor compliance with protocol posting, and monthly to assess actual patient compliance. (See attached graphs)

Compliance with posting/orientation to the protocols has been exceptional (consistently averaging 90-100%). Analysis of a subset of patients from each service shows variable rates of activity, but consistently well above baseline. In FY 2018 to date, there have been zero pneumonia occurrences reported and one lower extremity DVT that occurred in the patient cohort. This data is posted on the floor and distributed widely, leading to healthy competition among services, patients, and staff.

6. **Describe the interventions that were instrumental in achieving the results for your initiative.**

- **Interdisciplinary Working Group:** a strategic interdisciplinary surgical quality and safety subgroup was formed with a mission to reduce harm and improve patient outcomes. This collaborative working group is headed by a “Surgeon Champion” and consists of members of the nursing leadership team (managers and team coordinators), registered nurses, residents, nurse practitioners, and representatives from the CSQ. This working group, along with input from attending surgeons, designed detailed, procedure-specific ambulation protocols, using evidence-based guidelines. The protocols were then approved by all participating surgeons of each surgical specialty.

- Five separate procedure specific protocols were developed using evidence-based recommendations for various types of surgery: Laparoscopic Surgery, Laparotomy, Non-operative Patients, Thoracic Surgeries, and Ad Hoc. Ambulation expectations are therefore tailored and specific to patient needs.

- **Education:** All nurses, clinical associates, volunteers, faculty and resident physicians were educated on the intention of the established ambulation protocols and the shared responsibility for participation. In addition, patients and families are oriented by nurses and physicians to the ambulation protocols and informed that cumulative service line data comparison occurs. This orientation is done in the outpatient offices, the preoperative area, and on arrival to the inpatient floor.

- **Funding:** The reward program was sponsored by the Chairman of Surgery for the first 4 months of implementation. A grant was awarded for the subsequent 8 months.

- **W.A.G.S.:** An article published in the AORN Journal, the official journal of the Association of Perioperative Registered Nurses, states that “some of the goals that can be met by using trained and certified therapy animals are reducing stress preoperatively, motivating patients to have a positive attitude, promoting postoperative activity, and reducing the need for pain medication” (Miller & Ingram, 2000). Several certified Animal Assisted Therapy (AAT) dogs were sought out and recruited to volunteer for the Ambulation Program. Beyond their initial certifications, all dogs and their owners were
required to complete the organization’s volunteer orientation and these dogs work specifically with our postoperative patient cohort.

- **Volunteers**: Selected volunteers (particularly those studying physical therapy and medical practices) were trained on ambulating postoperative patients. A display board was developed to enhance communication between the nursing staff and the volunteers in order to establish the ambulatory status of the participating patients. Volunteers are then empowered to ambulate independently with these designated patients.

7. **Describe the key steps required to successfully replicate this initiative throughout the region. (Please limit this description to 100 words.)**

   Encouragement and protection (time/priorities) for all members to allow participation in this group is key. The needs and voices of all stakeholders (nursing, patients, families, CNAs, physical therapy, residents/faculty) should be heard in the group and respected when designing a novel program to address a specific and verified need. Start slow, make corrections and then gain steam. The celebration of success, encouragement of collaboration, and recognition by leadership and the institution have ingrained the new program into this unit’s culture. Minimal funding was required. Time, energy, encouragement, and teamwork made this program a great success.

8. **Explain how the initiative demonstrates innovation (Please limit this description to 100 words.)**

   This program was innovative in the multidisciplinary, ground up approach. Instead of top-down mandates regarding patient safety indicators, DVT prophylaxis orders, and clinical documentation requirements, this program was designed around specific patient needs and perceived barriers. Incentives for both, staff and patients, gamesmanship, and the pleasure to be gained by simply walking a dog enabled all participants to be enthusiastic about engaging in this collaborative approach to care. Improved outcomes and the act of sending congratulatory emails to attending surgeons when their patients won an “Awesome Ambulator” award facilitated universal faculty support.

9. **How does this initiative demonstrate collaboration with other providers within the continuum of care? (Please limit this description to 100 words.)**

   The personnel in the various surgical offices were educated on the program, and convey the expectations with the patient, prior to surgery. The staff in pre-admission testing also prepares the patients for their postoperative course. Many surgeons discuss this program with their patients in the pre-operative holding area and notify the patient that nursing will be getting them up to walk at a certain timeframe after surgery. The residents, APPs, nurses, and CNAs ensure that the protocols are executed throughout the patient’s hospital stay and verify that the expectation is to be continued after discharge.

10. **Explain ways in which senior leadership exhibited commitment to the initiative (Please limit this description to 100 words.)**

    Senior leadership has been exceptionally supportive of the multidisciplinary working group since inception. All relevant stakeholders have been protected in their consistent participation in the group. Clerical and data processing support have been available. Funding from the chairman of surgery and the grant has allowed the incentive program
to mature. Recognition of the program’s success is evident through various internal awards. The ongoing promotion and sharing of the program’s success with other units throughout the hospital have reinforced the culture of teamwork and embedded this program into everyday workflow.

11. Appendices (i.e., tables and graphs)

![Ambulation Protocol Worksheet Sample](image_url)

**Laparoscopic Abdominal Surgeries**

- Walking helps ensure a successful recovery by: promoting return of bowel function, alleviating gas pains, decreasing risk of developing blood clots, and preventing pneumonia.
- OOB and walking in hallways 4 hours post-operative, then every 2 hours while awake, at every meal, and out of bed to chair >4 hours.

Help us document YOUR Out of Bed progress:
- Check here if patient is OK per nursing staff to walk without nursing assistance.
- Date: _______ Time: _______

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>LENGTH OF WALK (e.g., 3 lap around unit, half 2 lap, one hallway)</th>
<th>WERE YOU ASSISTED? Y/N</th>
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*Dr. __________ discussed the importance of my ambulation protocol with me.*

Figure 1. Ambulation Protocol Worksheet Sample

Amalgamation Protocol

- [ ] Advance Lap
- [ ] Colorectal/Bari
- [ ] General Surgery
- [ ] Trauma
- [ ] Urology
- [ ] Vascular
- [ ] OBGYN
- [ ] Surg One/Thoracic/Plastic/Ortho

- [ ] Walking helps ensure a successful recovery by: promoting return of bowel function, alleviating gas pains, decreasing risk of developing blood clots, and preventing pneumonia.
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*Rev: 9/14/2017*
Figure 4. “Ambulation Station” Bulletin Board and “W.A.G.S.” Dog Walking with Patient