

To Err is Human: To Understand Error is Divine - Part II

Peter DeBlieux, MD

LSUHSC Department of Medicine

Section Pulmonary and Critical Care Medicine

Section Emergency Medicine

pdebli@lsuhsc.edu

Case One

While performing a complicated history and physical on a new consult for admission, the house officer is paged every 10-15 minutes for everything from patient discharge planning to residency administrative responsibilities. The resident is having trouble keeping the intricacies of the exam straight.

Paging

- Interruption of patient care, critical procedures and critical decision making
- Residents must respond immediately because the urgency of the information is unknown

Paging

Recommendations:

- Use of alphanumeric paging to designate pages as (E) emergent, (U) urgent, and (R) routine
- Limit routine paging to a portion of each hour- the first ten minutes
- Email routine communications

Case Two

Mr. Thomas Jacobs admitted for emergent appendectomy was wheeled to the med-surg floor following recovery. The nurse had difficulty reading the hand written orders and administered 1 mg of morphine for pain relief every 4 hours instead of the 10 mg ordered by the surgeon.

Orders/Records

- Illegible handwriting
- Adverse drug-drug interactions
- Timing and dating orders
- Access to common data and medical records

Orders/Records

Recommendations:

- Computerized ordering system
- Screening programs for drug interaction
- Computer templates for interns
- Electronic medical record
- Automatic pager notification for alarm values

Case Three

A night call intern is called about Ms. Lisa Jenkins, a 40 year old patient with recurrent lymphoma receiving rescue chemotherapy, who is suddenly hypotensive and short of breath. The intern received no sign out information other than she is doing fine. Unknown code status.....

Sign Out

- Haphazard manner in transferring patient information
- Less familiar care providers
- Duty hour work limits increase turn over rate
- Nursing staff is unclear regarding care giver providing coverage

Sign Out

Recommendations:

- Computerized sign out system that is universally applicable within a specialty
- Automatically includes drug allergies, medications, results of recent tests, relevant med/surg history and code status
- House officers sign out their pagers to cross covering house officers electronically to prevent paging confusion

Case Four

A code is called on the pediatric floor and the cross covering intern is the first one to the bedside of Jimmy Mengle, a 3 year old with patent foramen ovale, in cardiac arrest. The night charge nurse has called for the code cart and the new nurse on the unit rolls an adult crash cart into the room.....

Equipment/Charts

- Wasted time searching for charts and equipment
- Arbitrary rules regarding placement of charts and equipment on each unit
- Organization of charts-vital signs, medications, lab results varies from unit to unit

Equipment/Charts

Recommendations:

- Standardization of code carts for pediatrics and adults
- Single system for chart storage, chart organization, vital signs, medications
- Standardization for location of equipment and composition of procedure kits
- Standardization of examination room lay out

Case Five

A cross cover intern was called to the bedside of Mr. Daniel Watts who was complaining of SOB. The 48 year old had been admitted for lung cancer and was undergoing radiation therapy. The intern ordered a chest x-ray and read the film as a complete opacification of the right hemithorax. A thoracentesis was performed to evacuate a suspected pleural effusion. There was no fluid return and a repeat CXR read by radiology revealed a small pneumothorax and complete atelectasis on the right.

Procedures

- See one, do one, screw one up.....
- Autonomy and education through experience falls short of guaranteeing proficiency and promoting patient safety
- No standardization for teaching procedures or documenting competency
- Poor supervision on nights, weekends, holidays

Procedures

Recommendations:

- Evidence supports use of workshops and training in promoting competency in procedures
- Create refresher courses, simulated codes
- Standardization of training in procedures and procedure kits
- Improve availability of supervision and materials to review prior to procedure

High Risk

Patients at risk for medical error:

- Altered mental status
- Intoxicated
- Passive aggressive personalities
- Violent or aggressive
- Poor communicators/language barriers
- Incarcerated
- Elderly
- AMA patients
- Uncooperative patients

High Risk

Diagnoses at risk for medical error:

- AMI
- CVA
- Vascular emboli, limb or gut
- PE
- Cardiac tamponade
- Tension pneumothorax
- Airway obstruction
- Spinal cord injury
- Tylenol overdose, carbon monoxide poisoning
- Aortic injury
- Testicular torsion

High Risk

Transitions at risk for medical error:

- Change of shift
- Sign out rounds
- Change in teams
- Patient transfers
 - Another hospital
 - Another service

Reporting Error

- 54% of residents told their attendings the most serious errors they committed in the previous year
- Of the errors reported 31% resulted in death
- Many attendings are unaware of the error yet are legally responsible
- Residents accepting responsibility for their errors and disclose them are more likely to report constructive changes in their practice

Impediments

- Culture of medicine – “Bad Apple Theory”
- Shame associated with error
- Fear of:
 - Liability
 - Scrutiny
 - Loss of medical license

Patient Needs

What Patients Need:

- To know what happened
- To hear we are sorry
- To know what we are doing to prevent it
- To be compensated for their loss

Caregivers Needs

What Caregivers Need:

- To take responsibility
- A safe place to talk
- To apologize
- To know something will be done to prevent recurrence

Event Management

What to do:

- Be honest, be fearless, don't blame
- Think “system”, multifactorial
- What can be done for prevention
- Reward positive contributors to change
- Read, stay informed, innovate
- Educate others regarding medical error
- Facilitate interdisciplinary solutions