AAOS American Academy of Orthopaedic Surgeons
American Association of Orthopaedic Surgeons

Information Statement

Orthopaedic Data Collection

This Information Statement was developed as an educational tool based on the opinion of the authors. It is not a product of a systematic review. Readers are encouraged to consider the information presented and reach their own conclusions.

Collection of reported events and analyzing safety data is necessary to drive continuous quality improvement and innovation. The Institute of Medicine (IOM) released *To Err Is Human: Building a Safer Health System* in 1999, stimulating a drive for healthcare workers and health care institutions to work toward a safer environment for patients and employees.

The American Academy of Orthopaedic Surgeons (AAOS) is committed to improving patient safety and to decreasing medical errors through promoting the use of reporting systems that, first and foremost, benefit patients, while also protecting the information and health care personnel involved with the event.

Event reporting and data collection should not be limited to sentinel events only, such as wrong-site surgery or accidental death, but should also be focused on improving patient outcomes through the collection and analysis of 'near miss' events. Data collection should include all common adverse events such as pulmonary complications, cardiac complications, surgical-site infections, readmissions and others.

Several reporting systems have been established to gather patient safety data:

Organization/Facility: Each health care organization/facility should have a system in place to routinely and systematically collect safety data with the goal of improving patient safety and minimizing surgical harm. Fostering a non-punitive environment will encourage safety reporting.

Voluntary national: Several voluntary national reporting systems are in place that gather and analyze safety data and publish safety recommendations.

Mandatory state: Currently, at least 27 states have mandatory reporting systems where a list of certain medical errors and events are required to be reported as they occur. The intention of these reporting systems is to bolster national reporting systems in preventing patient harm.

Mandatory national: Congress has enlisted the Centers for Medicare and Medicaid Services to form agencies that collect and analyze data from patient safety events. CMS reports the results from its analysis in an attempt to prevent medical errors and patient harm through a national network.

Improvements that have resulted from data reporting range from system-wide changes that have an immediate impact to subtle cultural changes that may not be evident immediately. Orthopaedic surgery can greatly benefit from these reporting systems.

Within local healthcare organizations/facilities data should be collected routinely concerning the essential elements of surgical safety that will help detect and reduce medical errors contributing to:

- Adverse drug reactions and medication errors
- Incorrect surgical site or procedure confirmation including wrong site surgery
- Communication failures including hand-off errors during transitions of care
- Proper use of surgical /Briefs/, 'Time-Outs' and 'De-Briefs'
- Adverse surgical outcomes, including surgical-site infections and re-admissions

The AAOS believes the following principles are essential to ensure the success of a nationwide effort to reduce the number of medical errors:

- Public and private initiatives to ensure patient safety and reduce the number of medical errors.
- Ensuring patient confidentiality and appropriate legal protection of all information involved in patient safety reporting systems is critical.
- Patient access to their medical records should not be jeopardized by new initiatives.
- Hospitals and medical organizations should foster an attitude of valid feedback and appreciation for error reporting and minimize punitive and adversarial approaches to error reporting. This attitude towards error reporting will foster an environment of safety and comfort in reporting, not one of fear and unwillingness to report errors.
- Before instituting new reporting systems, federal and state governments should first determine, through supporting research, whether and how existing reporting programs as well as public and private initiatives have led to a reduction in medical errors.

To enhance reporting, systems should foster an environment of non-punitive reporting with regard to medical error and adverse event reporting. Congress has led the movement on this matter, establishing the Patient Safety and Quality Improvement Act of 2005, which protects safety event information from being used in medical liability cases.

Orthopaedic surgeons and their organizations/facilities should support and participate in orthopaedic devise registries, such as the American Joint Replacement Registry (AJRR). Through voluntary reporting of key patient and orthopaedic device information to local, state and national device registries both patient care and safety can be improved.

The AAOS strongly recommends orthopaedic surgeons to foster a safety culture through data collection and reporting. Furthermore, the AAOS recommends physicians have an open and honest dialogue with their patients and appropriate health care providers when adverse events occur to promote improvement and reduce future errors.

References:

1. Kohn KT, Corrigan JM, Donaldson MS: *To Err Is Human: Building a Safer Health System*. Washington, DC: National Academy Press; 1999.
2. Naveh E, Katz-Navon T: Antecedents of willingness to report medical treatment errors in health care organizations: A multilevel theoretical framework. *Health Care Management Rev. 2014 Jan-Mar:* 39(1):21-30.
3. Barach P, Small SD: Reporting and preventing medical mishaps: Lessons from non-medical near-misses reporting systems. *BMJ.* 2000 Mar 18;320(7237):759-63.
4. Leape LL: Reporting of adverse events. *N Engl J Med*. 2002, 347; 1633-1638.
5. Mahajan RP: Critical incident reporting and learning. *Br Journ Anesth*. 2010, 105; 69-75.
6. Provost PJ, Berenholtz SM, Goeschel CA, Needham DM, Sexton JB, Thompson DA, Hunt E: Creating high reliability in health care organizations. *Health Services Research*. 2006, 41; 1599-1617.
7. Zhao B, Olivera F: Error reporting in organizations. *Academy of Management Review*. 2006, 31; 1012-1030.
8. Leape LL, Berwick DM: Five years after To Err Is Human: What have we Learned? *JAMA*. 2005, 293(19); 2384-2390.

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