

the Challenge

In 1999 the Institute of Medicine (IOM) published a report entitled *To Err Is Human: Building a Safer Health System*. It drew national attention to the occurrence, clinical consequences, and cost of adverse drug events (ADEs) in hospitals¹. Since then, many more studies have focused on the breadth and consequences of medication errors. Research led by Dr. Kenneth Barker, Director of the Center for Pharmacy Operations and Designs at Auburn University, and published 9 September 2002, by the Archives of Internal Medicine found that a medication error occurred in nearly one of every five medication doses given in hospitals and skilled-nursing homes².

This study involved 36 institutions located in Georgia and Colorado selected at random. Overall, the research found that mistakes were made in 605 of 3,216 doses for an error rate of 19%. An error was defined as a “discrepancy between the dose ordered

and the dose received.” Some 7% of the errors were judged to be potential adverse events, meaning that they had the potential to cause injury to a patient.

In addition to the potential for causing physical harm and death, medication errors cost hospitals a great deal of money every year. According to the 1999 IOM report, the cost of treating ADEs averaged \$4,600 per incident. To put this into context, the IOM report indicated that a 700-bed teaching hospital would experience \$2.8 million in increased costs due to these events³.



the Solution

The **AU MEDS Observation Based Medication Error Detection System** is the solution that can identify, measure and track medication errors at the point of administration. Dr. Kenneth Barker, internationally recognized as one of the foremost authorities on medication dispensing and administration accuracy, is the primary inventor of MedAccuracy's AU MEDS. AU MEDS is the result of more than 40 years of research and development.

When AU MEDS is installed in a hospital or healthcare facility, our staff assists the hospital in identifying one of their full-time employees, a nurse or pharmacist, who is then trained by MedAccuracy as the hospital's AU MEDS Certified Medication

Observer, or CMO. Once the training program is completed, Auburn University then administers a final certification test to the CMO. The newly trained and certified CMO begins observing and recording the nurses' administration of medications during regular rounds, usually between the hours of 8 a.m. and 12 noon.

The CMO directly observes approximately 100 medication administrations per week, reviews the chart and patient records to discern discrepancies between the drugs that were administered and the original orders, and then records all observations in our proprietary AU MEDS software, which tabulates and formats the data into reports.

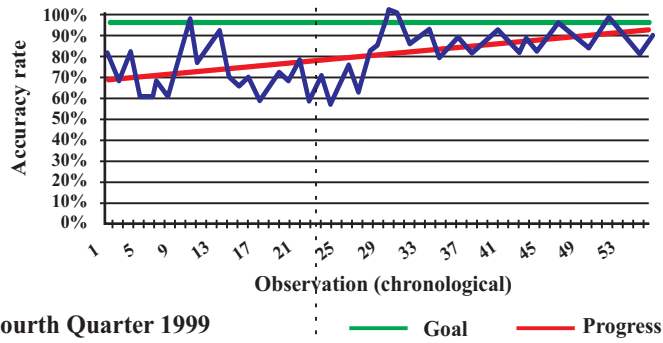
TM
AU MEDS

¹Institute of Medicine, *To Err is Human: Building a Safer Health System*. Washington, DC; National Academy Press; 1999.

²Barker, KN, Flynn, EA, Pepper, GA, Bates, DW, Mikeal, RL, *Medication Errors Observed in 36 Health Care Facilities*. Archives of Internal Medicine, American Medical Association, 2002.

³Institute of Medicine, *To Err is Human: Building a Safer Health System*. Washington, DC; National Academy Press; 1999.

Is our Accuracy Rate Increasing?



These reports integrate seamlessly with Microsoft Access and PowerPoint, graphically providing several layers of analysis, which help identify probable root causes between what was prescribed and what was, in fact, administered to the patients. The CMO shares the AU MEDS™ reports with the nursing staff, pharmacists, risk managers and executives so that appropriate and timely operational adjustments can be planned and implemented as soon as possible.

the Research

According to the 2002 study of 36 hospitals and skilled nursing staff:

- In 43% of errors, dosage was given at the wrong time
- In 30% of errors, the dosage was not given at all
- In 17% of errors, the wrong dosage was given
- In 4% of errors, an unauthorized drug was given

A panel of three doctors determined that the percentage of errors that were potentially harmful was 7% or that more than 40 errors per day occurred in a typical 300-patient facility.

the Company

MedAccuracy™ provides an observation based medication error detection and recording system, AU MEDS, to hospitals and skilled-nursing centers. AU MEDS is a proven peer review technique that improves medication safety at the patient's bedside. Healthcare leaders recognize the AU MEDS system as a unique, cost-effective solution.

For additional information about AU MEDS please contact: Jim Martin, Vice President of Marketing and Sales
E: jim@medaccuracy.com

the Services

- Assisting the hospital in identifying the successful **Certified Medication Observer**.
- Onsite **training and certification** of the hospital's Certified Medication Observer.
- **Installation assistance and training** for the Proprietary AU MEDS software.
- Annual **training and re-certification** of the CMO.
- AU MEDS “Hot-line” clinical and systems support.
- AU MEDS Software **updates**.
- **AU MEDS Annual User Group** participation.
- Regularly scheduled **operational and business reviews** with the MedAccuracy Team.