From The Editor

Welcome to the TSG Newsletter. My wife just informed me that the equinox occurs in two weeks, indicating that it’s high time for the winter edition since it is almost spring!

In prior newsletters, we followed the “failure to diagnose” trail from 20,000 feet, and we almost made it to ground level. We followed that with a granular analysis of data that TSG has accumulated and published related to specific elements of clinical behavior and documentation that impact both patient safety and practitioner risk. In our summer newsletter, we addressed the following high-risk groups: Chest Pain Patients, Abdominal Pain Patients age 40 and older, and Children with Fever. In this newsletter, we will address two additional high-risk groups: Abdominal Pain Patients in the 15 to 40 years of age group and Adult Headache Patients.

Introduction

In the graphs and data tables that follow, TSG has made an effort to demonstrate compliance or lack of compliance with clinical practice and documentation in key areas of the high-risk patient encounter. Although the tables reflect compliance with documentation, the data reflects issues related to both clinical practice and documentation. For example:

- The data demonstrates that the medical records of most male patients presenting with lower abdominal pain do not contain an examination of the genitalia. It is well established that patients...
in this age group with testicular torsion may present initially with only lower abdominal pain. Although we are measuring compliance with documentation, this is probably a clinical practice issue. In most cases, the pain pattern is not resulting in a consideration of torsion and the examination is not done.

In headache patients, there is poor compliance with documentation of risk factor analysis. Risk factor analysis may be a key to putting subarachnoid hemorrhage (SAH) into the differential diagnosis. This is both a documentation and clinical practice issue. The fact is that a risk factor analysis is often not done.

We have now analyzed close to 400,000 high-risk medical records over the last decade. The analysis in this newsletter is from a published TSG study of 170,000 high-risk patients from over 200 U.S. emergency departments. This was published in 2006 and presented at the ACEP Scientific Assembly. However, TSG continues to address these critical issues in ongoing performance evaluations in over 400 emergency departments and will present only those that remain relevant to risk and safety in the practice of emergency medicine. We will address several key issues from these high-risk areas, but cannot be comprehensive in this newsletter format.

**Abdominal Patients 15 – 40 Years of Age**

Recall from our winter 2013 newsletter that by sheer numbers alone, the abdomen is the source of most adverse outcomes and emergency medicine litigation. In an effort to put brackets around and manage risk in emergency medicine, the abdomen is an important starting point.

**Note the following:**

1. There are over 25,000 patients in this data set.
2. The most significant risks in the 15- to 40-year-old abdominal pain age group are the failure to diagnose appendicitis,
torsion testicle (not strictly in the abdomen, but it causes abdominal pain), and ectopic pregnancy.

3 Several of the key risk and safety indicators in the data set reflect good or adequate compliance. That would include documentation of: location of pain; the presence or absence of nausea and vomiting; the presence of any element of the abdominal exam; laboratory results; and a discharge instruction of “Return” if there is any change in clinical condition.

4 The graph demonstrates several critical deficiencies. Look at the fall off from “Any Abdominal Exam” to a “Detailed Abdominal Exam.” “Any Abdominal Exam” would be something like “Abdomen normal” or “WNL” or “Benign.” However, since this is an abdominal pain patient, we recommend documenting “complete examination of the relevant organ system.” The terms “WNL” and “Benign” don’t convey quality and professionalism. Our assessment criterion, or marker, for a “Detailed Exam” is simply 3 or more elements of an abdominal exam (not a high hurdle!). For example, in something as simple as the following 3 factors would suffice: “soft, nontender, no guarding.”

The typical abdominal exam in an abdominal pain patient is usually significantly longer than 3 elements. There was an absence of a detailed abdominal exam in over 1,000 patients (approximately 4% of cases). That is a striking statistic! In all likelihood, the abdominal exam was adequate in most cases but was not adequately documented.

Key Point: Great care should be taken to document a “complete examination of the relevant organ system.”

5 Let’s return to the male genitalia exam issue. The fact is that torsion often presents with no scrotal discomfort, and the only early indication is lower abdominal pain. All veteran practitioners have experienced this presentation of torsion and many have missed it, delaying a patient’s diagnosis by failing to recall this pain pattern.

The graph indicates that there were over 5,000 males in this age group that presented with lower abdominal pain and conservatively, less than 1/3 had a docu-
mented examination of the genitalia. Documentation of this exam, when done, is typically not overlooked. This data probably represents a failure to perform a genitalia exam, and is thus a clinical practice issue. Once again, there is no evidence-based recommendation on when a practitioner should perform a genitalia exam in males with lower abdominal pain. If the diagnosis is obvious such as a UTI or guarding and rebound at McBurney’s point, this exam may be unnecessary. However in the many abdominal pain cases where the cause is not apparent, this examination represents quality care and can be a great aid in avoiding a failure to diagnose.

The pregnancy testing data comes as quite a surprise. The denominator is females in the 15- to 40-year-old age group who have not already been diagnosed with pregnancy and require pregnancy testing (via the assessment exclusion criteria). I would question the data if the n were not so large. Assuming the data is accurate, this is a critical issue. My impression is that EDs are all over the pregnancy testing issue and that testing is commonplace. However, that is not what the data demonstrate. The failure to test for pregnancy in this high-risk group would clearly represent a departure from standard care.

The patient re-evaluation data is worth pointing out. In my experience, emergency practitioners typically perform a re-evaluation of the abdomen. Rarely does an abdominal pain patient go home without at least one additional hands-on evaluation. But the data indicate that re-evaluations are not documented in one-third of the cases.

Re-evaluation is an incredibly important documentation element. It reflects high-quality care and represents compelling documentation in cases involving worsening of a disease process and adverse outcomes. Without the re-evaluation documentation, it would be difficult to defend against a ruptured appendix based upon a single exam that probably
included some tenderness. It is the follow-up exams that demonstrate resolution of pain and tenderness and establish wellness prior to discharge that make the case defensible.

8 Lastly, let’s look at the “Timed F/U” data. The abdomen is a major risk in emergency medicine. On initial exam, the findings are often inconclusive and labs or imaging are not supportive of a particular diagnosis. When this patient group is dis-

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XL Group’s Bermuda Insurance Operations Partner with The Sullivan Group to Provide Clinical Risk and Loss Prevention Services to Healthcare Clients

On February, 11, 2014, XL Group’s Bermuda Insurance Operations announced a new partnership with The Sullivan Group (“TSG”), one of the premier providers of clinical risk and loss prevention services to hospitals, physicians and nurses throughout the US.

Through this new partnership, XL Group’s Bermuda Insurance Operations, XL Insurance (Bermuda) Ltd (“XLIB”), seek to align their portfolio of healthcare clients and prospective clients with TSG’s mission of improving patient safety by reducing medical errors and lowering the frequency of malpractice claims.

Wesly Guiteau, Senior Vice President and Healthcare Practice Leader at XLIB, said: “We are pleased to have reached this agreement with TSG to provide our clients with first-class complementary risk management and online education services. For more than 27 years, XLIB has provided leading insurance solutions to this industry. This new partnership demonstrates XLIB’s continuing commitment to our clients and it is part of a multi-prong effort to realign our platform with our clients’ growing need for insurance products, including risk management support.”

Read more... http://bit.ly/1jW4d0W
charged, a discharge instruction containing a timed follow-up to a private or on-call physician is an excellent clinical plan and very strong risk management. The data above suggest that this instruction is missing in approximately one-quarter of the abdominal pain discharges. Although this number does not need to be 100%, you would expect it to be significantly higher than was demonstrated in this analysis.

Headache

The failure to diagnose subarachnoid hemorrhage has been and remains a high risk in the practice of emergency medicine. The TSG headache data reveals a number of very interesting issues.

Patient Satisfaction Is Here

What’s Your Plan?

It has been a common belief that “Happy patients don’t sue” and some organizations have relied on this as their risk management strategy. Furthermore, now that reimbursements have been tied to patient satisfaction scores, physician groups and hospitals have become even more invested in finding solutions that truly make a difference in their patient satisfaction metrics.

TSG has responded by developing a new Patient Satisfaction program called PatientSET™ “Satisfaction Every Time.” Championed by Dr. Doug Finefrock, PatientSET™ looks to the literature to identify certain elements of behavior that patients would like to see displayed during the physician/patient encounter. Delivered through an online course series, Dr. Finefrock uses multimedia videos to provide concrete examples that will help improve the patient experience.

In true TSG fashion, PatientSET™ extends beyond online education to include a real-time ‘checklist’ for the provider (PatientSET™ List) as well as an observational assessment tool (PatientSET™ Assessment) to be used by a case manager to analyze the clinician’s compliance with key behavior elements of the visit.

If you are interested in learning more about the new PatientSET™ Program, please contact: Brant Roth at broth@thesullivangroup.com
Note the following:

1. This is an analysis of just under 20,000 headache patients.

2. The “Onset” issue appears to be adequately addressed in this population. The abrupt or sudden onset of pain suggests a vascular etiology and possible subarachnoid hemorrhage. Documentation of this important historical issue is quite good.

3. Patients in pain are typically asked about the severity of pain. The severity of pain was not documented in over 3,000 cases. A high level of severity or truly the “worst headache” of a patient’s life should cause the practitioner to consider SAH in the differential diagnosis. A higher level of compliance with this documentation should be an expectation in headache patients.

4. Risk factor analysis can provide key information in considering the potential for SAH. For example, patients with a family history of SAH, a connective tissue disease and polycystic kidney have a higher incidence of SAH compared to the general population TSG conducted another study to determine overall physician compliance with documentation of risk factor analysis in high-risk presentations. That table is below. Other than risk analysis for coronary artery disease, emergency practitioners’ compliance with risk factor analysis was relatively low. When analyzing EM medical malpractice claims, it often appears that risk factor information could have pointed the practitioner in the right direction.

### Risk Factor Table

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<tr>
<td>ED Risk Factor Documentation</td>
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<td>% Documented</td>
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<tr>
<td>Coronary Artery Disease</td>
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<tr>
<td>Pulmonary Embolism (PE)</td>
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<tr>
<td>Ectopic Pregnancy</td>
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<tr>
<td>Abdominal Aortic Aneurysm (AAA)</td>
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<tr>
<td>C-Spine Fracture</td>
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<tr>
<td>Subarachnoid Hemorrhage (SAH)</td>
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<td>Thoracic Aortic Dissection (TAD)</td>
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The next important discussion point is exactly analogous to the abdominal pain discussion regarding “any” neurologic exam vs. a “detailed” examination. Look at the fall off from “any” to “detailed.” Again, any 3 factors from the neuro exam meet our assessment criteria as a marker for a complete exam. For example, the following 3 factors would suffice: “alert, normal mental status, and motor intact.” Most practitioners document several additional elements of the neurologic examination (e.g., sensory, reflexes, cerebellar, Babinski, etc.).

As you can see from the graph above, well over 1,000 medical records did not contain a “complete examination of the relevant organ system.” It is our opinion that the “detailed” examinations are most often done, but documentation is inadequate. The exam should be documented 100% of the time.

The lumbar puncture data point is interesting, but it is difficult to draw any firm conclusions. Clinicians are faced with a wide spectrum of clinical presentations in patients with subarachnoid hemorrhage and have little evidence to help them...
determine which patients can safely avoid imaging or lumbar puncture. The denominator is the number of headache patients with a completely normal CT scan; the numerator is any patient that had a lumbar puncture or provided an informed refusal for the LP. However, we did not look at other factors in the clinical presentation, the type of CT scanner used, and the time from the onset of symptoms until time of CT. Therefore, we refrain from drawing any conclusions from this data.

7 The re-evaluation issue is also similar to the discussion for abdominal pain. As mentioned, clinicians are faced with a wide spectrum of clinical presentations. There is research focused on validation of clinical rules that would assist in decision-making in headache patients. At this time, however, headache evaluation remains an inexact science, and steps should be taken to document a high-quality evaluation and the patient’s condition over time through re-evaluation. The data in the graph above suggest that emergency practitioners do not document re-evaluations in approximately one-third of headache patients. The practitioner should carefully document the initial history and physical examination, but should also make a significant effort to document re-evaluation of the headache patient.

Discussed

There is a lot of discussion above, so there isn’t much additional required here, but there are a few points well worth making. The data points identified in the graphs above are by no means a complete analysis of risk and safety in these high-risk areas. The data gathering is related to what appeared to be important elements from malpractice litigation, peer review, and morbidity and mortality presentations related to the abdominal pain and headache patient in emergency medicine. Consider this a beginning; there remains much work to be done.

It takes a system and a team to reduce errors and improve patient safety, so many of the key problem indicators above can be addressed by creating a system that provides high reliability. If your system solution is (a) being human and (b) using your singular mind to remember everything, you will fail. Bring the team together around the issues addressed above and create high-reliability solutions.

There are several pure documentation issues represented in the data above. These include
the documentation of detailed exams and patient re-evaluation. The fix is creating a medical record that serves human cognition. Make these issues easier to document and present them in a user-friendly manner.

The clinical practice issues identified may require educational efforts as well as perhaps clinical decision support inside of electronic medical record systems. The system issues like the discharge process for the abdominal pain patient will require the ED team to come together around a high-reliability protocol, which must be monitored to ensure success.

We hope you have found this data interesting and useful. Our goal is to provide the data behind some of the TSG programs to further enforce a systematic approach to medical error reduction and improvements in patient safety.

