The Effects of a Customizable, Office-Based Surgical Safety Checklist on the Rates of Key Patient Safety Indicators

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The Problem

In recent years, the economic pressures of medicine have incited a paradigm shift in health care delivery, such that surgical procedures are being moved from the hospital to the office-based setting. Recent hospital-based studies found that a comprehensive checklist used in an interdisciplinary, team-based setting resulted in a reduction in surgical complications as well as cost savings.

The ASA Closed Claims analysis has demonstrated higher severity, malpractice payments, and more occurrences deemed "preventable" in review of office-based claims. It is unclear if the safety and economic improvements attributed to the use of checklists in hospital-based settings would also be relevant and attainable in office-based surgery.

Aims/Goals

Based on the W.H.O. checklist, we developed a checklist for use in the office-based setting. The objectives included: training of office personnel on how to both use and customize the checklist to the individual practice, analysis of accuracy in using the checklist, and determining its effect on the frequency and severity of adverse events.

For baseline control values, we conducted a retrospective chart review of 219 cases in an office-based plastic surgery practice using the checklist to assess for pre-implementation rates of documentation of important safety indicators.

The Interventions

With focus-group input from office personnel, including surgeons, anesthesiologist, and nurses, the checklist was customized to the individual setting and implemented into daily practice, facilitated by frequent and open communication with office staff to address barriers to compliance.

Results/Progress to Date

Site and side identification and marking showed a statistically significant, 24.6% increase from pre- to post-checklist (p=0.0258). Verbal confirmation of anticipated critical events, availability of case-specific equipment, and confirmation of EMS policy increased from 0% pre-checklist to 88-100% post-checklist (p<0.0001).

Percentage of Positive Responses Pre- and Post-Checklist Implementation
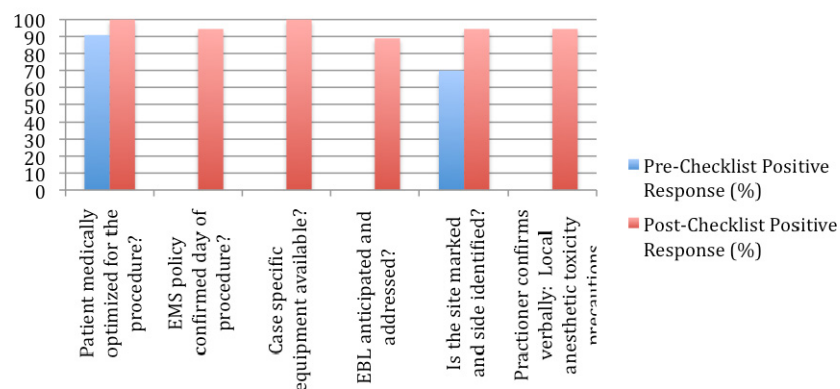
Lessons Learned

Training office personnel is perhaps the most significant barrier to introducing a checklist. It is important to initially conduct frequent reviews of documentation and assess staff understanding of the process, as most resistence to change will occur immediately following implementation. Checklist requirements may be incorrectly perceived as "extra work" by office staff, and poor compliance is often linked to limited understanding or appreciation for safety indicators.

Next Steps

➢ The prospective, post-checklist phase of implementation is ongoing.
➢ Customizable, office-based checklists are being explored in various specialties including interventional radiology, dentistry, OB/GYN, GI, ophthalmology, dermatology and pain, as the idea of furthering the culture of safety in medicine continues to gain momentum.

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