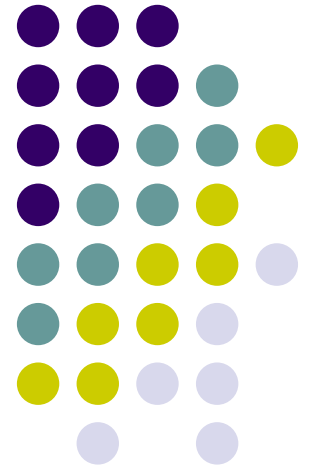


POCT IN THE EMERGENCY DEPARTMENT

PROGRESS OR PROBLEM?





INTRODUCTION

- Point Of Care Testing (POCT), or Near Patient Bedside (NPD) is not new.
- Thirty plus years ago there were bedside tests done routinely on patients
 - Urine glucose
 - Urine specific gravity
 - Hemocult of stool, GI contents
 - Urine pH
 - Urine ketones etc.

INTRODUCTION



- These basic POCT of years ago allowed practitioners to do further testing to establish a diagnosis.
- There were no quality control regulations at that time. Anyone could perform these tests with minimal training.
- Rarely was treatment initiated based on the results.



POCT Objective

- “The key objective is to generate a result quickly so that appropriate treatment can be implemented, leading to an improved clinical or economic outcome.” (Price 2001)
- This objective is a guiding principle in emergency departments when treating patients.

TECHNOLOGY



- Bedside devices (glucometer, ABG analysis)
- Satellite bench top (I-Stat)
 - Regardless of the type of technology, the results are dependent on the preparation of the patient, proper technique, quality monitoring, appropriate policies, appropriate competencies.

Definite advantages in speed of results, but at what cost?

PROBLEM OR PROGRESS

Management of POCT



- Identification of clinical need
- Analysis of cost and benefits
- Research what technology is available
- Identify information systems needed for interface
- Interface for real time reporting and integration
- Training for users of POCT system
- Provide annual certification of POCT
- Constant monitoring of quality controls
- Maintenance of JCAHO standards
- Notify MD of result
- Intervention
- Documentation in pt. chart
- Audits

PROBLEM OR PROGRESS

Clinical Indications



- Assist with rapid decision making
- Early treatment
- Self-regulation of therapy
- Reduced complications
- Rapid triage
- Patient Satisfaction
- Confidence level of POCT
- Pre-hospital treatment

PROBLEM OR PROGRESS

Economics



- Repetitive testing
- Reliability and confidence
- Ancillary staff assistance
- Labor intensive
- Staff training
- Decreases ED visits

PROBLEM OR PROGRESS

Pre-hospital testing

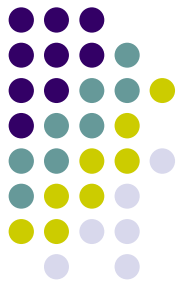


- Early treatment for hypoglycemia
- Huge benefit for rural communities
- Lesser benefit in metropolitan/urban areas



Rural Areas

- Ability to call ahead
- Early intervention
- Ability to treat in the field
- STEMI
- Diabetes
- Monitoring during critical care transports.



CONCLUSIONS



- The benefits to patients with POCT in the ED are remarkable.
- Cost of training and maintaining must be considered
- Reliability in results to avoid repeated lab testing for confirmation
- Greater patient satisfaction