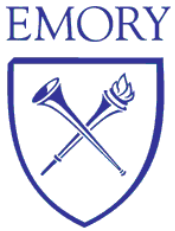
Staff perceptions of advantages and disadvantages of a commercial pediatric electronic medication administration record



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Objectives

- Prior to and following implementation of a commercial inpatient pediatric electronic medical record (EMR), examine nursing staff perceptions of system
  - Usefulness
  - Advantages
  - Disadvantages

Study Setting

- Children's Healthcare of Atlanta
  - Pediatric healthcare system in metro-Atlanta
  - 2 largest hospitals during EMR implementation
    - 1 academic, 1 community hospital
    - 23,000 hospital admissions
    - 128,000+ inpatient days

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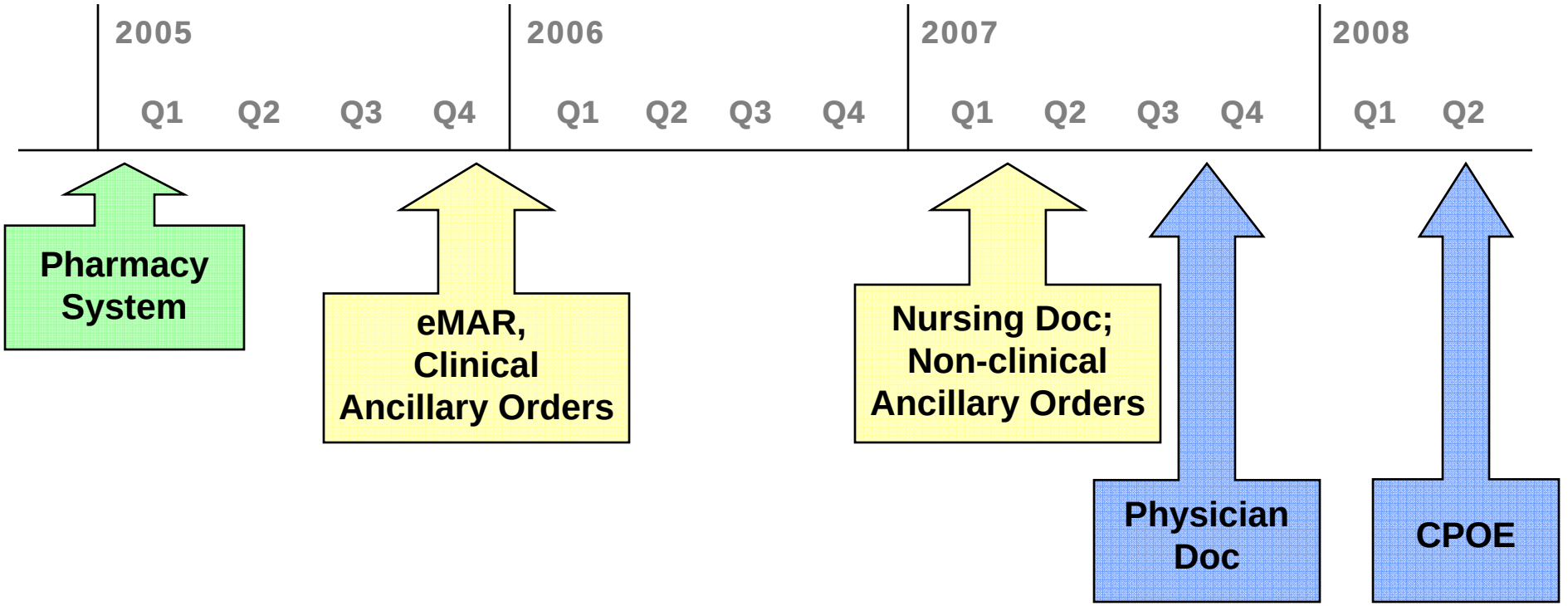
Children's EMR implementation



Phased implementation employing user-centered methods

Nurse acceptance surveys

- Survey distributed before and after each go-live
  - Survey items based on Technology Acceptance Model (TAM) measured perceived usefulness
  - Open-ended questions: advantages & disadvantages
- Survey population: inpatient nursing staff
  - Before eMAR (n=245), after eMAR (n=268)
  - ~45% work in ICU
  - ~50% have worked 1-5 years in their current work area

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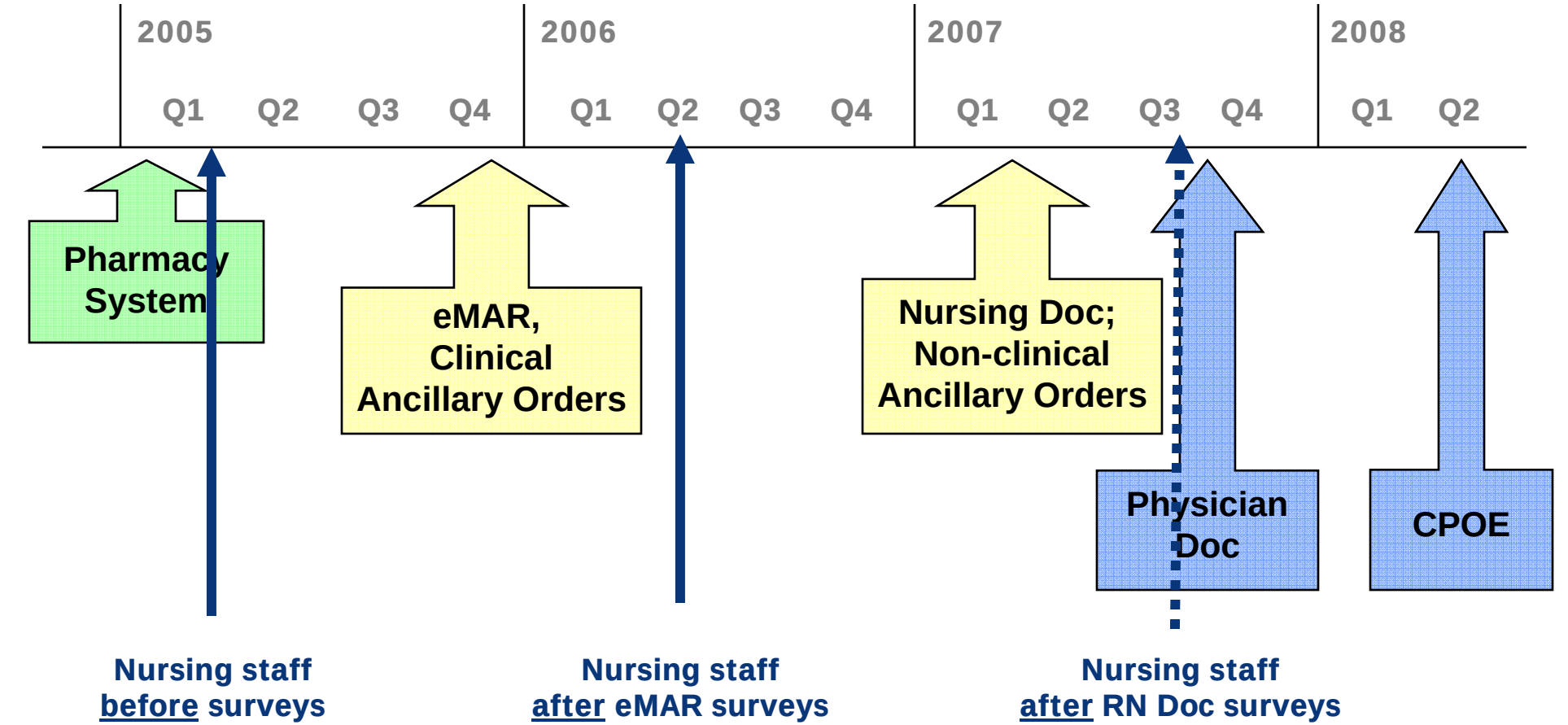
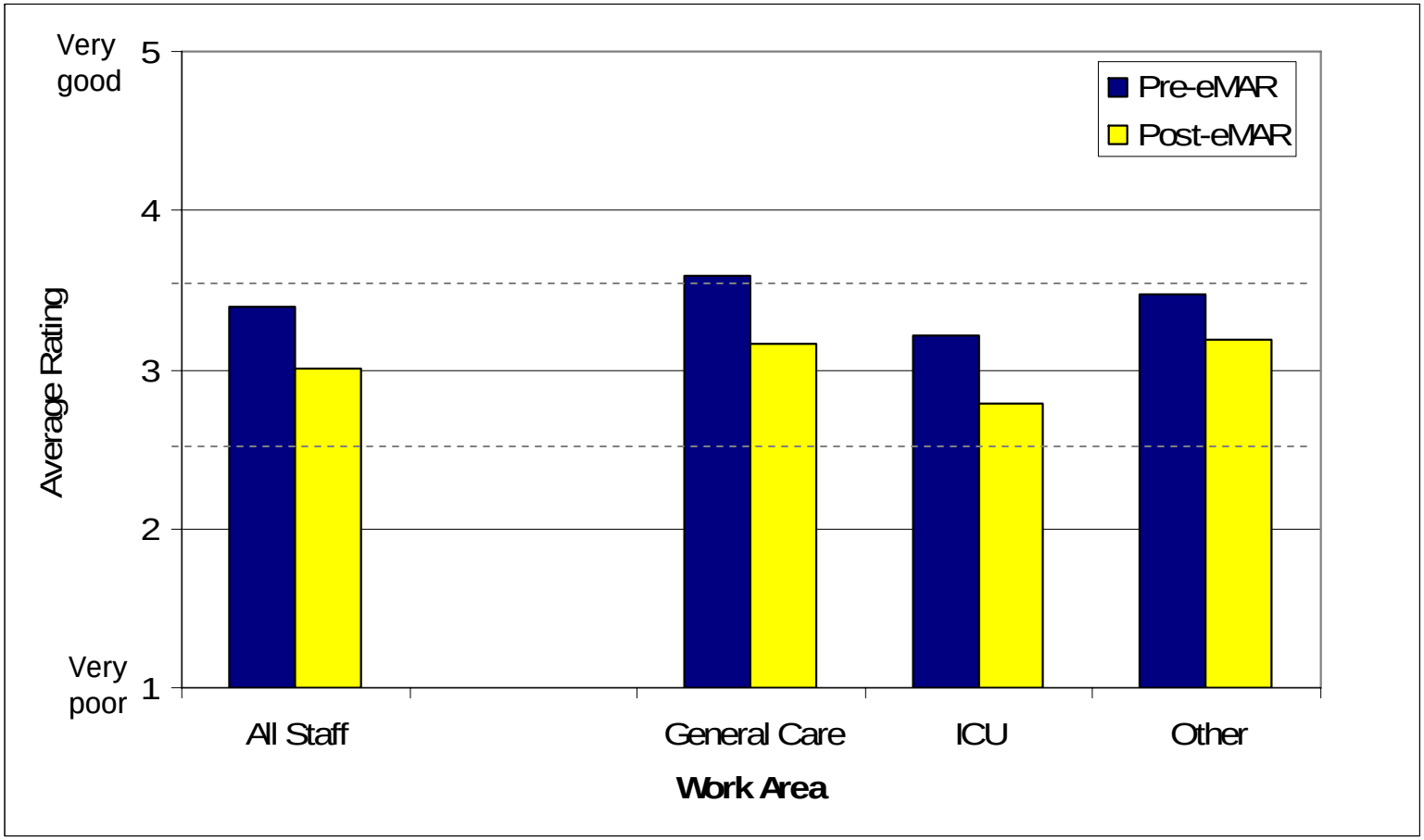
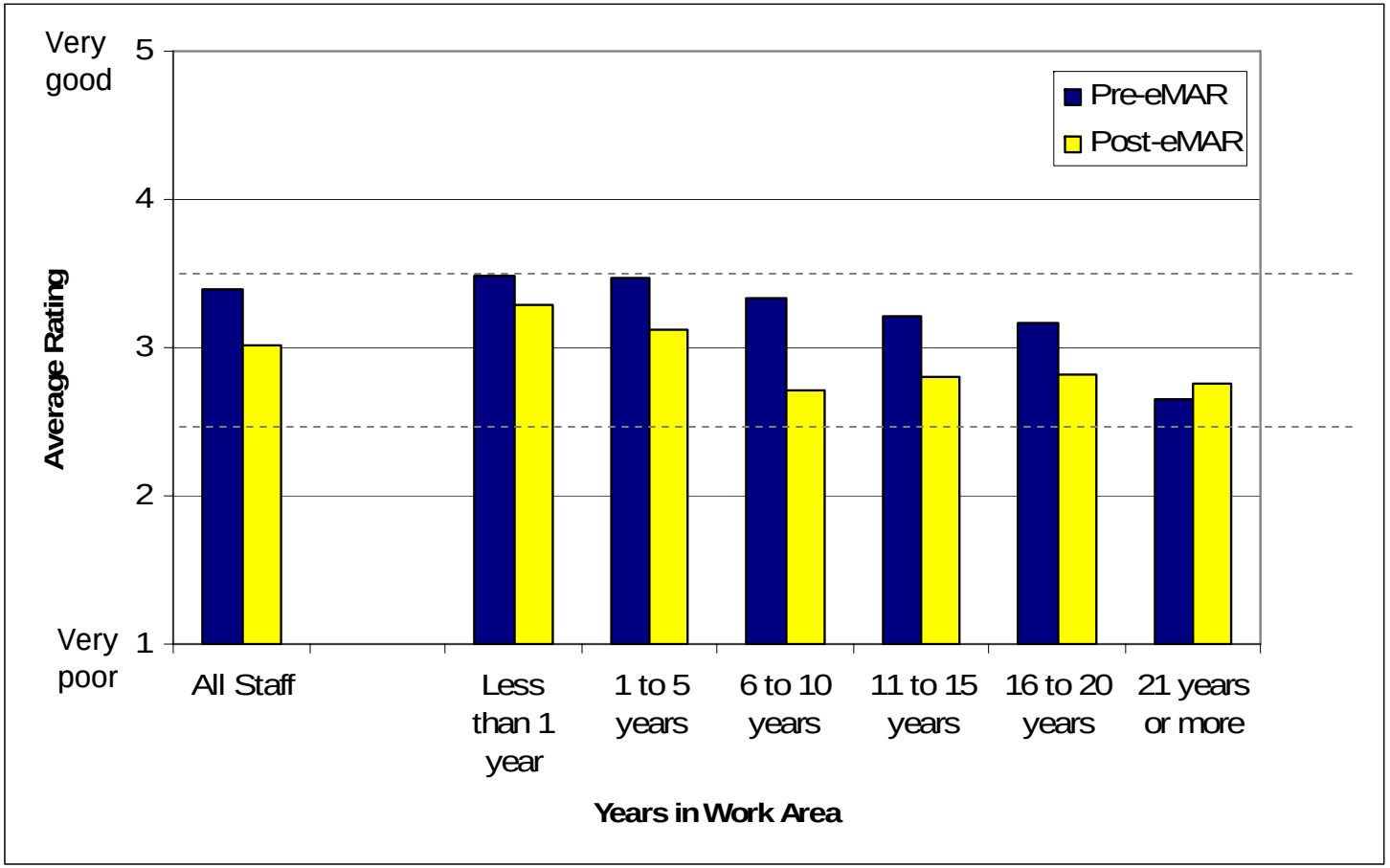
Children's EMR implementation



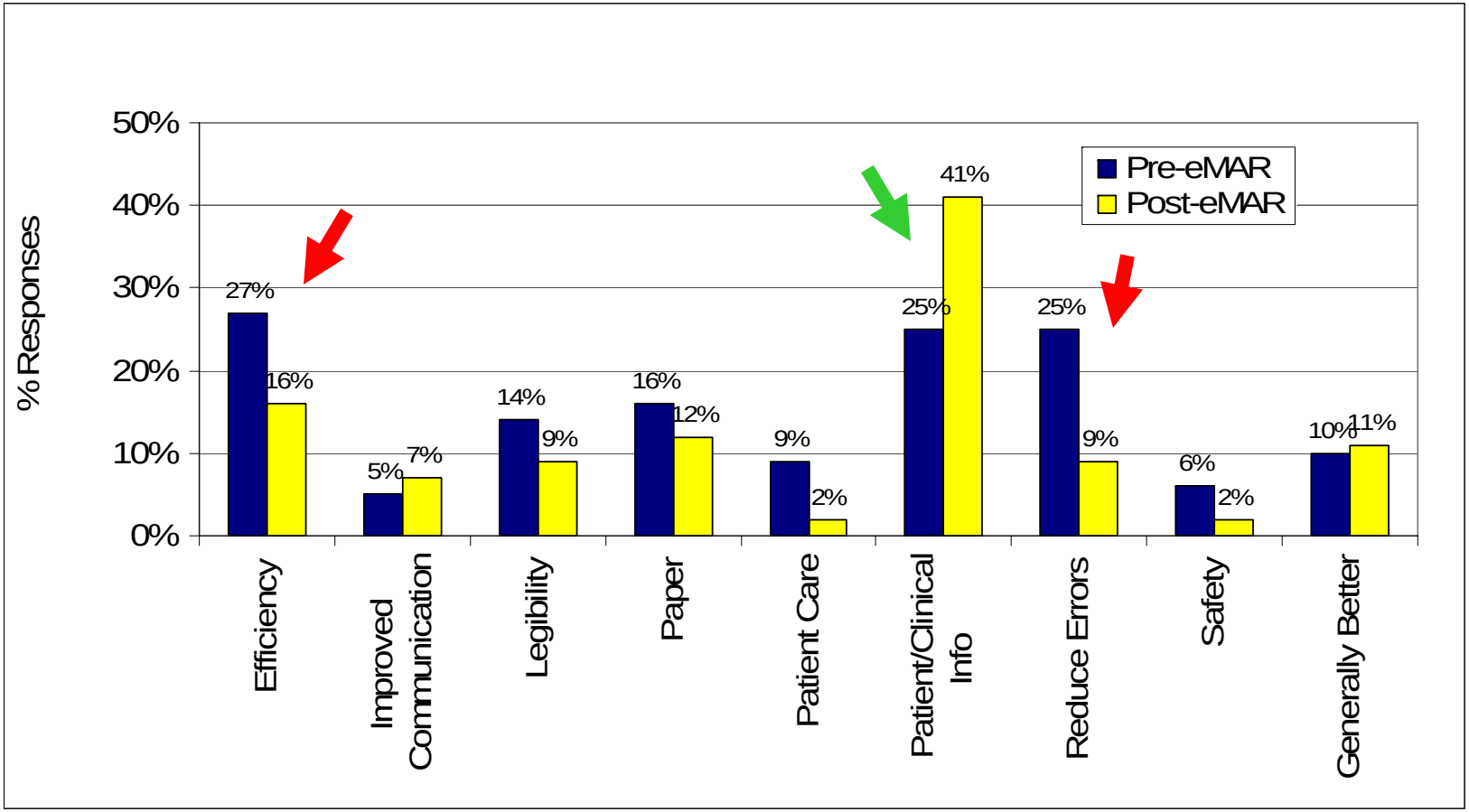
Perceived usefulness ratings



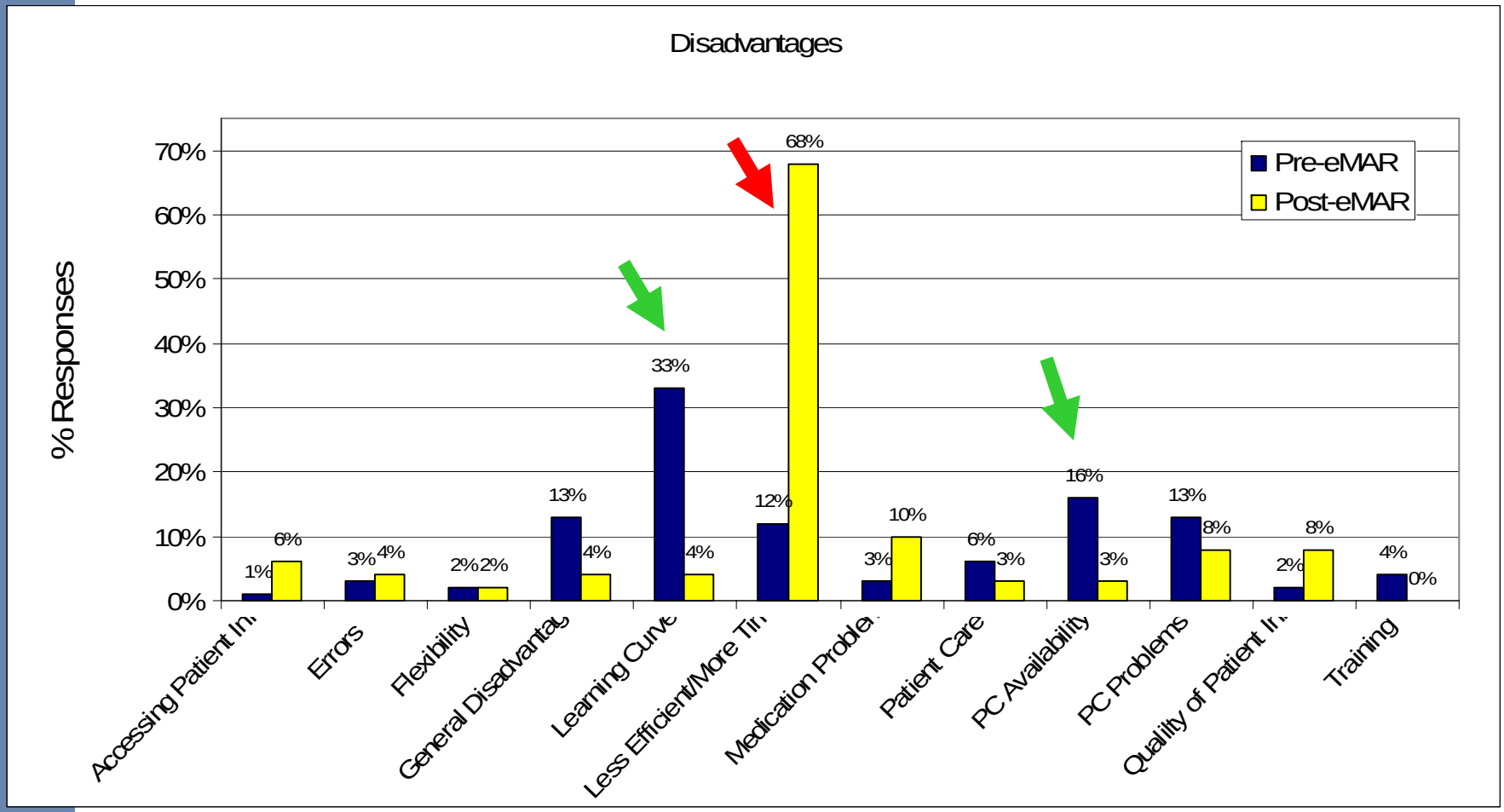
Perceived usefulness ratings



Perceived advantages



Perceived disadvantages



Conclusions

- Investments in hardware addressed concerns regarding PC availability
- Training & support efforts addressed concerns regarding learnability
- Perceived inefficiencies offset advantages in access to information and reduced errors, resulting in lower ratings of overall usefulness
  - Efforts undertaken to address inefficiencies in login and dual-signoff medications
  - Implementation of future phases will eliminate the need to access both paper and electronic charts