GAINING INSIGHT INTO WRONG-SITE SURGERY

Pennsylvania Patient Safety Reporting System (PA-PSRS)

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Background and Purpose

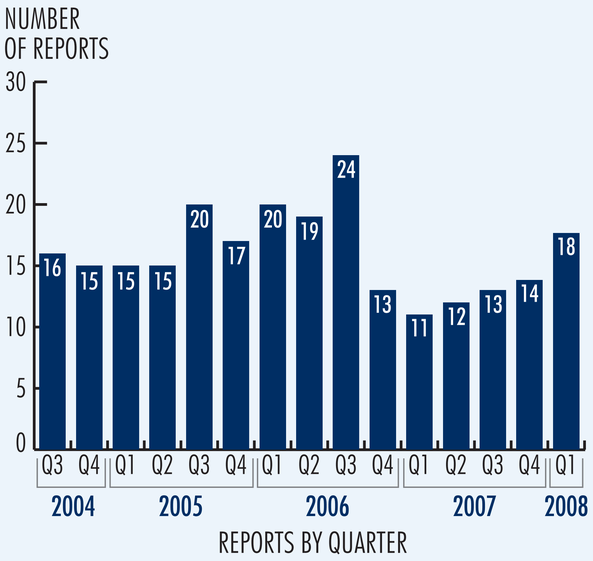
Pennsylvania hospitals, ambulatory surgery centers, behavioral health centers, and birthing centers have submitted more than 700,000 Incidents ("near misses") and Serious Events (adverse events) through PA-PSRS since the program's inception in June 2004. The value of collecting near miss reports as well as aggregating adverse event reports is illustrated by our analyses of all reports involving wrong-site surgery.

Problem

Wrong-site surgery has been considered an exceedingly rare event that has been estimated in the literature to occur in 1 out of 112,994 operations. However, PA-PSRS data indicates that wrong-site Serious Events and Incidents occur more frequently. Between June 2004 and December 2006, 427 reports were submitted through PA-PSRS that reflected some aspect of wrong-site surgery. More than 40% of these errors actually reached the patient and nearly 20% actually involved completion of a wrong-site procedure. We used comparisons of the near miss reports and the actual wrong-site surgery events to identify weaknesses in the Universal Protocol and suggest risk reduction strategies.

The data presented in the graph below has been updated to include events through March 2008 that were not accurately classified as wrong-site surgery events, even though these events reached the patient.

PA-PSRS Actual Wrong-Site Surgery Events by Quarter



Risk Reduction Strategies

Scheduling

- Document patient information on a standardized form that includes the exact description of procedure including exact site, level, digit, and side.
- Implement a standardized verification process.
- Assign responsibility to appropriate staff for verifying the accuracy of scheduling information.

Verification and Reconciliation of the Documents

- Implement a process to verify documents prior to the patient's arrival for surgery.
- Assign responsibility to appropriate staff for verifying the following documents are accurate and consistent: schedule, consent, and history and physical.
- Document relevant information on a standardized form.

Patient Identification

- Ask the patient questions requiring an active response, including name and procedure with site and/or side.
- Use two patient identifiers.
- Assign responsibility to appropriate staff for educating patients about the multiple verifications to be performed throughout the perioperative phase.

Verification and Reconciliation on Patient's Admission

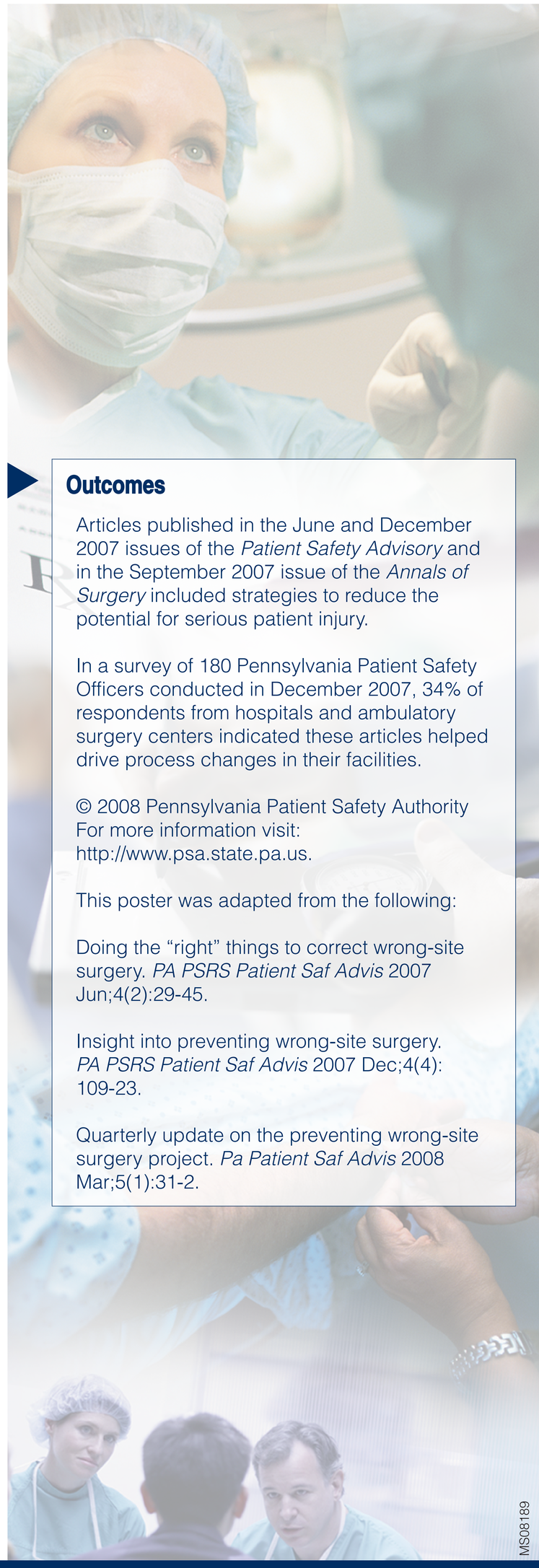
- Assign responsibility to two or more surgical team members to perform an independent verification and reconciliation of the schedule, consent, and history and physical.
- Document relevant information on a standardized form.
- Conduct verification with the patient's involvement prior to administration of sedation.
- Review by the surgeon radiology images and pathology reports prior to the procedure.

Marking the Operative Site

- Educate the surgical staff regarding site marking to ensure the mark is visible when the patient is prepped, draped, positioned, and during the time out.
- Assign responsibility to an appropriate surgical team member for marking the site.
- Mark the site after verification and reconciliation of all available documents.
- Mark the site before administration of regional block, local anesthesia, and/or sedation.
- Mark the site unambiguously and in agreement with the patient's understanding of the procedure.
- Provide radiographic confirmation for procedures involving identification of vertebrae or ribs.

Time Out

- Document the time out on a standardized form.
- Perform the time out before administering regional or local anesthesia.
- Perform the time out before making the first puncture or incision.
- Engage all members of the surgical team.
- Refer to relevant documents while conducting the time out.
- Empower surgical team members to speak up if there are any concerns.



Outcomes

Articles published in the June and December 2007 issues of the *Patient Safety Advisory* and in the September 2007 issue of the *Annals of Surgery* included strategies to reduce the potential for serious patient injury.

In a survey of 180 Pennsylvania Patient Safety Officers conducted in December 2007, 34% of respondents from hospitals and ambulatory surgery centers indicated these articles helped drive process changes in their facilities.

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For more information visit: http://www.psa.state.pa.us.

This poster was adapted from the following:

Doing the "right" things to correct wrong-site surgery. *PA PSRS Patient Saf Advis* 2007 Jun;4(2):29-45.

Insight into preventing wrong-site surgery. *PA PSRS Patient Saf Advis* 2007 Dec;4(4): 109-23.

Quarterly update on the preventing wrong-site surgery project. *Pa Patient Saf Advis* 2008 Mar;5(1):31-2.

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