

## Implementing an Enhanced Recovery After Surgery Joint Replacement Program in a Small Acute Hospital Using a Multi-Disciplinary Approach

Dr. Luis Corrales, MD, Cynthia Lopez, MSN, NP, RN, Suzi Johnson, PT, Michelle Marmol, MSN, BSN, RN, PCCN, Noriann Forrest- Readdy  
Casa Colina Hospital and Centers for Healthcare



### BACKGROUND

- Total joint replacement surgery has become one of the most commonly performed surgeries across the United States. With this increase in number, years of evidenced based research have gone into this specific population to ensure that the practice is standardized and regulated. With evidenced based research (EBP), patients are then cared for in the safest way possible.
- Several orthopedic surgeons came to the facility without standardization of care. Medications, pre-op standards, intra-op medications, and even post-operative care all varied across the continuum.
- Casa Colina Hospital started elective surgeries in 2017 with a significant amount of cases being either total hip or total knee replacement surgeries.
- As of 2020, there have been a total of 846 total joint replacement surgeries performed alone.
- Without standard protocols in place for total joint surgery, a multi-disciplinary approach team was formed and created under the vision of Dr. Luis Corrales, MD.
- Standardization of care across the patient continuum became a reality along with the creation of clinical practice guidelines (CPGS) formulated after the Enhanced Recovery After Surgery Model (ERAS) and evidenced based research.
- Using Dr. Corrales' expertise, the team collaborated to formulate the foundation that would be used to introduce protocols, guidelines, and standards of work to normalize the process, identify areas of improvement, and guarantee patient safety.
- With the incorporation of the Revive Joint Program, patients have experienced enhanced recovery along with significantly lowered risks of infection or readmission rates.



### TOTAL JOINT REPLACEMENT PROGRAM METRICS

	2018	2019	2020
Total Hip and Knee Replacement Surgeries	284	266	296
Infection Rate Post Surgery* <small>*Infection defined as accepted by NHSN</small>	0%	1.1%	0.3%
Readmission Rate* <small>*Within 30 calendar days</small>	3.5%	4.9%	1%
Patient Satisfaction/HCAPs* <small>*Rated Overall Satisfaction</small>	93%	97%	97%
Average Days Spent in Hospital	1.3	1.5	1.3

### CONCLUSION



### METHODS

**Step I: Form a Multi-Disciplinary Team**

- Dr. Luis Corrales, MD (Director)
- Dr. Fadi Tahrawi, DO (Anesthesia)
- Ms. Cynthia Lopez, NP
- Suzi Johnson, PT (Joint Navigator)
- Nori Forrest-Readdy (Quality)
- Ligia Lanuza (Total Joint class [Spanish] and Med-surg RN)
- Michelle Marmol, RN (Preop/Pacu)
- Rachel Johnson, OR RN
- Monica Scholfield, RN (Pre-admit testing clinic)

**Step II: Gather Research and Formulate CPGS**

- EBP gathered from varying regulated bodies to formulate CPGS and standard of work
- Identify key players or core group of Revival Total Joint Program to review research and data
- Get input from other Advanced Certified Hospitals in surrounding area
- Create a pre-admission testing clinic to regulate and screen elective surgeries to ensure medical clearance and education completed before surgery
- Review articles and guidelines published from, but not limited to: CMS, The Journal of Arthroplasty, The Bone and Joint Journal, AORN, ASPAN, American Academy of Orthopedic Surgeons, American Society of Anesthesiologists

**Step III: Put Evidence into Action**

- Regulated requirements for candidacy for elective surgery along with medical clearance
- Mandatory attendance of Total Joint classes with patient's choice of Joint Coach
- 24-7 Access to Joint Navigator beginning with scheduling of surgery
- Standardize education hospital wide to ensure orthopedic trained care across the continuum of care
- Require mandatory annual training and education for all employees of facility in each department
- Clinical Practice Guidelines available in each department and updated in company's policy

**Step IV: Surgery**

- Standardize medication order sets for: pre-op, intra-op, post op, and med-surg
- Patient goals established and reviewed with patient in every department
- Reduced use of Foley catheter intra-op and post op using POUR scale
- Mandatory spinal anesthesia or alternative nerve block administered
- Ambulation within hours of surgery

**Step IV: Constant Collaboration**

- With quarterly meetings to seek and improve process and improvement, frequent collaboration is happens between surgeons, the Joint Navigator, and key stakeholders
- When patients are identified as at risk, or may need additional scrutiny in the pre-admission clinic, key members of the total joint team are alerted to ensure that elective surgery is safe to proceed

**Step V: Next Steps with Continued Growth**

- The facility has since acquired two additional total joint orthopedic surgeons
- The facility is in the process of looking to the next steps of Advanced Certification for Total Joint Replacement Surgery
- On going protocols and guidelines have been formulated for same day discharges

### ACKNOWLEDGEMENTS

Multi-disciplinary team would like to thank administration, leadership, as well as other key members that of the multi-disciplinary team at Casa Colina Hospital and Centers for Healthcare which have helped to make the program what it is today. The program is on-going with continued process improvement.  
Contact: Michelle Marmol / michmarm@gmail.com