

## POSNA Safe Surgery Quality Improvement Program – First Year Results

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### **Introduction**

Ranking of orthopedic programs by external unaffiliated organizations (USNWR, NSQIP, CMS, HealthGrades, etc.) is now expanding to pediatric orthopedics. Support for reliable, accurate performance evaluation orthopedics is significant amongst POSNA Membership. However, input into these ranking programs by the surgeons themselves has been limited. POSNA created a member-driven process to drive quality and performance improvements in pediatric orthopedic care in a manner applicable to small, medium, and large centers. The primary focus of the POSNA Safe Surgery Program (PSSP) is to internally develop key quality metrics that members believe enrich care in a specific domain and furthermore give POSNA Members the resources and institutional backing to advocate for certain quality improvement projects at their home institution. The purpose of this research is to summarize the first 2 years of the pilot experience with the PSSP Quality Metrics.

### **Materials and Methods**

The POSNA Quality Safety Value Initiative Council (QSVI) council developed 20 key quality metrics for the domains of Spine, Trauma, Sports, Hip/Lower Extremity, and Hand/Upper Extremity. These metrics were integrated into a survey and were distributed to 24 POSNA Member orthopedic centers across North America, including academic and private centers. Centers were classified into small (<4), medium (4-8), large (8-14), and very large (15+) based upon the quantity of pediatric orthopedists.

### **Results**

Of the 24 centers, 21 responded to one or more subspecialty metrics. Spine surveys had the highest rate of response (83%) while hip had the lowest (67%). The percent of centers meeting each metric ranged from 77-95% in sports medicine, 88-100% in trauma, 80-100% in spine, 94-100% in hip, and 88-100% in hand. Large and very large centers, as well as specialized children's hospitals, detail more technical protocols and procedures in their responses, which may be due to greater resource availability and specialization. Moreover, large and very large centers tend to have a higher participation rate in quality improvement registries.

### **Conclusions**

The primary goal of the PSSP is to create internally developed, surgeon driven metrics that truly mirror what we as a society consider quality care. We hope that these metrics provide surgeon advocates institutional resources and support to drive quality improvement projects in their own hospital. The first year of PSSP demonstrated that these metrics can be successfully distributed and reviewed by POSNA members with a high response rate and a majority of our institutions meeting key quality metrics. Future work will focus on expanding PSSP to an increasingly diverse group of 60 centers to further evaluate abilities of POSNA surgeons and centers to meet these metrics as well as to consider other domains. Furthermore, we will continue to review and modify these metrics to preserve relevance over time.

<b>Sports Medicine</b>
VTE Prophylaxis
Multi-modal Pain Management Protocol
Return to Play Guidelines
Contribute cases to a Quality Improvement Initiative
<b>Trauma</b>
Minimizing Trauma Cases after Hours
Dysvascular Limb and Polytrauma Management
M&M Review and Discussion
Verification of Trauma-Specific CME for those taking Orthopaedic Trauma Call
Antibiotic Protocol for Open Fracture Management
<b>Spine</b>
Pre-op: Recurring Multidisciplinary Conference for all Pediatric Spinal Deformity Patients
Intra-op-Antibiotic: Written Protocol for Surgical Site Infection Control
Neuromonitoring: Center uses Consistent NM and has an Alert Checklist Available in OR
Global Ongoing Center Assessment: Participation in a Spine Deformity Quality Dashboard
<b>Hip</b>
Multidisciplinary Communications
Protocol for Timely Access to Care
Contribution to a Quality Improvement Initiative or Registry
VTE Prophylaxis
<b>Hand</b>
Replant/Revascularization System
Comprehensive Evaluation of Congenital Hand Differences
Access to Hand Therapists