



LEAP

Learning From Errors in Ambulatory Pediatrics

Julie Mohr, MSPH, PhD

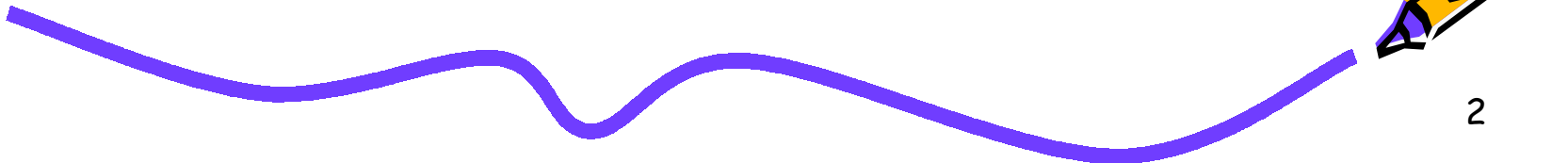
National Ambulatory Primary Care
Research and Education Conference on
Patient Safety

Sept 18-19, 2003



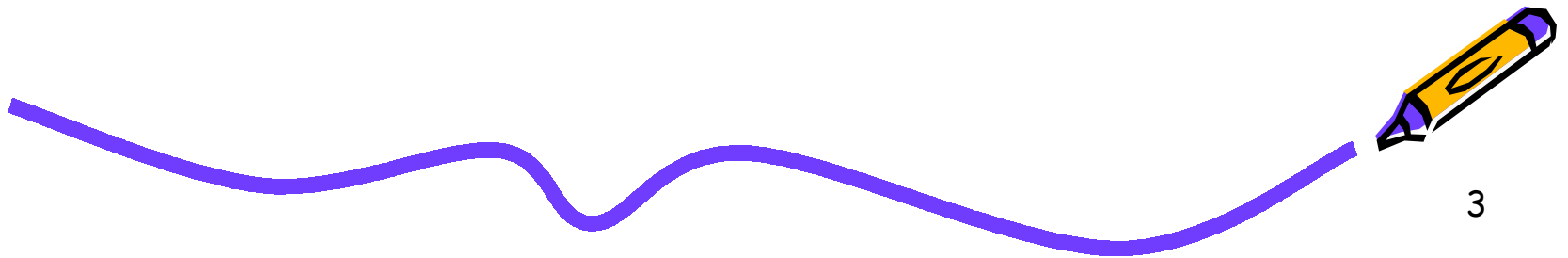
The LEAP Team

- Julie Mohr
- Carole Lannon
- Kathy Thoma
- Eric Slora
- Dave Kleckner
- Lynne Uhring
- Mort Wasserman
- Donna Woods



Aim of LEAP

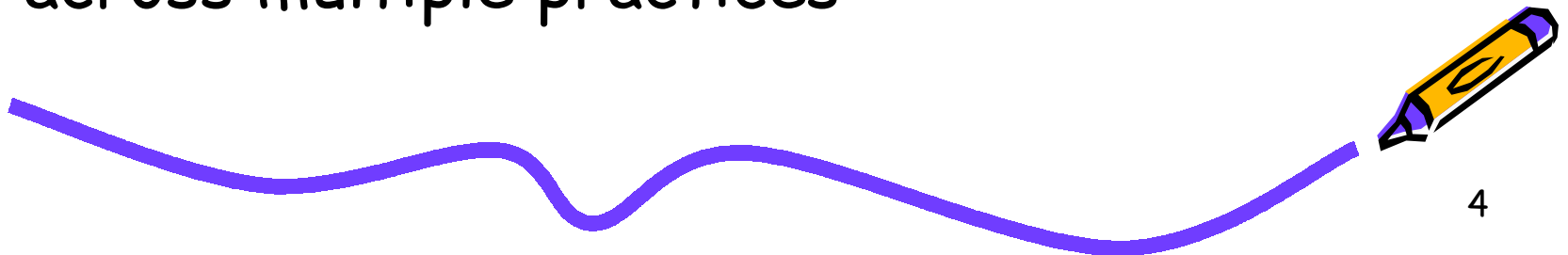
- To learn the scope, range, potential causes, and possible solutions to medical errors in pediatric ambulatory care



Goals of the LEAP Project



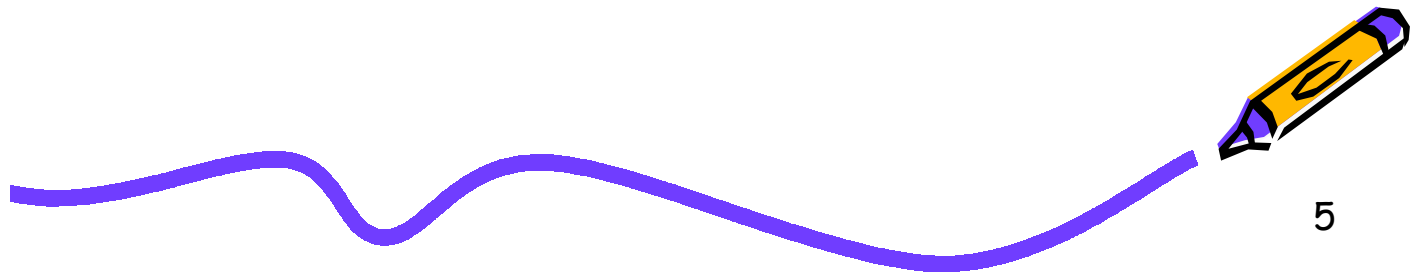
- Create a secure method of reporting errors and near misses in the ambulatory environment via the internet
- Identify the types of errors that are occurring in children
- Identify errors that are generalizable across multiple practices



A Brief History



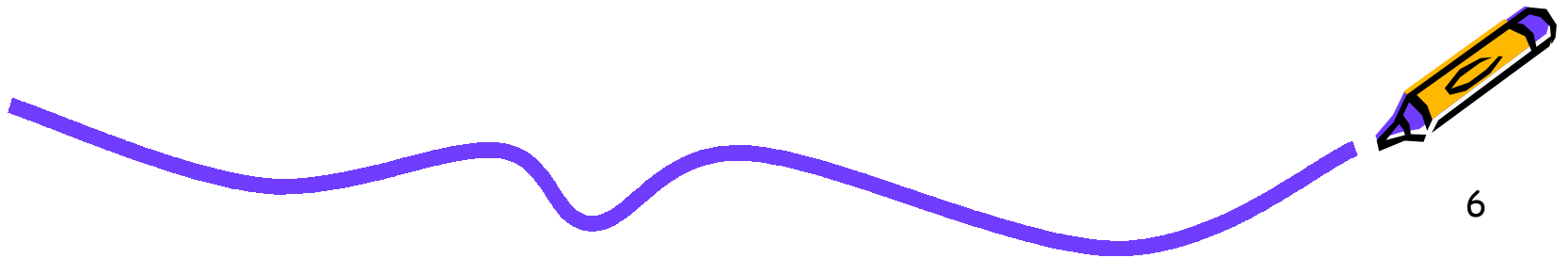
- Submitted as a supplemental grant of the Center for Education and Research in Therapeutics (CERTs) at the University of North Carolina at Chapel Hill



A Brief History



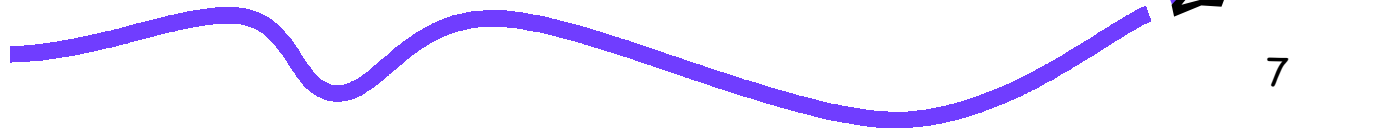
- The CERTs are jointly funded by FDA and AHRQ
- UNC CERTs partnered with the Pediatric Research in Office Settings (PROS) Network to provide the sites for the study



A Brief History



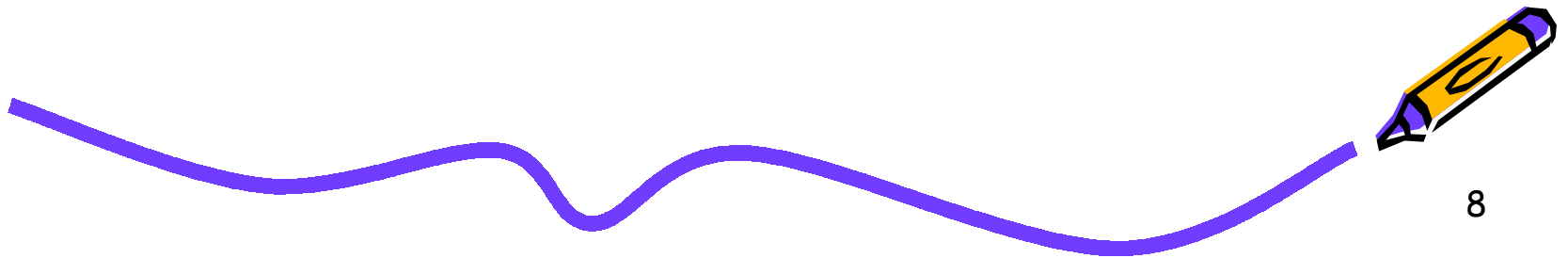
- PROS is a program of the American Academy of Pediatrics Center for Child Health Research



A Brief History



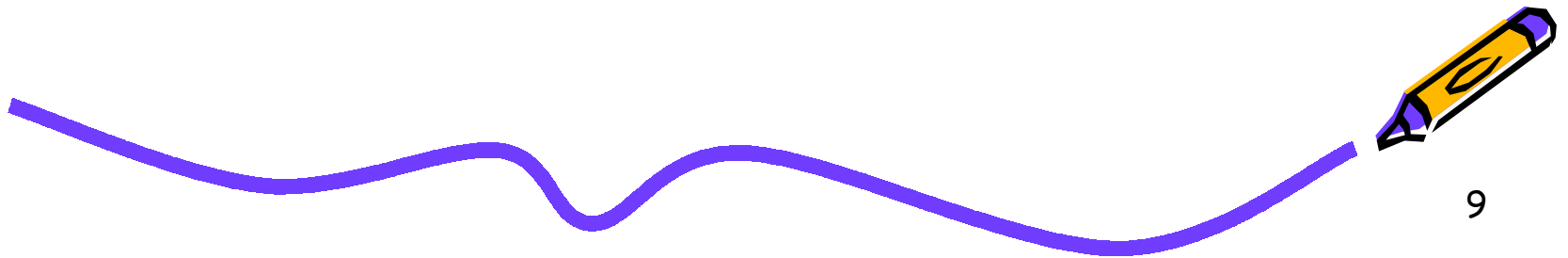
- Pilot data collected with 5 sites in March 2003
- Revisions to the reporting tool made in April and May
- Data collection with 10 sites began in June and ended September 2, 2003



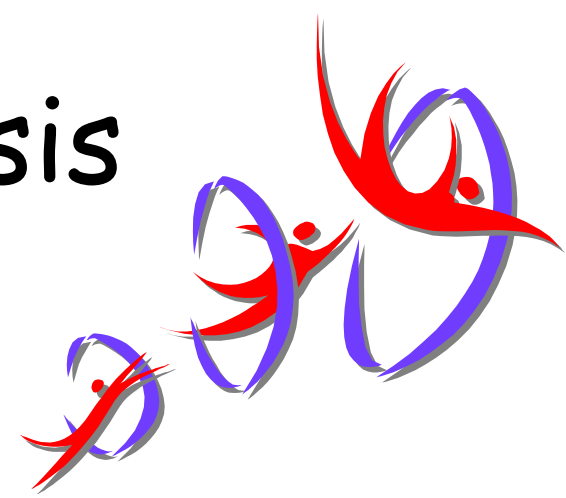
The Reporting Tool



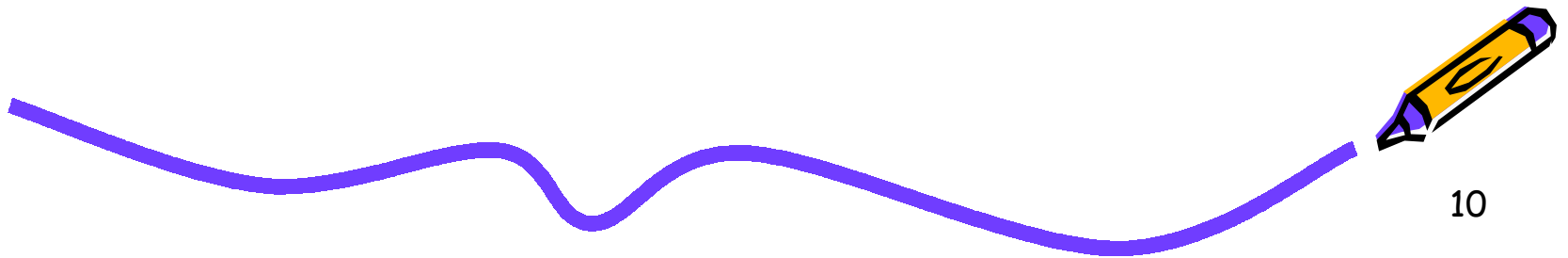
- See handout



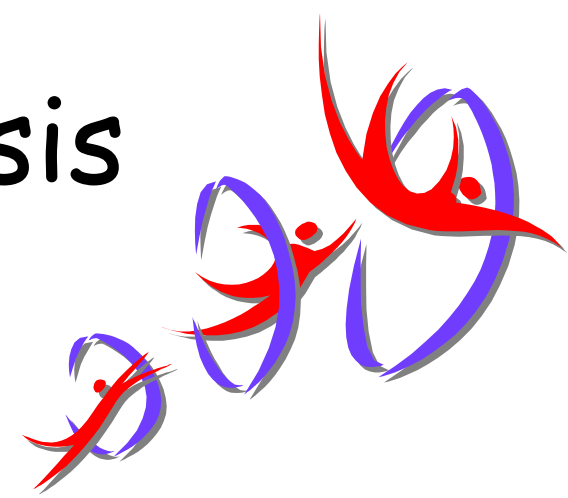
Methods for Analysis



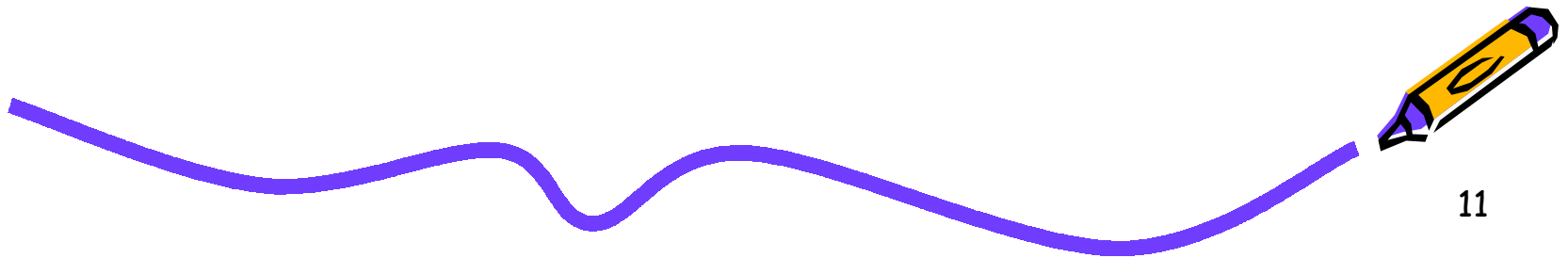
- Critical Incident Analysis Technique
- 3 independent coders (1 pediatrician, 2 patient safety researchers)
- Independently code data
- Differences are reconciled through consensus based on definitions and criteria



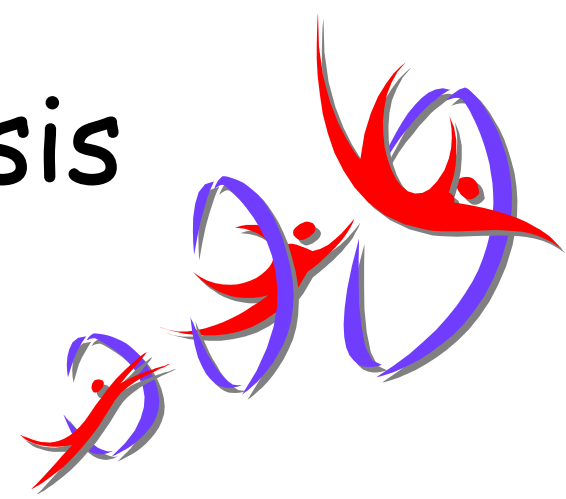
Methods for Analysis



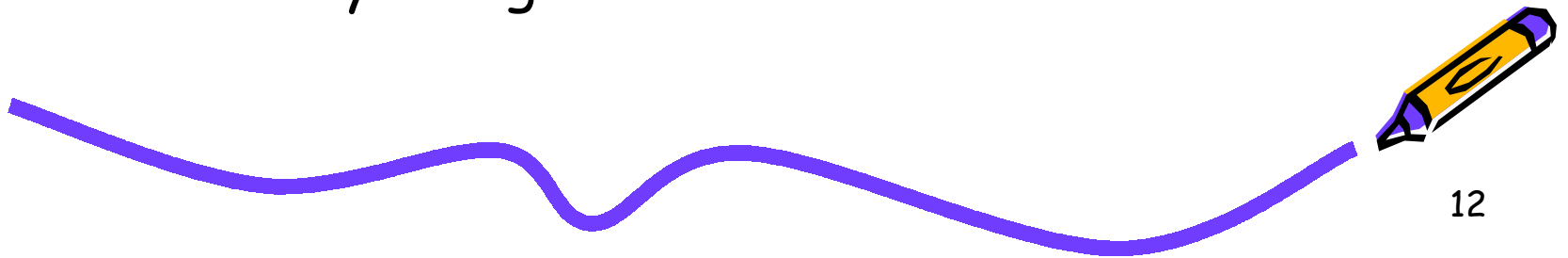
- Coding error reports by
 - Medical domain
 - Prevention
 - Diagnostic
 - Treatment
 - Communication
 - Patient Identification
 - Falls
 - Equipment
 - Administrative



Methods for Analysis



- Coding error reports by
 - Problem types
 - Problematic communication and/or handoffs
 - Problematic decision
 - Problematic execution
 - Mechanical/Technical malfunction
 - Risky design



Methods for Analysis



- Coding error reports by
 - Child Specific Factors that make it easier for errors and/or harm to occur
 - Physical characteristics
 - Developmental characteristics
 - Physiological
 - Cognitive, social, emotional
 - Minor status
 - Woods found that 50% of cases from an inpatient study had a child specific factor
 - Will we find similar results in the outpatient setting?

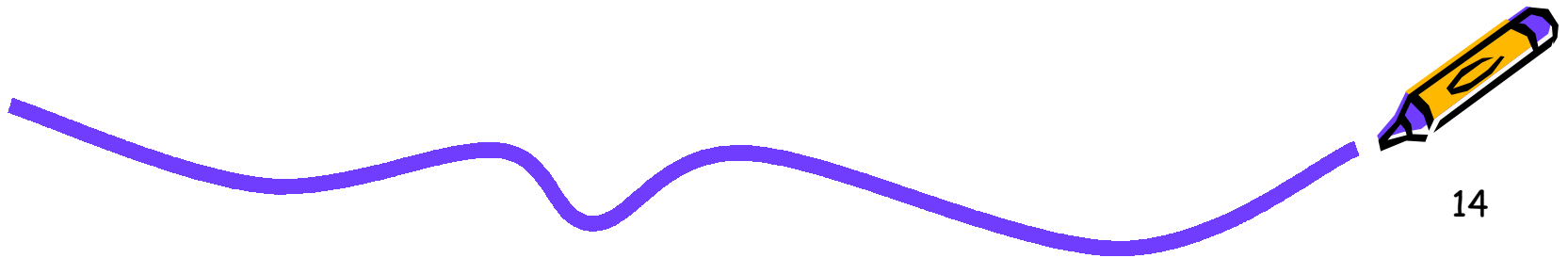


Examples of Errors Reported (n=68)



- Treatment
(Medication Ordering)

"6 year old boy on 5 different medications for behavior disorder. I prescribed an antibiotic that reacts with one of his meds because I didn't look up possible drug interactions"

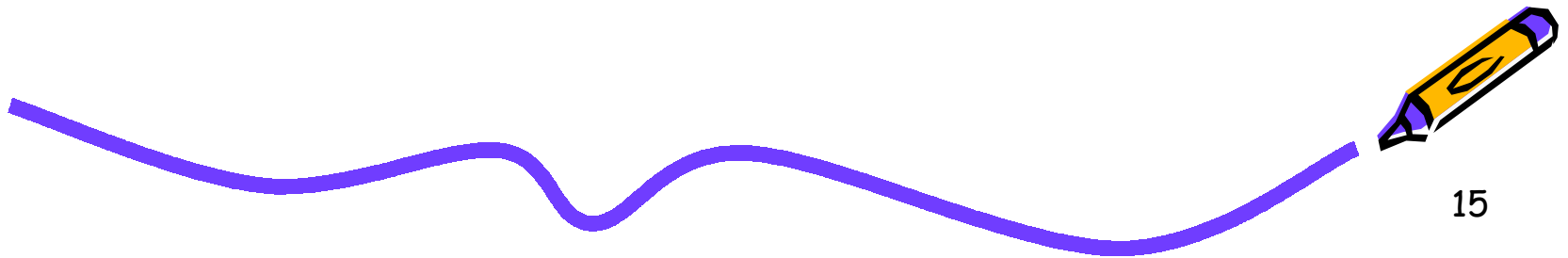


Examples of Errors Reported



- Treatment
(Medication Administration) and
Communication (Medication Related)

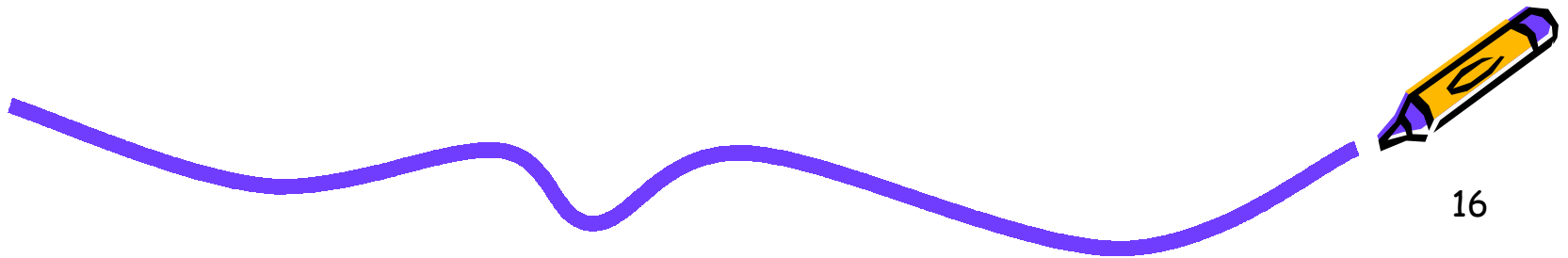
"Pediatric Neurologist wanted to change the patient from liquid to capsule form of anticonvulsant. Mom misunderstood the directions and gave both meds for a week. Child developed blurred vision, stuttering, and ataxia"



Examples of Errors Reported



- Treatment (Medication Administration) and Communication (Medication Related)
"Mom given written instructions for psychotropic med. Told to give $\frac{1}{2}$ tab BID and she interpreted it as bedtime"

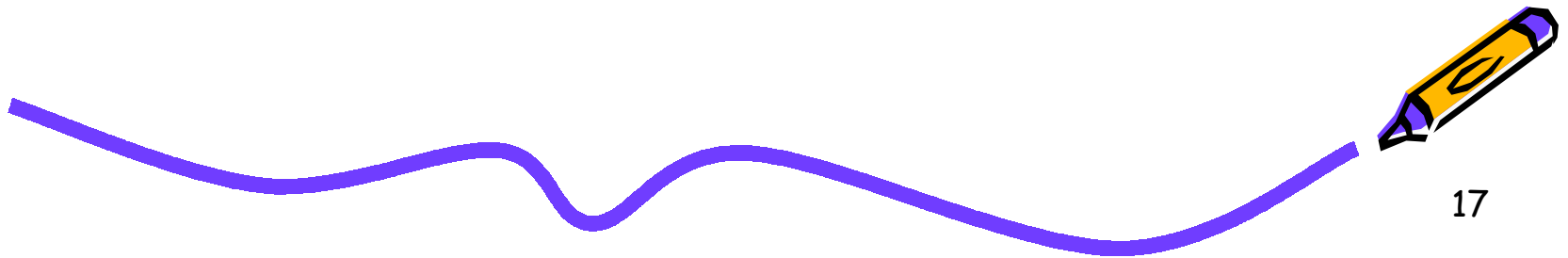


Examples of Errors Reported



- Patient Identification and Administrative (chart related)

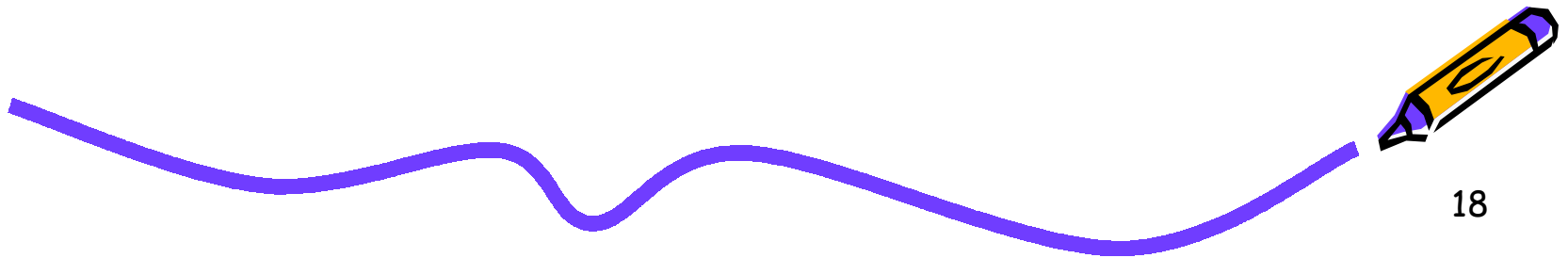
“Information regarding allergies and medications on the wrong patient with the same name in this patient's chart. During the physical the physician initiated a discussion of allergies as though it was the other patient.”



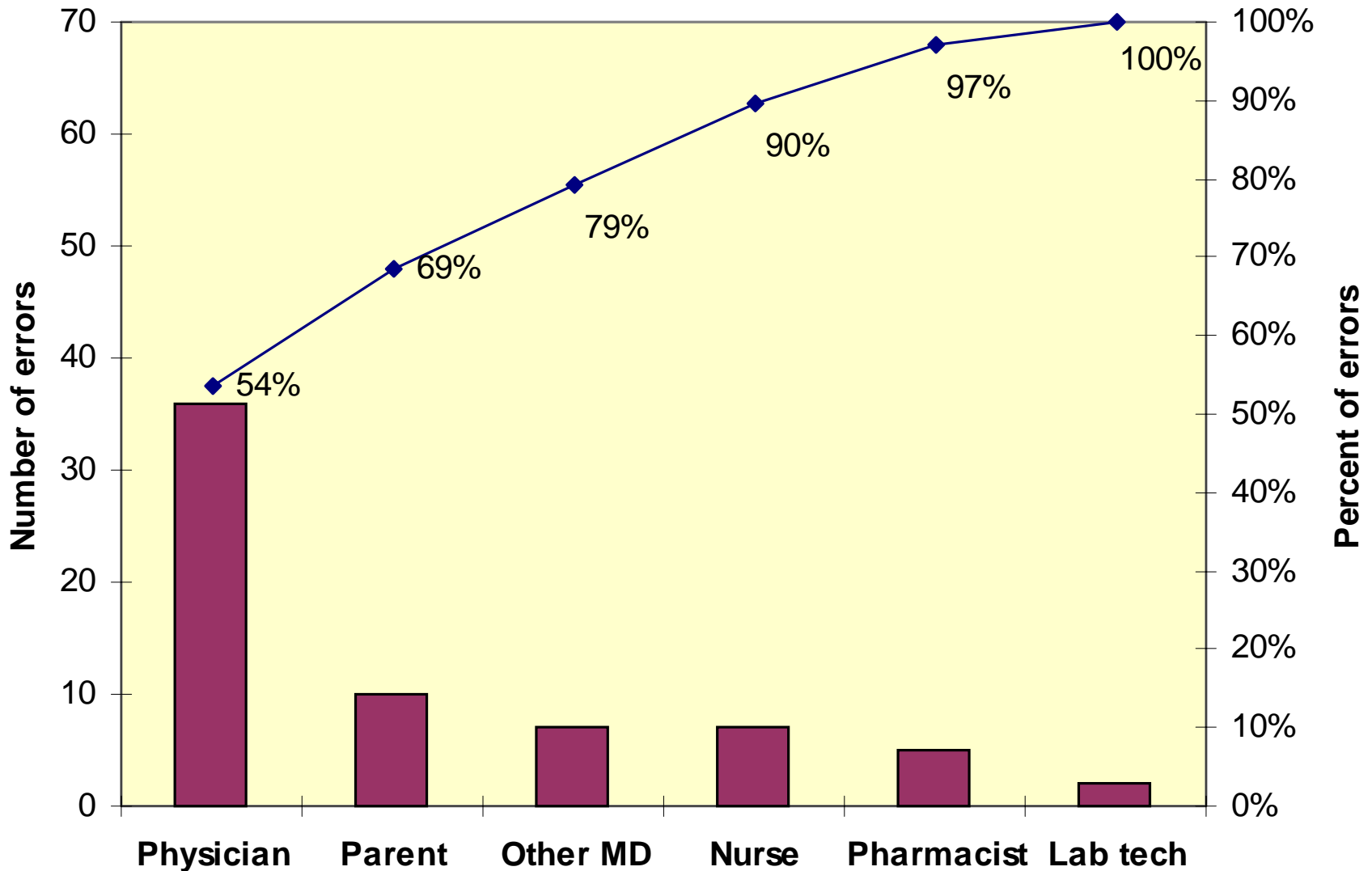
Examples of Errors Reported



- Treatment
(surgical procedure preparation)
“I forgot to put gloves on until I had started a circumcision”
- Diagnostic (Ordering)
“CBC and Lipid panel ordered, but nurse only drew Lipid panel”



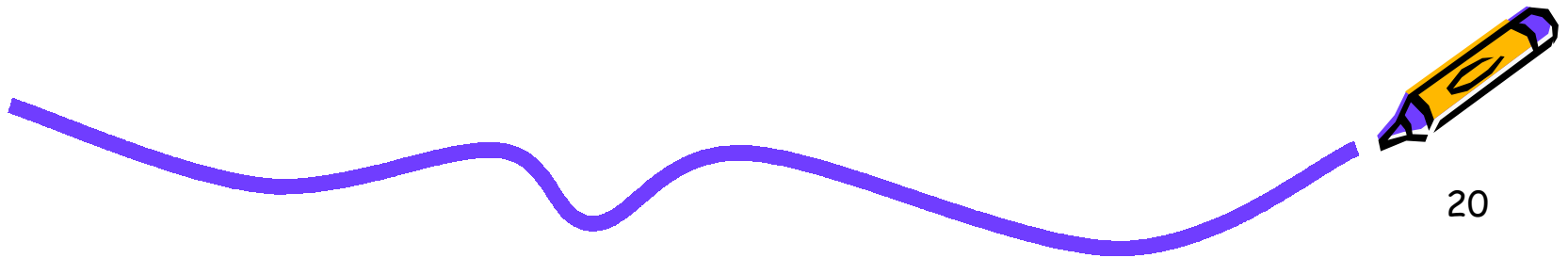
Who Discovered the Error?



Preliminary Interpretations and Lessons Learned



- There are errors in ambulatory settings - more than PROS members originally thought
- Everyone on the team has a role in preventing errors from reaching the child
- We need to clarify categories of harm



Preliminary Interpretations and Lessons Learned



- Clinicians welcomed the opportunity to talk about his or her own errors
- Reporting isn't the goal
- We need a venue for presenting the errors and then collaboratively designing and testing solutions

