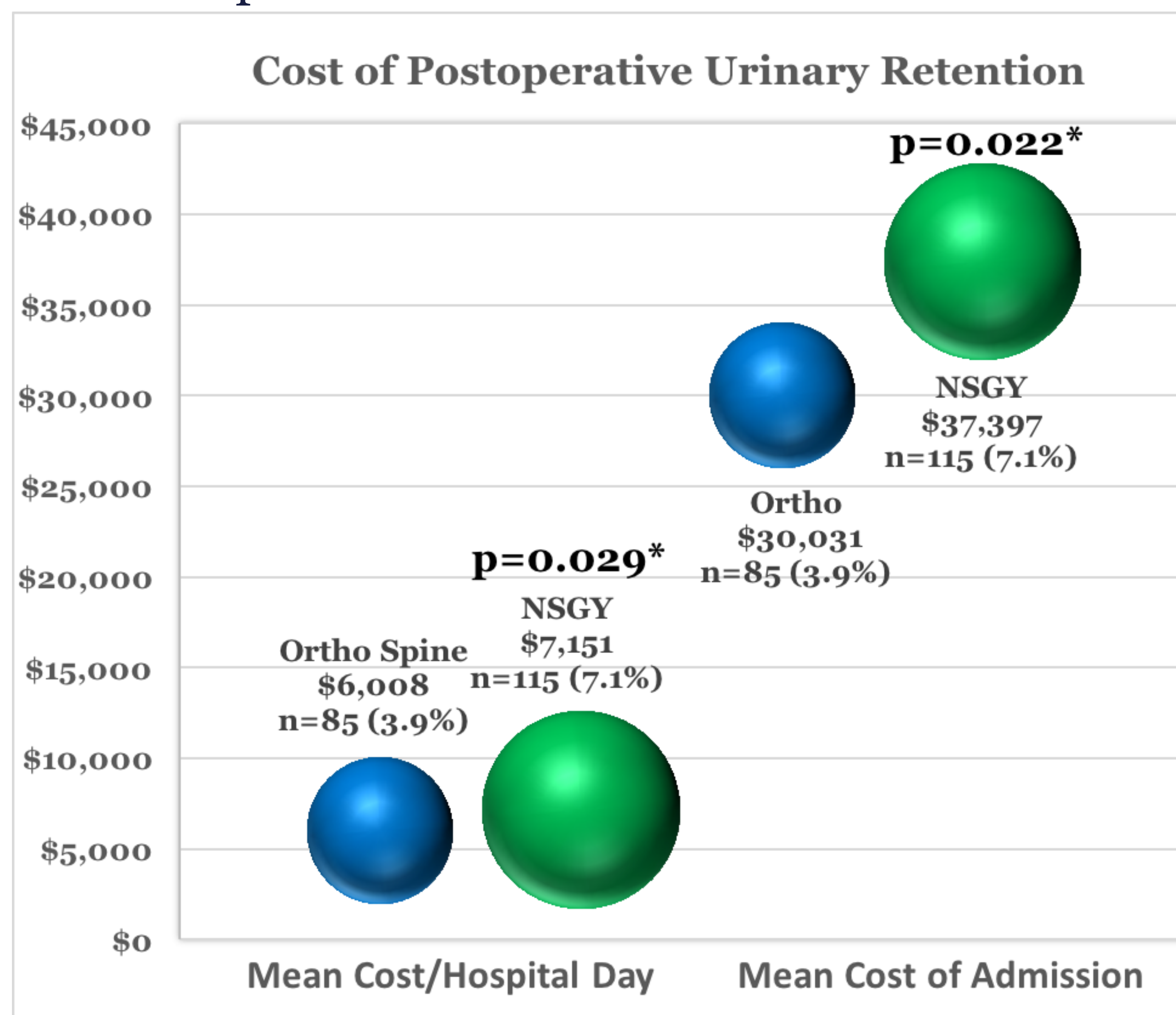


PROBLEM

Postoperative urinary retention (PUR) is a commonly seen complication after spine surgery with an incidence ranging in the literature **from 5.6% to 38% of patients**. Despite its high prevalence, there is a **lack of a systematic approach** to addressing PUR. While its diagnosis may be benign and self-limited or a heralding sign of significant neurological injury, the literature describes widely varied criteria for diagnosis and workup of PUR.

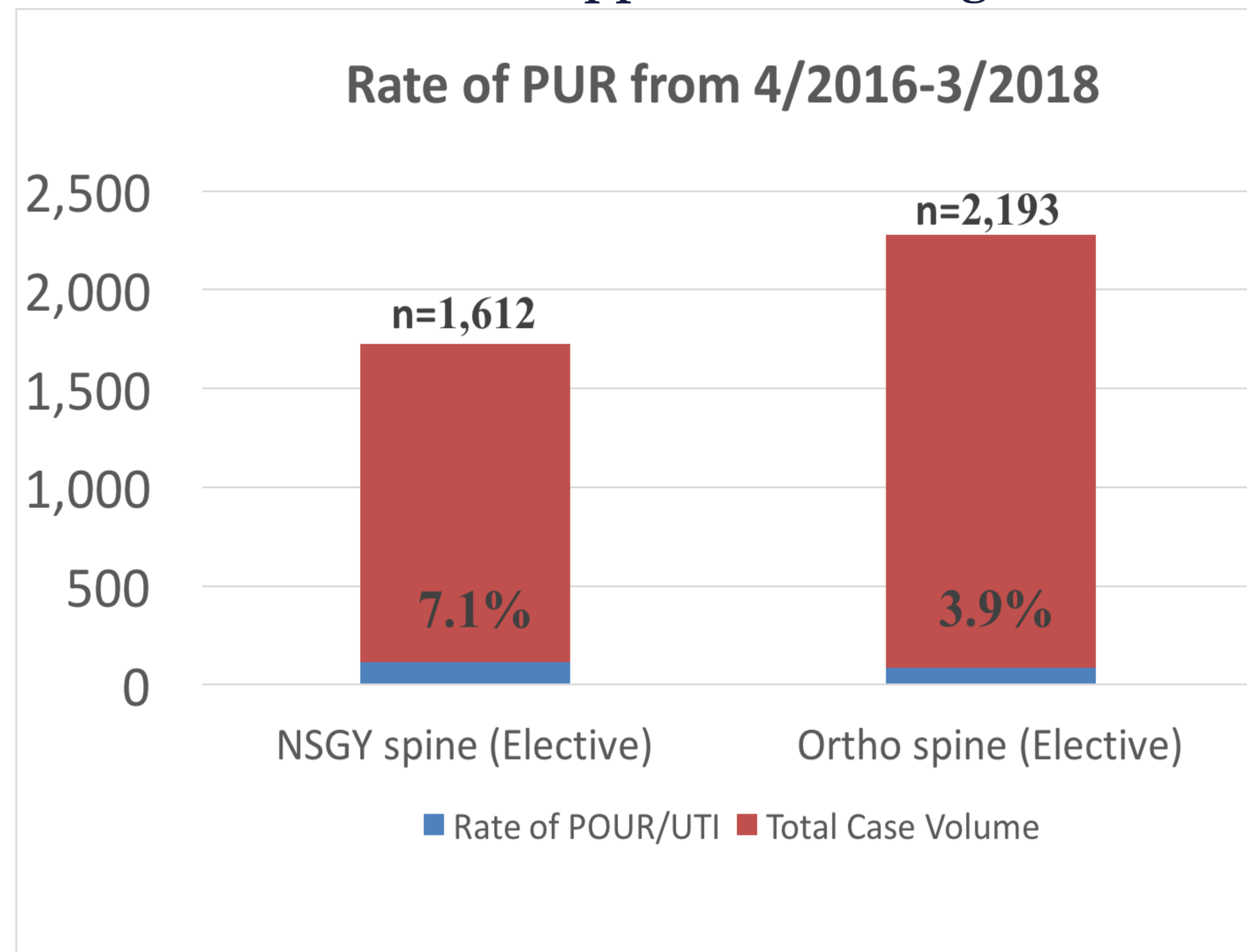


As a result, PUR is a very costly diagnosis and its workup varies significantly with limited benefit.

AIMS FOR IMPROVEMENT

Our goal is to develop evidence-based guidelines that:

- streamline** the order/timing of interventions in patients who develop PUR after spine surgery
- identify those at **high-risk** of long-term urinary retention that require further workup
- minimize** the rate of PUR –goal is to reduce to **3.5% in FY 2019**
- and determine the **cost savings** from our intervention when applied to all surgeries



INTERVENTION

We have formed a **multi-disciplinary team** comprised of **Neurosurgery, Orthopedic surgery, Urology, Anesthesiology and Farber Hospitalist faculty and house staff** aimed at developing an algorithm for **evidence-based and cost-effective** management of PUR.

MEASUREMENT

We are collaborating with the **Dept. of Quality and Safety** and will be **tracking** the following hospital-maintained patient safety indicators (**PSI**) and inpatient quality indicators (**IQIs**):

- # of patients with urinary retention not present on admission based on ICD-10 coding
- Associated cost of admission, length of stay, functional outcome at discharge, readmission rate, protocol adherence
- This prospectively-collected database will be retrospectively analyzed at the end of year

IMPLEMENTATION

Jun-Aug '18: Establish **criteria** for the algorithm

Sep '18-Mar '19: Apply to **all elective** spine cases

Apr-Jun '19: Data **analysis** and **feedback**

