

Showcasing the Success of a Multidisciplinary Approach to Total Joint Replacement

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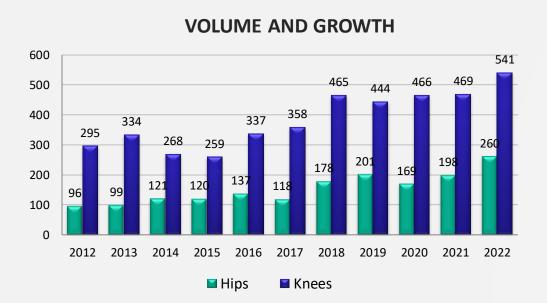






Background

The evolution of total joint replacement surgery over the past 10 years has been remarkable. Surgical techniques have advanced with the use of robotic approaches to TKR and anterior approaches to THR. The length of hospital stays has decreased from 3-5 days to less than 1 day, with some qualified candidates doing same day discharges. These factors have increased the necessity for consistent, evidence-based multidisciplinary care planning that begins long before the patient's hospital admission.









Project Design

Joint Commission Certification

- Initial Core Program Total Hip and Total Knee Certification 09/2013
- Recertification 01/2015
- Initial Advanced Total Hip and Knee Certification 04/2017
- Recertification 02/2019, 04/2021, 05/2023





Team Members

Multidisciplinary Performance Improvement Team

- Medical Director, Orthopedic Surgeon
- Chief Medical Officer
- VP and Chief Nursing Officer
- Director of Surgical Services
- Director of Inpatient Medical Services
- Manager 2 North Total Joint Center
- Anesthesiologist
- Hospitalist
- RN, 2 North
- RN, Preadmission Testing

- Charge RN, Preadmission Testing
- Manager, Surgery
- Manager, Perioperative Services
- Director, Rehabilitation Services
- Accreditation Manager
- Clinical Data Coordinator
- Director, QualityManagement
- Executive Director of Surgical Services

- Executive Director of Rehab Services
- RN, Ortho Office Nurse Navigator
- Manager of Ortho Office
- RN, Case Manager



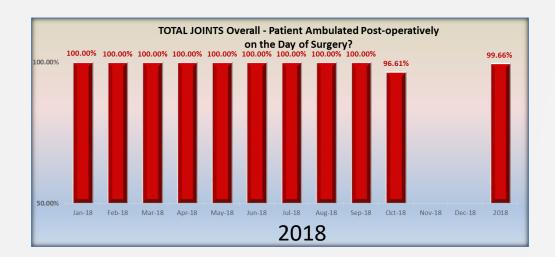


Results

Monthly Meeting Model

Changes over the past 10 years that have improved outcomes include:

- Elimination of drain use
- Elimination of urinary catheter use
- Elimination of CPM machines
- Early Mobilization:



Post-operative Ambulation:

2 hip cases were excluded due to fractures.

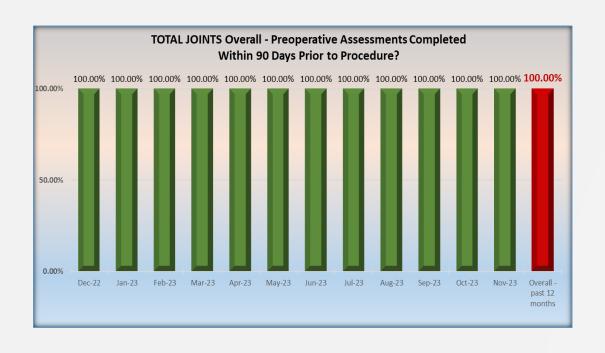
- 2 FALLOUTS in October! Knee cases first time this year!

 Both involved cases done later in the day with arrival times to 2N around 5:00 PM.
- Case 1 was bilateral PCA documented "did not attempt patient OOB due to unable to lift legs." Documentation must be linked to reason for no ambulation. Addressing OOB to chair, BSC, etc. cannot be counted. Patient was doing leg lifts at 22:10 but no attempt at ambulation found. No MD or RN documentation found addressing ambulation within the acceptable time frame. Patient did not ambulate until the afternoon on the day after surgery.
- Case 2 the patient RRT'd around 9:30 PM for chest pain and transferred to PCU. Documentation of first ambulation was found after midnight @ 01:53. No MD or RN documentation found addressing ambulation within the acceptable time frame.



Performance Measures

Pre and Postop Functional Assessments are now a mandatory requirement directly tied to CMS reimbursement:



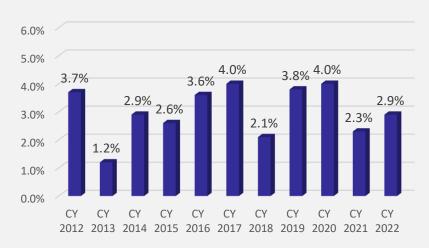


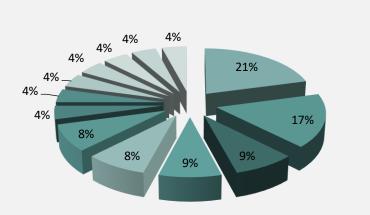


Quality Metrics

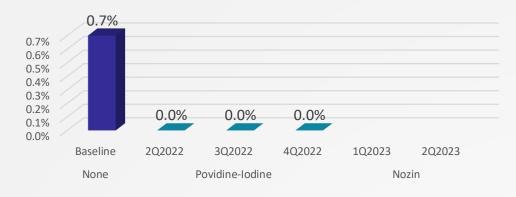
Rate of Infection Nasal Decolonization Methods

30-Day Readmission Rates

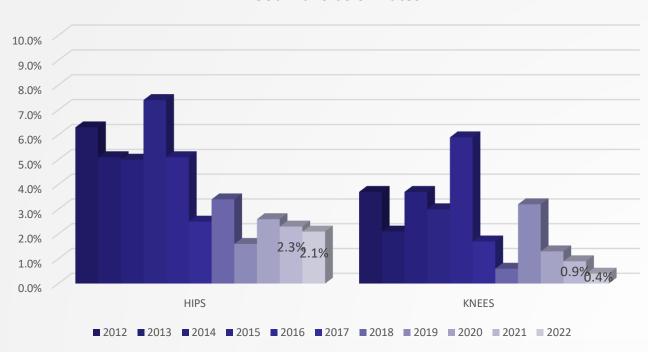




- Pain/injury/fall
- Infection
- Heart failure
- Hypotension
- GI Bleed
- Hematuria
- COPD exacerbation
- Syncope
- Depression/BH
- Acute kidney injury
- Pneumonia



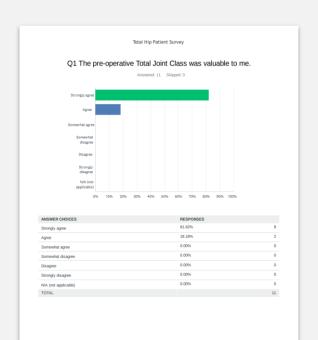
Blood Transfusion Rates

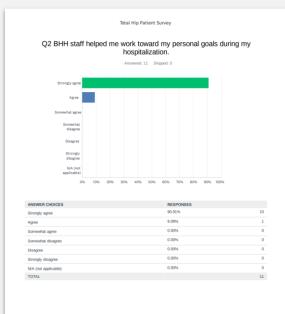


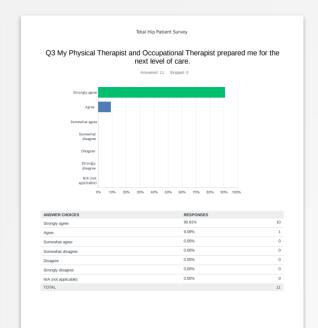


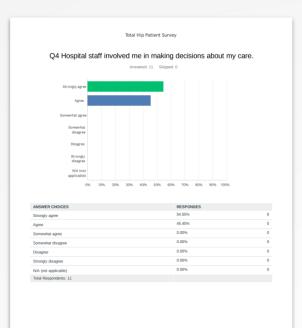
Patient Satisfaction

The entire staff was remarkable from pre-admission to discharge.









"Would recommend BHH again and again. Wonderful staff!"

"First class in every way."

"Each and every staff member deserves to be recognized. Their smiles, laughter, and helpful hands were a God send." "Best ever, thanks for making my stay awesome."

"Perfect"



BAPTIST HEALTH®

The Road Ahead

	The second second		
	*Inpatient Criteria	Outpatient Criteria	Same-Day Discharge Criteria
Status	(Discharge after POD 1)	(Discharge on POD 1)	(Discharge before 12 MN DOS)
AGE	>80 years	>75 years	<75 years
Distance from Care	Lives > 20 km away	Lives > 20 km away	Lives within 20 km of hospital
Functionality	Up and Go Test > 10 Seconds	Up and Go Test > 10 Seconds	Up and Go Test <10 Seconds
ASA	<u>≥</u> III	III	1 & 11
Time of Surgery	Any time of the day	Any time of the day	Early in Morning
Preoperative Tentative		Tentative Plan in Place Preop:	Tentative Plan in Place Preop:
Discharge Plan	Lack of home support/unsafe	Prescheduled Therapy sessions	Family/friend support for first
	home environment requiring	 Preplanned family/friend support for first few days 	few days post-op. • PT session scheduled POD 1
	inpatient subacute rehab	postop	F1 Session scheduled FOD 1
Nutritional Status	• ALB < 3.5 mg/dL	• ALB > 3.5 mg/dL	• ALB > 3.5 mg/dL
- Natifitional Status	• BMI > 35 < 18.5	• BMI < 35 > 18.5	• BMI < 35 > 18.5
Diabetes	 Uncontrolled Diabetes Insulin Dependent Diabetes	 Diabetes managed with oral medications/diet 	
Substance Abuse	History of substance abuse (alcohol/illicit drugs)		
Chronic Pain	Chronic pain requiring opioids		
Preoperative Class Attendance	Unable to attend or comprehend the preoperative educational class	Attend and comprehend a preoperative educational class	Attend and comprehend a preoperative educational class
Cardiovascular Comorbidity	 Current or History of Significant Heart Disease History of Deep Vein Thrombosis/ Pulmonary Emboli Bleeding/Clotting Disorders Anticoagulated Uncontrolled Hypertension History of Cardiac Dysrhythmias Pacemaker/implantable cardioverter-defibrillator Valvular Disease Peripheral Vascular Disease 	 Remote history of cardiac stents Remote history of deep vein thrombosis 	-
Cardiopulmonary Comorbidity	 History of Congestive Heart Failure/Pulmonary Edema Pulmonary Vascular Disease 	-	-
Pulmonary Comorbidity	 COPD/Emphysema Obstructive Sleep Apnea (untreated) Oxygen Dependent 	Obstructive Sleep Apnea with successful treatment in place	-
Chronic Organ Failure	Renal Disase (Stage 4)Liver FailureCirrhosis	• Renal Disease (> Stage 2 < Stage 4)	-
Neurological Disease	 Cognitive Dysfunction Poor comprehension History of Postop Delirium Seizure Disorder Dementia History of Cerebral Vascular Accident 	-	-

 ▼ Preoperative **Optimization Protocols** Prehabilitation with pre-op Physical Therapy ▼ Regional Anesthesia ▼ Multimodal Pain Control ▼ Same Day Discharges



References

- Table 1: (Ahmed et al., 2020; Ardon et al., 2022; Bodrogi et al., 2020; Crawford et al., 2023; De Wouters et al., 2021; Goltz et al., 2022; Goltz et al., 2023; Harrison et al., 2020; Johnson et al., 2021; House et al., 2022; Kimball et al., 2020; Mascioli et al., 2021; O'Donnell et al., 2021; Reynolds et al., 2024; Rodriguez et al., 2022; Vandepitte et al., 2022).
- Lewis, C. (2024) Practice Point: Criteria to Determine Patient status for Total Joint Arthroplasty. National Association of Orthopaedic Nurses (submitted for publication).

A very special thank-you to

Amelia Mathews, BHH Data Abstractor, and

Karolyn Griswell, BHH Director of Quality and Performance Improvement,

for their contributions to this data presentation.