

The History of POSNA's Quality, Safety, Value Initiative Committee/Council – 2011-2020

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The purpose of this article is to summarize the ongoing work of the POSNA Quality, Safety, Value Initiative (QSVI) started in 2011. A previous summary of POSNA QSVI work was published by McCarthy et al., highlighting the initial efforts by Peter M. Waters, MD and Jack Flynn, MD, to launch QSVI based upon the mission to lead POSNA members to value-based care.^{1,2} In their effort to improve pediatric orthopedic care in North America, they promoted a vision of a POSNA partnership with hospital-based and AAOS efforts to provide safe, high-quality outcomes to our patients, and to communicate our initiatives and results cooperatively with payor, credentialing, and compliance. The program was born out in part by a response to the Institute of Medicine report "To Err Is Human—Building a Safer Health System."³ The initial goals of the POSNA QSVI included:

1. Develop clinical tools that members can use to improve quality and safety at their institutions.
2. Conduct multicenter research trials focused on determining complication rates, the efficacy of safety interventions, and other QSVI questions.
3. Educate members on best practices and new developments in the realms of quality, safety, and value.

The focus upon quality, performance improvement has led to early success in obtaining prestigious grants, including three significant awards from the AAOS/Board of Specialty Societies Quality Grant

Program. The QSVI Spine Committee obtained a grant to develop a series of spine safety checklists for spinal deformity surgery. The QSVI Sports Committee received a grant to support the development of the Sports Cohort Outcomes Registry (SCORE). The QSVI Hip/LE received a grant to study DVT incidence and prophylaxis. The POSNA BOD now supports an annual QSVI grant for \$10,000 and has also received additional industry support for Spine QSVI grants of up to \$25,000 per year.

The Committee started under the presidential council and evolved to a council in 2018. The development of the council has been driven by member feedback, the board of directors, and enthusiastic support from council members and committee chairs. Bryan Tompkins continues his superb support for the QSVI Platform and online content. The following highlights the current initiatives from the POSNA QSVI Committees.

QSVI Education Committee

This committee has developed several programs within the POSNA educational program under the leadership of Dan Sucato and Brian Brighton. For instance, the Annual Meeting includes a section on QSVI, with dedicated presentations on relevant topics. The top ranked QSVI presentation is selected for the Peter Armstrong/Shriners Quality Award at the Annual Meeting. The education committee produced several webinars relating to topics of quality improvement, opioid and surgical safety, value in spine surgery, and

variation in practice, which are available on POSNAcademy. Stay tuned for the 2020 IPOS meeting where content will be dedicated to QSVI.

Many of the QSVI articles can be found on the POSNA website at <https://posna.org/Physician-Education/QSVI/QSVI-Library>. Julie Samora and Kevin Shea have developed an educational curriculum on patient safety and quality for the AAOS Orthopedic Video Theater, integrating the experience and principles of many POSNA and AAOS members:

<https://aaos.org/aaosnow/2020/may/research/research01/>;
<https://www.aaos.org/videos/collection-quality-and-improvement/>.

QSVI Research Committee

Under the direction of Pat Cahill and Selina Poon, the research committee has developed a quality grant review process that systematically ranks research grants based upon quality gains, generalizability to other POSNA centers, and the prospects for successful implementation. This ranking tool provides a more objective, data-driven process to rank and select these grants. This committee has worked with the POSNA BOD and industry partners to further expand the QSVI grant program. This committee has coordinated the review and selection of POSNA presentations on QSVI topics for the Annual Meeting. The group also managed the QSVI Challenge offered at the Annual Meeting from 2015-2019. In addition, this committee has developed a repository of institutional quality improvement projects from the challenge.

QSVI Spine Committee

Under the direction of Matt Oetgen and Nick Fletcher, this committee has continued the work on developing standards and best practices for spine surgery. These include: neuromonitoring safety checklists, high risk spinal deformity patient care evaluation/management bundles, surgical site infection prevention bundles/toolkits. This group has promoted webinars on spine surgery procedural safety and neuromonitoring in partnership with the Scoliosis Research Society.

QSVI HIP/LE Committee

Ben Shore and Grant Hogue have led this committee to develop recommendations for DVT prophylaxis and have developed a multicenter tracking tool/registry for DVT. This group has developed an excellent document on radiation exposure, management, and education for patients/families. They are currently working on recommendations to guide evaluation and referrals for foot deformity and DDH for NICU staff.

QSVI Sports Committee

Under the leadership of Henry Ellis and Jennifer Beck, this group has developed toolkits for ACL return to play guidelines, and pain/narcotic management. These toolkits are on the POSNA website at: <https://posna.org/Physician-Education/QSVI>. The group continues work on return to play guidelines for sports injuries and recommendations about sports specialization. The SCORE registry has enrolled over 1,300 pediatric sports patients, evaluating outcomes for ACL reconstruction, meniscus repair, tibial spine injury, and treatment for discoid meniscus.

QSVI Hand/Upper Extremity Committee

Joshua Abzug and Andrea Bauer have led their group to develop several guidelines on the evaluation and management of ganglion cysts, with ongoing work on fingertip injuries, preoperative antibiotic indications, and the evaluation of brachial plexus palsy.

QSVI Trauma Committee

This committee has done extensive work on supracondylar elbow fracture management, with an emphasis upon low volume centers, and protocols for the pulseless supracondylar fracture patterns. Under the leadership of Stephanie Holmes and Ishaan Swarup, this group continues work on optimal treatment pathways for buckle fractures, pain management, and patient/parent education for common fractures. This work can be seen on the POSNA website, and on OrthoKids. They have also surveyed POSNA members

on access to pediatric trauma rooms within their health systems.

Future for POSNA QSVI Council and Performance/Quality Improvement

One of the future opportunities for POSNA QSVI Council is to become more proactive in the area of quality assessment of pediatric orthopedic centers. Currently, *U.S. News and World Report* has played a major role in the evaluation of pediatric orthopedic programs in the U.S., and this role will continue to evolve. Other groups are developing data platforms to assess the quality, value, costs of pediatric orthopedic programs, including insurance companies, national quality organizations, and other industry groups. Many of these outside groups have limited access to higher quality tools to assess quality outcomes or to perform adequate risk adjustment for patient care. Despite these limitations, these ranking systems will continue to develop and become an increasingly dominant player in the field of health care quality/value/outcomes assessment.

The POSNA QSVI Council and the POSNA Presidential Line are acutely aware of these trends and are exploring options to allow POSNA members to play a more active role in quality assessment of children's hospitals and pediatric orthopedic programs. One of the goals of this effort is to define a group of process quality metrics to provide some standardization around routine and complex pediatric orthopedic surgical care. This program would focus upon providing resources to help

POSNA members obtain adequate support/resources to build the best environment to provide pediatric care.

Summary

For decades, POSNA has been the orthopaedic leader in promoting research and education for musculoskeletal care in children. Healthcare has changed and key stakeholders (Congress, CMS, Insurance Payers, etc.) have promoted value-based care and had a significant impact in the delivery of healthcare. Their language and metrics for success are remotely related to the early core POSNA values. Yet to adapt and communicate with those who administrate healthcare, POSNA was one of the first organizations to understand the need to promote Quality and Safety and to demonstrate the Value that we provide to children and society as a whole. As this evolves, we can be sure that POSNA will too.

References

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