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## MEDICAL ERRORS

By Christi McEachern

Patient Michael Samnick wears an allergy alert bracelet.

# Make No Mistake

## Piedmont Hospital Leads the Way in Error Prevention

As the old saying goes, “to err is human,” but in the healthcare profession, errors are often costly. That’s why Piedmont Hospital, a leader in the effort to prevent errors, combines tried and true safety practices with cutting-edge technology to provide patients with the safest hospital experience possible.

“Realistically, errors occur in every industry, and healthcare is no exception,” emphasizes Sarah Mullis, director of the Hospital’s Pharmacy. Add to that the complex, critical, emergency-oriented nature of healthcare, and the possibility for errors increases dramatically. But at Piedmont, we are — and always have been — doing everything possible to minimize mistakes.”

### A Focus on Preventing Medical Errors

The most common type of medical error is a medication error. Other medical errors occur when a treatment is prescribed or administered incorrectly during the course of a patient’s care. Incidents such as falls or other cases of personal injury to patients may be considered medical errors as well.

“Regardless of whether you are discussing medication or medical errors,” notes Richard S. Taylor, M.D., vice president of Medical Services, “the root cause is usually a problem with the process, not individuals. At Piedmont Hospital, we constantly evaluate our processes and fine-tune our systems so mistakes won’t happen.”

The following are among the error-prevention practices followed at Piedmont Hospital.

- *Blood Testing* Before blood arrives at the Hospital, it undergoes extensive testing at the Red Cross to ensure a safe blood supply. Before it is administered, compatibility testing of the patient’s blood sample and the donated blood takes place in Piedmont’s Laboratory. The unit of blood is checked again on two occasions by two different nurses to ensure it is the one intended for that patient.

- *All Accounted For* The surgical staff, prior to every surgery, performs a documented count of surgical instruments and sponges that will be used during the operation. Another count is taken just before the incision is closed. A third and final count is taken before the patient leaves the operating room. These simple steps help to ensure that no instrument or sponge is inadvertently left inside a patient. “This is such an ingrained part of every surgery, we consider it standard medical practice,” notes Dr. Taylor.

- *Infection Control Measures* Piedmont Hospital follows all CDC guidelines for the control and isolation of communicable diseases such as tuberculosis, chicken pox and measles. There are specific criteria for handwashing before patient care, the appropriate wearing of gloves and other protective attire, and the sterile conditions in which patients undergo surgery and other invasive procedures.

- *Allergy Identification* Patients wear yellow armbands if they have allergies to medications, contrast dye, adhesive tape, food, or latex.

# HELP YOURSELF

**Studies show that patients** who are involved with their own healthcare usually get better results. So if a hospitalization is in your future, play an active role in the experience.

You are a V.I.P. (Very Important Patient) and a very important member of your healthcare team.

**GET EDUCATED.** Learn all you can about a recommended medical procedure before it takes place. Ask your doctor about the goals, risks, likely results, and what you will need to do before and after the medical or surgical procedure to achieve the best results.

**CHOOSE WISELY.** Choose a doctor and a hospital with a great deal of experience treating your condition or performing the procedure or surgery you need. Not surprisingly, studies show that when it comes to medical procedures, experience translates into a successful outcome.

**TELL ALL.** Tell your doctor and hospital personnel about every medication you are taking. That includes over-the-counter, prescription, herbal medications, dietary supplements and diet aids as well as alcohol and recreational drugs. Your honesty in these matters could save your life. Also be open and vocal about any allergies and adverse reactions you have had to medicines, foods, latex, dyes, and the environment. Be frank about any fears or phobias you may have. "Keep a written record in your wallet of your current medications and allergies," advises Sarah Mullis, director of the Piedmont Pharmacy. "Then, in case of emergency, the hospital has all the information it needs to give you the proper

care." Clip, complete, fold and save the wallet-size "My Health History" on pages 15-16.

**FOLLOW THE LEADER.** A team of professionals will care for you in the hospital, but someone — such as your personal doctor or surgeon — is in charge. Consult him or her if you don't understand the reason for a medication or procedure.

**CLARIFY YOUR PROCEDURE.** Take time (1) in your doctor's office, (2) when you are admitted to the hospital and (3) just before your procedure, to clarify the details of what will be done. Make sure you and your doctor agree on what will be performed.

**ASK QUESTIONS.** Before every medication dose and prior to every procedure, ask about what you are taking and what is being done. Similarly, if you are being transported to X-ray or another department for a procedure, ask where you are going and why. If you don't understand why the procedure is being performed, request a consultation with your doctor.

**IDENTIFY YOURSELF.** Your armband lets your caregivers know who you are. Make sure they know you are who they think you are, so keep your armband visible. (Your name is also posted at your door.)

**COME CLEAN.** Remind all healthcare workers who come into direct contact with you to wash their hands, recommends Lorna Martin, RN, vice president of Nursing Services. They routinely have washed before entering your room, but you won't know unless you ask.

**BRING FRIEND OR FAMILY.** A friend or family member can serve as your advocate and speak for you in case you are unable to speak for yourself.

**REQUEST RESULTS.** If you have a test done, request the results. Ask questions about anything you don't understand.

**REVIEW DISCHARGE INSTRUCTIONS.** Before leaving the hospital, talk to your doctor about any medications or treatments you will need at home. Discuss when you can return to daily activities.

In addition, complete information about that allergy is contained in the patient's medical chart.

• **Built-In Checks and Balances** "We've built a number of checks and balances into our system," stresses Dr. Taylor. "For instance, pharmacists check doctors' orders, and nurses check the medication when it comes from the pharmacy. Patients also play a critical role in this checks-and-balances process. Patients should inquire about every medication and procedure before they accept it."

• **Ongoing Education** When a new procedure or technology is introduced, all relevant hospital staff members undergo extensive training before the procedure or technology is performed on patients. Patients also have excellent resources available for learning about their illness or disease. Video-on-Demand is a new digital service that allows patients to order, by phone, and view an educational video in their room. The Nicholas E. Davies Community Health Information Center located in the Sauls Memorial Library at Piedmont Hospital provides a wide selection of materials on illnesses and diseases for patients and families.

When a new medication is added to the Hospital's formulary, the Pharmacy provides an educational printout that is placed in the nursing pharmacy manual. A software program called Micromedex produces an information sheet for patients and staff. "Physicians even receive ongoing education on how to improve the legibility of their written prescriptions," says Dr. Taylor.

• **Standing Orders** Certain diagnostic and treatment categories require the administration of standard medications and/or procedures and treatments. In such cases, physicians can use preprinted "standing" orders. Standing orders also help address physician handwriting legibility and ensure that no steps in the process are omitted.

• **Standardized Equipment** Whenever possible, patient care equipment, such as feeding or IV pumps, is standardized. "You cannot have several different brands of complicated equipment and expect clinical staff to know how to use them all," emphasizes Mullis.

• **Sign-Your-Surgical-Site** Orthopaedic surgeons helped pioneer this approach that involves writing the word "NO" on the extremity

### DATE OF LAST VACCINES

Flu: Month/Year: \_\_\_\_\_  
 Pneumonia: Month/Year: \_\_\_\_\_  
 Tetanus: Month/Year: \_\_\_\_\_  
 Hepatitis: Month/Year: \_\_\_\_\_



### HEALTHCARE WISHES

I \_\_\_ do \_\_\_ do not have a Durable Power of Attorney for Healthcare. My Power of Attorney for Healthcare is:  
 Name: \_\_\_\_\_  
 Phone #: \_\_\_\_\_

I \_\_\_ do \_\_\_ do not have a Living Will/Directive for Final Healthcare.  
 Name: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ has a copy of my Living Will/Directive for Final Healthcare.

### MY HEALTH HISTORY

Name: \_\_\_\_\_  
*In case of an emergency, call:*  
 Name: \_\_\_\_\_  
 Phone #: \_\_\_\_\_

### HEALTH PROBLEMS

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

# (cut out, fold and place in wallet)

where surgery will not occur and “YES” on the extremity where surgery will occur while the patient is watching or sometimes by the patients themselves. For example, in the case of a knee replacement surgery, the word “YES” is written on the knee to be replaced, and “NO” is written on the other knee.

- *Clinical Pathways* For certain medical diagnoses and procedures, clinical pathways have been developed that map out the entire plan of care from admission to post-discharge care. “Such proven pathways represent best practices and help ensure that everyone’s expectations are the same,” Dr. Taylor explains.

- *Safety Rounds* Planned inspections of all facilities by the management team, safety coordinator, director of engineering, and infection control nurses help to ensure that conditions are safe and that infection control measures are being followed. In addition, as part of the Hospital’s Core Values, each employee is encouraged to do whatever is necessary to make Piedmont a safe and clean hospital; and the Hospital’s Service Standards, which are a part of employees’ performance appraisals, list a “safe and clean environment” as a watchword.

### Error Prevention in the Future

- *Bedside Bar-Coding* Hand-held scanning devices will cross-check and verify information for clinical staff who administer medications, perform lab tests and other functions. For example, the nurse will scan the patient’s bar-coded wristband and a computer screen will display the patient’s identification and medications. Next, the nurse will scan the bar-coded medication. If there are any discrepancies in the drug name, dose or timing, an error message will alert the nurse. By June 2001, Piedmont will have this state-of-the-art technology.

- *Computerized Prescribing and Patient Records* Over the next 18 months, each patient floor will be equipped with a computer containing complete patient records in a secured database, accessible by password by authorized physicians. Physicians can order medications, lab work, and X-rays electronically, as well as other procedures and treatments for their patients. Soon after the physician system is implemented, a similar system for clinical staff will be operational.

### A Prescription for Safety

Piedmont Hospital administers over three million medication doses annually, or 8,800 daily. Medication errors occur when a patient receives

the wrong medication; or the right medication but the wrong dose; or the right medication at the wrong time; or by the wrong method (oral vs. intravenous). In order for medications to work as they were designed, they must be administered exactly as the physician prescribes.

Piedmont’s push to eradicate medication errors starts with upper management and involves virtually every department in the Hospital. There is a concerted and ongoing effort to reduce the incidence of medication errors by looking at different aspects of the medication process including error reporting, physician prescribing, order processing and drug delivery.

“The Healthcare Advisory Board in Washington, D.C., publishes the best practices from hospitals nationwide for decreasing medication errors,” explains Lorna Martin, RN, vice president of Nursing Services. “Several task forces at Piedmont are examining best practices in relation to our own processes, and making adjustments or changes where necessary.”

Todd Parker, Pharm.D., and Kristi Wilkins, RN, BSN, discuss a patient’s medications at the nursing station.

## MEDICATIONS I TAKE

e.g. amoxicillin                      Dose: 500mg 3xday

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

\_\_\_\_\_ Dose: \_\_\_\_\_

## ALLERGIES

(List any foods, drugs or substances)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## RECENT HOSPITALIZATIONS

Mo./Yr.: \_\_\_\_\_ Reason: \_\_\_\_\_

Mo./Yr.: \_\_\_\_\_ Reason: \_\_\_\_\_

Mo./Yr.: \_\_\_\_\_ Reason: \_\_\_\_\_

Mo./Yr.: \_\_\_\_\_ Reason: \_\_\_\_\_

## DOCTORS I SEE

*My primary doctor is:*

Name: \_\_\_\_\_

Phone #: \_\_\_\_\_

*Other doctors I see are:*

Name: \_\_\_\_\_

Phone #: \_\_\_\_\_

This information is current as of \_\_\_\_\_

(date)

# (cut out, fold and place in wallet)

Piedmont Hospital has a number of safety measures in place to prevent medication errors, and still other changes are planned for the future. While some of these measures evolved from recent efforts, others have existed for years, a testament to the fact that Piedmont Hospital has long emphasized an error-free environment.

In addition to the measures described earlier in this article, the following practices are in place to minimize medication errors.

- **Pharmacy Robot** Piedmont Hospital was the first in Georgia to invest in a pharmacy robot, an automated system that helps sort and dispense medications. Located in the Pharmacy, the robot contains 400 of the most commonly prescribed medications. Each patient's medications are entered into the computer system, which generates a bar-coded label for that patient. The robot reads the bar-coded label and pulls that patient's medications from an inventory of medications which are also bar-coded.

- **Patient Focused Care (PFC) Pharmacists** "At Piedmont, we take a team approach to preventing medication errors," says Mullis. "That team includes physicians, nurses, pharmacists and others. Together, we've developed a process where pharmacists make rounds on specific patient floors. These PFC pharmacists answer questions from nurses, physicians and patients about medications and review patient records and physician prescriptions. If the pharmacist has a question about a prescribed medication, he or she will clarify the order and leave notes in the chart. The physicians have been very receptive to recommendations from the pharmacists. They "check and balance" each other.

- **Patient Medication Cabinets** Giving prescribed medications to the wrong patient is an error easily committed if there are no safeguards in place. "When a nurse has medications for several patients on a rolling cart, it is too easy to administer a drug to the wrong patient," says Mullis. "So several years ago, individual medication cabinets were installed outside every patient room. Each cabinet is stocked with medications only for the patient occupying that specific room."

## Working Together

Given the current complexity of modern healthcare, Piedmont is doing everything possible to ensure the quality and safety of the patient experience and considers the patient to be a partner in the process. By working together, under strict internal quality control procedures, vigilance and education, adhering to independent oversight from agencies such as the Centers for Disease Control and Prevention, we, the caregiver and the patient, can narrow the risk of unwanted and unintended consequences.

"At Piedmont Hospital, we treat approximately 300,000 patients each year," says Marilyn Head, director of Compliance, Risk Management and Safety. "We strive diligently to maintain a safe environment for all patients, visitors and employees. As a result, our safety record is very good, and we are committed to making it even better. But that will take everyone's help — healthcare providers, management and also patients and families." ■

CAROLINE JOE

**Editor's Note:** Although the safety measures described in this article pertain to Piedmont Hospital, the more than 66,000 patients treated annually at Fayette Community Hospital benefit from comparable practices, where more than 500,000 medication doses are administered annually.

Rhonda Fambro, RNC, prepares medications at her patient's medical cabinet.