Evaluating Home Hospital Care for Postoperative Sleeve Gastrectomy

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Background

- The home hospital model for medical patients has been shown to be safe and effective.
- Incorporating sleeve gastrectomy postoperative care into home hospital has unknown outcomes.
- We performed a pilot randomized controlled trial to determine feasibility and preliminary efficacy with respect to utilization, quality, safety, and experience.

Methods

- Parallel, patient-level randomized controlled trial.
- Patients randomized to the home arm were transferred home after a minimum of three hours of observation in the post-anesthesia care unit, contingent on review by both the surgeon and the home hospital team.
- Patients received twice daily in-home nurse or paramedic visits and once daily provider visits.

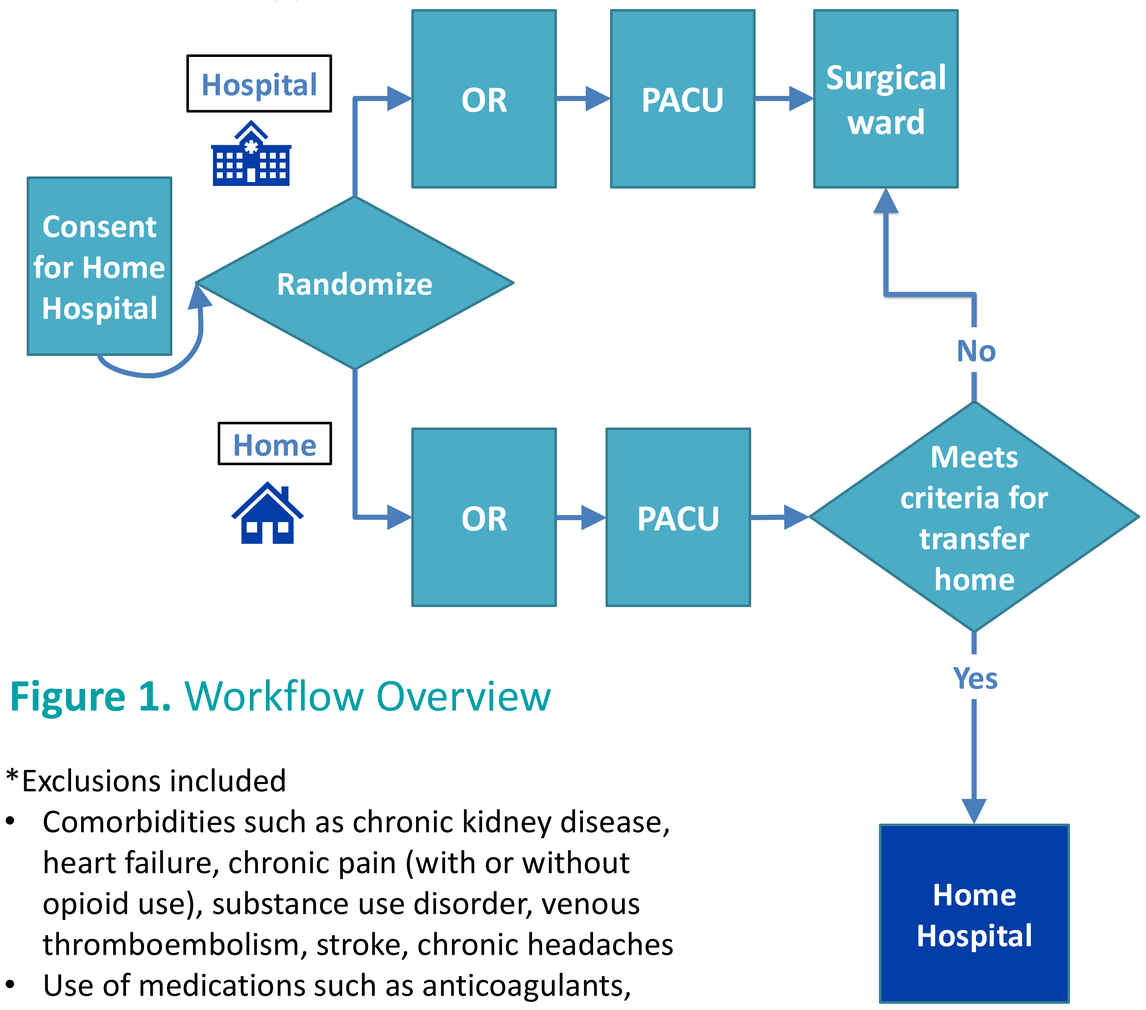

Figure 1. Workflow Overview

*Exclusions included
- Comorbidities such as chronic kidney disease, heart failure, chronic pain (with or without opioid use), substance use disorder, venous thromboembolism, stroke, chronic headaches
- Use of medications such as anticoagulants, beta-blockers, immunosuppressants, and supplemental oxygen
- Allergy to ketorolac
- Prolonged QTc interval

Home hospital care for post-operative sleeve gastrectomy is likely associated with similar quality, safety, and experience as the brick-and-mortar.

Results

Table 1. Patient Demographics

Characteristic	Home (n = 19)	Control (n = 15)
Age, %		
18-30	32	40
31-39	47	33
40+	21	27
Female Sex, %	100	87
Race/Ethnicity, %		
White	21	33
Black	16	20
Hispanic/Latin@	63	47
Other	0	0
Lived Alone, %	5	13
Primary Language, %		
English	79	93
Spanish	21	7

Table 2. Patient Healthcare Use

Measure	Home (n = 19)	Control (n = 15)
During Episode		
Length of stay, median hours	32	28
Intraop/Postop Occurrence		
Blood transfusion, n (%)	1 (5)	1 (7)
Urinary tract infection	N/A	1 (7)
Gastrointestinal tract bleed	1 (5)	N/A
Postop COVID-19 Diagnosis	1 (5)	1 (7)
Escalation		
Escalation to brick-and-mortar, n (%)	1 (5)	N/A
Escalated to ED, n (%)	1 (5)	N/A
Transferred to ICU, n (%)	1 (5)	N/A
Length of stay for escalation, mean hours	88	N/A

Table 3. Patient Experience

Measure	Home (n = 19)	Control (n = 15)
Picker experience questionnaire score, median	14	14.5
Body Q satisfaction with information, median	97.5	96.25
Body Q satisfaction with surgeon, median	100	100
Body Q satisfaction with medical team, median	100	100
Global experience score, median	10	10
Net promoter score, median	93	70

Discussion

- This pilot study shows that home hospital care for select post-operative sleeve-gastrectomy patients is feasible.
- Preliminary data suggest home hospital is associated with quality, safety, and experience outcomes that are similar to brick-and-mortar care.
- Future work will examine cost and physical activity outcomes.

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