



James H. Nichols, Ph.D., DABCC, FACB  
Baystate Medical Center, Dept. of Pathology  
Springfield, MA 01199

## Achieving Better Quality of Care with Point of Care Testing

James H. Nichols, Ph.D., DABCC, FACB

Professor of Pathology

Tufts University School of Medicine

Medical Director, Clinical Chemistry

Baystate Health System

Springfield, Massachusetts

[james.nichols@baystatehealth.org](mailto:james.nichols@baystatehealth.org)



## Objectives

- Define Point-of-Care Testing
- Identify resources for evidence-based practice
- Integrate POCT into clinical pathways of care
- Describe challenges with resulting POCT in an electronic medical record



## POCT Definition

- Clinical laboratory testing conducted close to the site of patient care, typically by clinical personnel whose primary training is not in the clinical laboratory sciences or by patients (self-testing).
- POCT refers to any testing performed outside of the traditional, core or central laboratory.
- Nichols JH (editor) National Academy of Clinical Biochemistry Laboratory Medicine Practice Guidelines: Evidence Based Practice for Point of Care Testing. AACC Press: 2007.

## Point of Care Testing

- Advantages
  - Immediate results - no lab transportation
  - Small blood volume
  - Wide menu of tests available
  - Whole blood and other samples available
  - Works within clinical patient flow
- Disadvantages
  - More expensive than traditional laboratory tests
  - Quality is questionable as anyone can run the analysis
  - Difficulties with regulatory compliance and documentation
  - Lack of appreciation for preanalytic, analytic, postanalytic issues
  - Compliance issues with billing and charge capture
- Where is the link between POC and Outcomes?

## Outcomes

- *Definition:* result, end, consequence, conclusion, end result, payoff. Collins Thesaurus of the English Language– Complete and Unabridged 2nd Edition. 2002 © HarperCollins Publishers 1995, 2002
- Quality outcomes – better technical performance
- Medical - discharge, faster recovery, less complications
- Patient and physician satisfaction
- Resource management – fewer people, less time, more efficiency
- Financial – less cost, reagents, controls, instrument maintenance, fewer office visits, lost time from work

## Evidence-Based Medicine

- Evidence-based medicine (EBM) or evidence-based practice (EBP) aims to apply the best available evidence gained from the scientific method to clinical decision-making.
- Seeks to assess the strength of evidence of the risks and benefits of treatment (including lack of treatment) and diagnostic tests.
- Evidence quality can range from meta-analyses and randomized-controlled clinical trials to conventional wisdom and opinion.

## Point of Care Testing

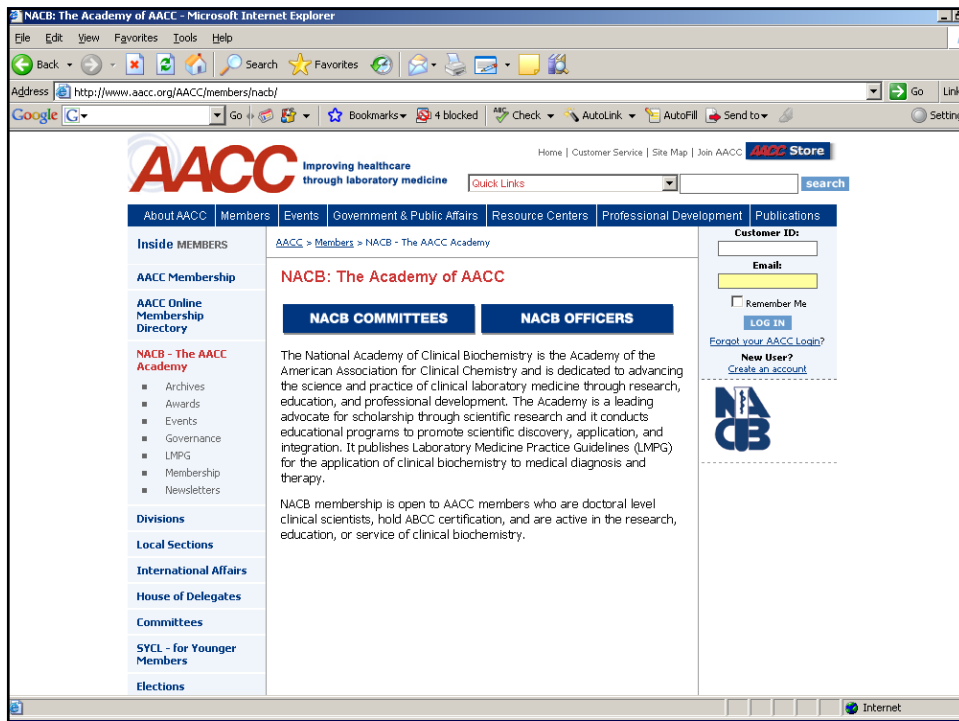
- Proliferation of misinformation – Faster is often understood to mean better outcomes without research to back this conclusion
- Hospital pressure to move patients faster, want faster turnaround of lab results – POCT seen as a solution to remove patient bottlenecks
- Physicians want the latest technology – new technology equates with better patient care
- Each lab must research new test requests to determine clinical utility, cost effectiveness, management and reimbursement issues.

## The Need for Evidence-Based POCT

- Clinicians, staff and laboratorians need guidance to apply POCT in the most effective manner for patient benefit.
- This guidance should be based on a concurrence of the scientific evidence to date.
- This need for evidence-based practice was the concept behind the NACB Laboratory Medicine Practice Guidelines for POCT

## NACB Guidelines

- Group of experts systematically reviewed the scientific literature linking POCT to patient outcomes
- Graded the evidence
- Developed a comprehensive set of recommendations on best practice linking POCT and outcomes



The screenshot shows a Microsoft Internet Explorer browser window displaying the AACC website. The address bar shows the URL <http://www.aacc.org/AACC/members/nacb/>. The page features the AACC logo and navigation menu. The main content area is titled "NACB: The Academy of AACC" and includes a description of the National Academy of Clinical Biochemistry. The page also has a sidebar with navigation links and a login section on the right.

**AACC** Improving healthcare through laboratory medicine

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Elections

**NACB: The Academy of AACC**

**NACB COMMITTEES** | **NACB OFFICERS**

The National Academy of Clinical Biochemistry is the Academy of the American Association for Clinical Chemistry and is dedicated to advancing the science and practice of clinical laboratory medicine through research, education, and professional development. The Academy is a leading advocate for scholarship through scientific research and it conducts educational programs to promote scientific discovery, application, and integration. It publishes Laboratory Medicine Practice Guidelines (LMPG) for the application of clinical biochemistry to medical diagnosis and therapy.

NACB membership is open to AACC members who are doctoral level clinical scientists, hold ABCC certification, and are active in the research, education, or service of clinical biochemistry.

Customer ID: [input field]

Email: [input field]

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**NACB**



James H. Nichols, Ph.D., DABCC, FACB  
Baystate Medical Center, Dept. of Pathology  
Springfield, MA 01199

The screenshot shows the AACC website page for Laboratory Medicine Practice Guidelines (LMPG). The browser is Microsoft Internet Explorer. The page title is "NACB: Laboratory Medicine Practice Guidelines (LMPG) - Microsoft Internet Explorer". The address bar shows "http://www.aacc.org/AACC/members/nacb/LMPG/". The AACC logo is prominent at the top left, with the tagline "Improving healthcare through laboratory medicine". The navigation menu includes "About AACC", "Members", "Events", "Government & Public Affairs", "Resource Centers", "Professional Development", and "Publications". The main content area is titled "NACB: Laboratory Medicine Practice Guidelines (LMPG)". It contains a paragraph explaining that since 1994, NACB has developed consensus-based guidelines for laboratory evaluation and monitoring of patients with specified disorders. Below this, it states that several LMPGs have been translated into other languages including French, Italian, Japanese, Polish, and Spanish. A table lists published guidelines with their years and availability for online viewing or purchase.

Published Guidelines	Year	Online	Purchase
Biomarkers of ACS	2007	<a href="#">Online</a>	
Point-of-care testing	2007	<a href="#">Online</a>	
Maternal-fetal risk assessment	2006	<a href="#">Online</a>	
Emergency toxicology	2005	<a href="#">Online</a>	<a href="#">Purchase</a>
Thyroid disease	2002	<a href="#">Online</a>	<a href="#">Purchase</a>

The screenshot shows the National Guideline Clearinghouse website page for "Management. Laboratory medicine practice guidelines: evidence-based practice for point-of-care testing". The browser is Microsoft Internet Explorer. The address bar shows "http://guideline.gov/summary/summary.aspx?doc\_id=108118&nr=0056368string=POCT". The National Guideline Clearinghouse logo is at the top left, and the AHRQ logo is at the top right. The page title is "Management. Laboratory medicine practice guidelines: evidence-based practice for point-of-care testing". The main content area is titled "Brief Summary" and contains the following information:

**GUIDELINE TITLE**  
Management. Laboratory medicine practice guidelines: evidence-based practice for point-of-care testing.

**BIBLIOGRAPHIC SOURCE(S)**  
Jacobs E, Goldsmith B, Larsson L, Richardson H, St. Louis P. Management. In: Laboratory medicine practice guidelines: evidence-based practice for point-of-care testing. Washington (DC): National Academy of Clinical Biochemistry (NACB); 2006. p. 1-4. [22 references]

**GUIDELINE STATUS**  
This is the current release of the guideline.

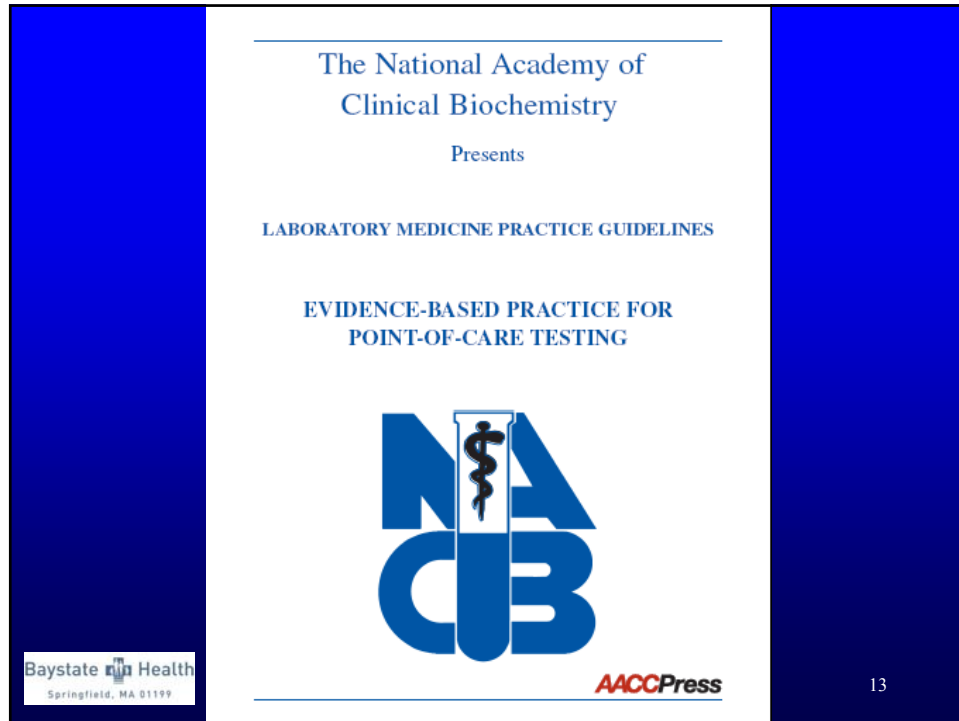
**BRIEF SUMMARY CONTENT**

**RECOMMENDATIONS**  
EVIDENCE SUPPORTING THE RECOMMENDATIONS  
IDENTIFYING SUPPORTING INFORMATION AND AVAILABILITY  
DISCLAIMER  
[Go to the Complete Summary](#)

**RECOMMENDATIONS**

**MAJOR RECOMMENDATIONS**  
Definitions of the levels of evidence (I-III) and grades of the recommendation (A, B, C, I) are presented at the end of the "Major Recommendations" field.

*Note from the National Academy of Clinical Biochemistry (NACB) and the National Guideline*



## EBM for POCT LMPG

- Split diversity of POCT into disease groups
- Introductory section for quality assurance that crosses all disciplines
- Focus groups (clinician, laboratory, industry)
  - Formulate pertinent clinical questions
  - Conduct systematic reviews of literature
  - Develop practice recommendations
- Publicize draft recommendations
- Review and resolve public comments
- Publish final LMPG

## EBM for POCT LMPG

- This LMPG is the most comprehensive collection of our POCT knowledge base.
- Recommendations from this LMPG will be useful:
  - To sort the facts from conjecture when implementing and utilizing POCT devices.
  - To establish proven applications from off-label and alternative uses of POCT
  - To define the mechanisms and strategies for optimizing patient outcome.
  - To identify areas of research that are needed to establish the link between POCT and outcomes

## Evidence Based Practice for POCT

- 13 chapters
- 75 analytes
- 190 recommendations
- 75 authors + 4 consultants
- 546 pages
- 113 literature searches
- 1280 reference citations
- 3 peer-reviewed supporters:
  - American Society for Microbiology (ASM)
  - College of American Pathologists
  - IFCC – Committee on Evidence-Based Laboratory Medicine





James H. Nichols, Ph.D., DABCC, FACB  
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**NACB Laboratory Medicine Practice Guidelines**

**LMPG: Evidence Based Practice for POCT (Draft Guidelines)**

**Table of Contents - Word Document Format**  
(Right click link to save file to your computer)

<b>Published Guidelines</b>	<a href="#">Introduction</a> (152 kb)
<ul style="list-style-type: none"><li><a href="#">Cardiac Markers - 1999</a></li><li><a href="#">Diabetes Mellitus - 2002</a></li><li><a href="#">Emergency Toxicology - 2003</a></li><li><a href="#">Hepatic Injury - 2000</a></li><li><a href="#">Thyroid Disease - 2002</a></li></ul>	<a href="#">Chapter 1: Management</a> (90 kb)
	<a href="#">Chapter 2: Bilirubin</a> (100 kb)
	<a href="#">Chapter 3: Cardiac Markers</a> (173 kb)
	<a href="#">Chapter 4: Coagulation</a> (129 kb)
	<a href="#">Chapter 5: Critical Care</a> (267 kb)
<b>Draft Guidelines</b> Open for Comment	<a href="#">Chapter 6: Diabetes</a> (266 kb)
<ul style="list-style-type: none"><li><a href="#">2005 Tumor Markers</a></li><li><a href="#">Evidence Based Practice for POCT - 2004</a></li><li><a href="#">Biomarkers of Acute Coronary Syndrome and Heart Failure - 2004</a></li><li><a href="#">Maternal and Fetal Health Risk Assessment - 2003 Version 2</a></li></ul>	<a href="#">Chapter 7: Drug Testing</a> (135 kb)
	<a href="#">Chapter 8: Infectious Disease</a> (154 kb)
	<a href="#">Chapter 9: Occult Blood</a> (301 kb)
	<a href="#">Chapter 10: Parathyroid Testing</a> (660 kb)
	<a href="#">Chapter 11: pH</a> (134 kb)
<b>Planned Guideline Projects</b>	<a href="#">Chapter 12: Renal</a> (116 kb)
<ul style="list-style-type: none"><li><a href="#">2006 Pharmacogenetics</a></li></ul>	<a href="#">Chapter 13: Reproduction</a> (248 kb)

[LMPG Home](#)

## Systematic Review Recommendation

- Strength/Consensus of Recommendation:
  - A – Strongly recommend POCT (Good evidence POCT improves important clinical outcomes, benefit outweighs risk)
  - B – Recommend POCT (Fair evidence support)
  - C – Recommend against POCT (Fair evidence against)
  - I – Insufficient evidence to recommend for or against POCT

AHRQ Publication 02-E016, Systems to Rate the Strength of Scientific Evidence, Bethesda, MD, April 2002. <http://www.ahrq.gov>

## Level of Evidence

- I at least one, well-conducted, randomized-controlled trial
- II randomized studies with small numbers, case and cohort controlled trials
- III clinical experience or expert opinion

## NACB POCT Guidelines

- Few randomized controlled trials in the POCT literature (Most II and III level evidence)
- POCT alone doesn't improve outcomes without a change in patient management to utilize the result in a faster manner
- Laboratory input is required to ensure quality of test results

## Occult Blood Recommendations

- Can gastroccult testing of gastric fluid from a nasogastric tube be used to detect gastrointestinal bleeding in high-risk intensive care unit patients receiving antacid prophylaxis?
- **Recommendation:** *We cannot currently recommend for or against the use of gastroccult to detect gastric bleeding in intensive care unit patients receiving antacid prophylaxis. Only one study to our knowledge has indirectly addressed this issue. No randomized controlled trials have been performed.*  
(Strength/consensus of recommendation: I, Level III – small study, clinical evidence)

## Bleeding in ICU Patients

- A small study with 41 patients showed that 13/14 patients with positive gastroccult tests had a source of upper GI bleeding as seen by upper endoscopy.
- However, patients with negative gastroccult tests did not undergo upper endoscopy.

## Baystate Gastrocult Testing

- Discontinued without incident
- Approached Chief of GI and Division of Healthcare Quality with clinical utility.
- Researched literature
- Developed recommendation and justification
- Draft letter to medical staff reviewed by select clinicians
- General announcement and test removal

## Gastrocult Discontinuation

- No peer-reviewed literature indicating improved outcomes based on Gastrocult
- Use of test after NG tube placement leads to positive results solely due to trauma of tube insertion
- Overt bleeding is a medical concern and doesn't require test to detect
- pH is medically useful, pH paper is a better alternative because it's easier to QC, already available on units and lower cost
- Elimination would reduce hospital burden of training and POCT documentation on nursing staff and reduce risk of developer mixup with hemocult.

## Gastroccult Cost Savings

- Reagent: (12,000 tests/year)
  - Cards \$21,000
  - Developer \$ 5,000
- Labor
  - Nursing (5 min/test, 45K= 125d) \$22,000
  - Competency (1100 x 15 min) \$ 6,000
  - Lab oversight (4hr x 8 units x 12 mo) \$ 8,500
- Total Annual Savings Estimate \$62,500
- Total billed previous year 12
- Cost estimate for pH replacement \$ 250

## NACB LMPG POCT Creatinine

- Does the measurement of BUN/Creat POC result in improved outcomes?
  - Quicker time to treatment
  - Decreased wait time
  - Decreased length of stay
- Locations
  - Inpatient
  - ED
  - Dialysis
  - Cardiovascular diagnostics
  - Chemotherapy?

## NACB LMPG POCT Creatinine

- Found only 3 studies, 2 in ED for BUN
  - Tsai et al 210 patients POC faster TAT (8 vs 59 mins) but higher cost (\$14 – 16 vs \$11)
  - POC could be cost effective with higher volume, but didn't consider LOS or throughput
  - Parvin et al. 4985 patients POC did not decrease LOS (209 mins vs 201 mins core lab)
- 1 CVDL study for BUN/Creatinine

### Clinical Outcomes of Point-of-Care Testing in the Interventional Radiology and Invasive Cardiology Setting

JAMES H. NICHOLS,<sup>1\*</sup> THOMAS S. KICKLER,<sup>1</sup> KAREN L. DYER,<sup>1</sup> SANDRA K. HUMBERTSON,<sup>1</sup>  
PEG C. COOPER,<sup>2</sup> WILLIAM L. MAUGHAN,<sup>3</sup> and DENISE G. OECHSLE<sup>2</sup>

**Background:** Point-of-care testing (POCT) can provide rapid test results, but its impact on patient care is not well documented. We investigated the ability of POCT to decrease inpatient and outpatient waiting times for cardiovascular procedures.

**Methods:** We prospectively studied, over a 7-month period, 216 patients requiring diagnostic laboratory testing for coagulation (prothrombin time/activated partial thromboplastin time) and/or renal function (urea nitrogen, creatinine, sodium, and potassium) before elective invasive cardiac and radiologic procedures. Overall pa-

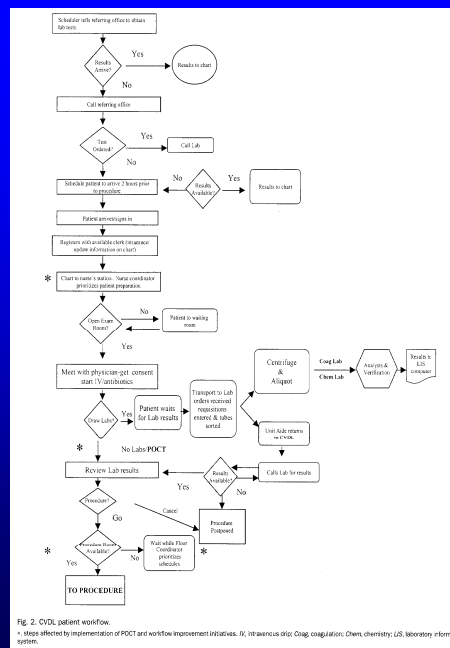
0.02). For patients needing coagulation testing, wait times improved only when systematic changes were made in workflow (phase 4, 109 ± 41 min; n = 12; P = 0.01).

**Conclusions:** Although POCT has the potential to provide beneficial patient outcomes, merely moving testing from a central laboratory to the medical unit does not guarantee improved outcomes. Systematic changes in patient management may be required.

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## CVDL Outcomes Trial

- Prior to therapeutic intervention, patients require coagulation (PT/aPTT) and/or renal function testing (Na/K, BUN/Creat)
- Phase 1 – workflow and patient throughput determined using central lab testing.
- N = 135 patients over 95 days
- Despite arriving 120 minutes early if lab work needed, 44% of results not available prior to scheduled procedure time.
- Average patient wait time was 167 minutes



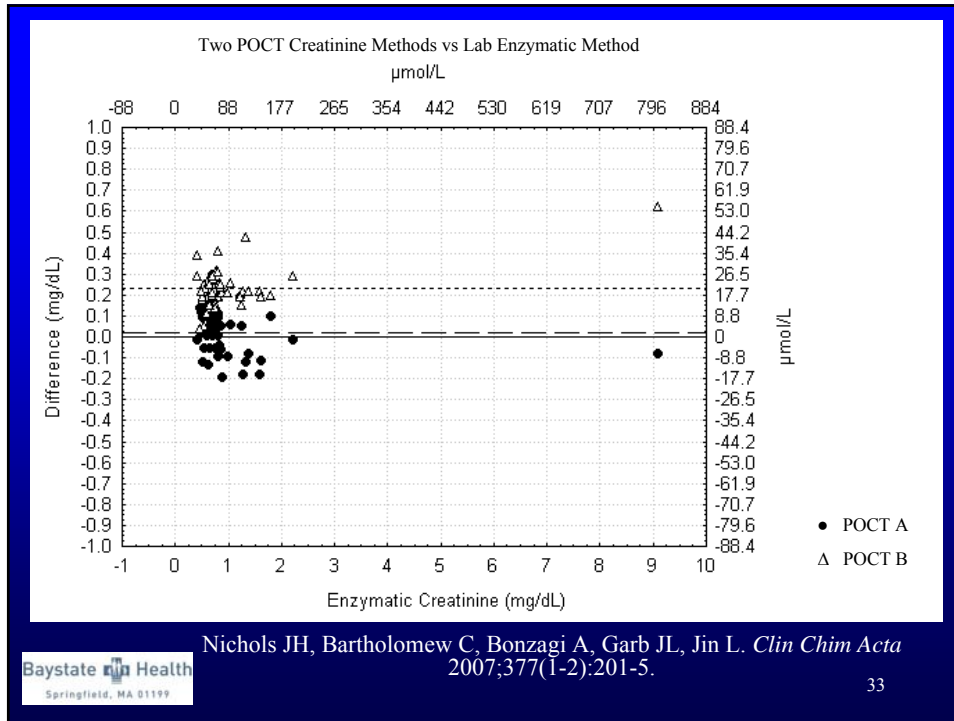
## JHH CVDL Outcomes Trial

- POCT improved wait times over core laboratory, but not significantly.
- Significant changes only occurred after unit workflow reorganized to optimize use of POCT results (implemented communication center between admit and procedure rooms); decreased wait times 63 mins for coag (N=9,  $p = 0.014$ ) and 47 mins for renal (N=18,  $p = 0.02$ )
- Hospital chose not to implement POCT once patient workflow was streamlined for efficiency

## POCT Creatinine in Oncology

- Oncology Center – 2 blocks from hospital
- Patients need estimate of renal function before administration of chemotherapy
- Hematology laboratory onsite performs cell counts and simple chemistries by a POC device
- Creatinine sent to core lab – periodic courier pickup (every 2 hours), means patients could wait up to 4 hours before testing completed
- Need faster turnaround time for results





## POCT Improves Patient Outcome

- Evaluated POCT creatinine (POCTA vs POCT B)

MDRD 60 mL/min	POCT A vs Jaffe	POCT B vs Jaffe
+ Predictive Value	100%	67%
Efficiency	94%	90%
	POCT A vs Enz	POCT B vs Enz
+ Predictive Value	88%	60%
Efficiency	96%	88%

- POCT gave higher creatinine levels, called more patients abnormal.
- Physicians had to adjust their cutoff levels for management decisions to higher creatinine (lower GFR) when utilizing POCT compared to lab
- POCT led to faster results and moved patients through clinic, resulting in increased patient and physician satisfaction

Nichols JH, Bartholomew C, Bonzagi A, Garb J, Jin L. *Clin Chem Acta* 2007;377:201-5.

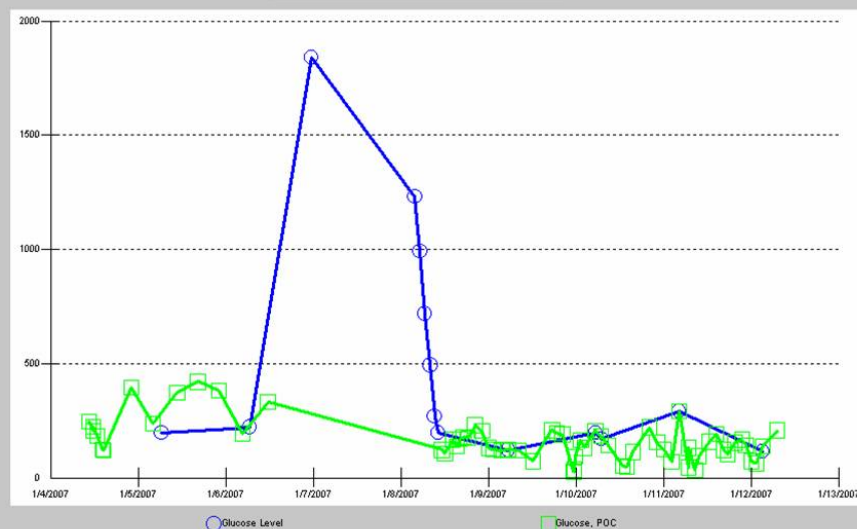
Baystate Health Springfield, MA 01199

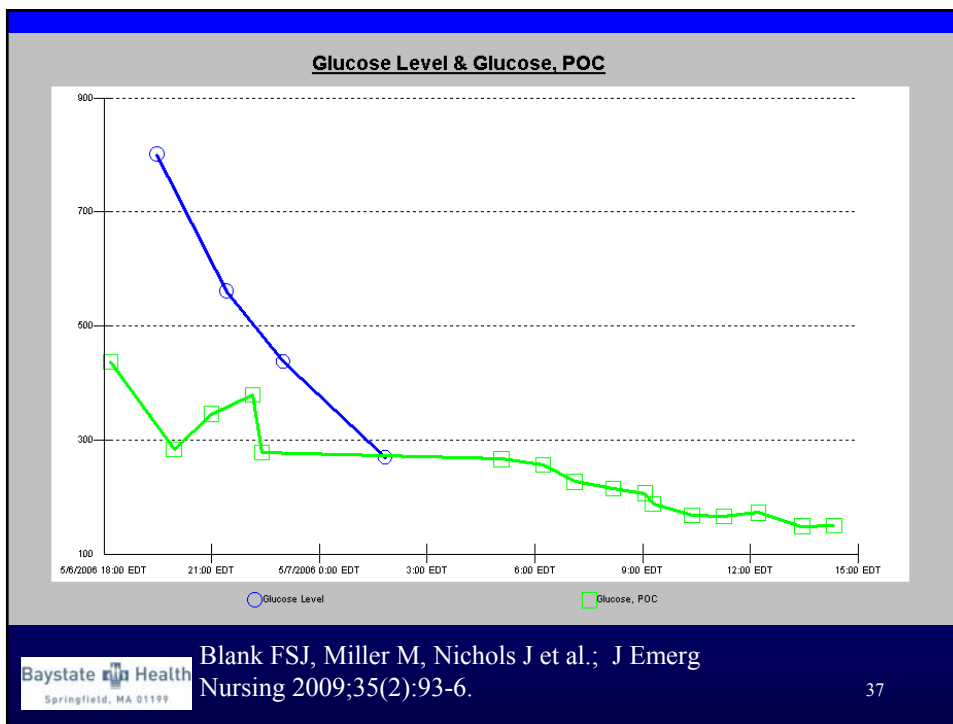
34

## POCT Information Management

- POCT creatinine leads to improved outcomes when integrated into the patient pathways of care in oncology setting
- But, POCT is a different technology
- Results are not equivalent to other laboratory methods without considering unique performance characteristics
- Another example: glucose meter limitations
  - Extremes of Hgb/Hct (<20 – 25% and >50 - 60%)
  - Maltose/xylose/galactose interference on some glucose dehydrogenase based methods
  - Affects patients receiving dialysis fluids containing Icodextrin
  - Erroneously low results if patient severely dehydrated, hypotensive, in shock or hyperglycemic-hyperosmolar state (with or without ketosis) [limitation of all meters]
  - Investigated by comparing capillary to venipuncture in ED and core lab Blank FSJ et al. J Emerg Nurs 2009;35(2):93-6.


**Glucose Level & Glucose, POC**





## POCT Information Management

- EMRs overlay results of the same name, so physicians can trend tests over time.
- POCT results cannot be freely interchangeable with other methodologies and electronic reporting must keep results separate.
- Need to call the test by a different name
- Separate physically in chart (lab results in lab tab and POCT results entered in nursing notes or use separate POCT tab for results)


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0601491 Opened by Nichols Ph.D., James H.

Task Edit View Time Scale Options Help

As Of 8:22

Chart Summary Ref. Text Facesheet

Orders Med Profile MAR Vital Signs I/O Patient Info Snapshot Lab Rad All Results Task List Documents Nsg/Anc Forms

Flowsheet: LABORATORY Level: LABORATORY Table Group List

03 January 2007 8:15 - 13 January 2007 8:15 (Clinical Range)

LABORATORY	1/10/2007 8:40	1/10/2007 6:52	1/10/2007 6:44	1/10/2007 5:15	1/10/2007 5:10
Glucose Level		172 H		199 H	
Glucose, Istat					
Glucose, POC	143 H		184 H		207 H
Beta Hydroxybutyrate					
BUN		15		15	
Creatinine-Blood		1.5 H		1.4 H	
Estimated GFR, Non African American		41		45	
Estimated GFR, African American		50 *		54 *	
Calcium		6.3 L			
Calcium, Ionized pH Corrected		1.01 *C		1.02 *C	
Phosphorus		3.7			
Magnesium		0.9 L			
Alkaline Phosphatase					
GGTP					
Amylase					

PROD EWH3202 12 January 2007 8:24

POC Urinalysis - TEST, CRASHDUMMY

\*Performed on: 06/20/2007 1645 By: Colburn, Caryn

### POC Urinalysis

**Color**

Colorless  Red  
 Straw/Light yellow (Normal)  Brown  
 Yellow (Normal)  Orange  
 Amber/Dark yellow (Normal)  
 Green  
 Pink

**Appearance**

Clear (Normal)  
 Hazy (Normal)  
 Cloudy (Normal)

**Glucose**

Negative (Normal)  
 Trace (100 mg/dl)  
 1+ (250 mg/dl)  
 2+ (500 mg/dl)  
 3+ (> or = 1000 mg/dl)

**Bilirubin**

Negative (Normal)  
 1+ small  
 2+ moderate  
 3+ large

**Ketones**

Negative (Normal)  
 Trace (5 mg/dl)  
 1+ (15 mg/dl)  
 2+ (40mg/dl)  
 3+ (80mg/dl)

**Specific Gravity**

< or = 1.005  
 1.010  
 1.015  
 1.020  
 1.025  
 > or = 1.030

**Blood**

Negative (Normal)  
 Trace  
 1+ small  
 2+ moderate  
 3+ large

**pH**

5.0  8.0  
 5.5  8.5  
 6.0  > or = 9.0  
 6.5  
 7.0  
 7.5

**Protein**

Negative (Normal)  
 Trace  
 1+ (30 mg/dl)  
 2+ (100 mg/dl)  
 3+ (300 mg/dl)

**Urobilinogen**

0.2 mg/dl  
 1 mg/dl  
 2 mg/dl  
 4 mg/dl  
 > or = 8.0

**Nitrite**

Negative (Normal)  
 Positive

**Leukocytes**

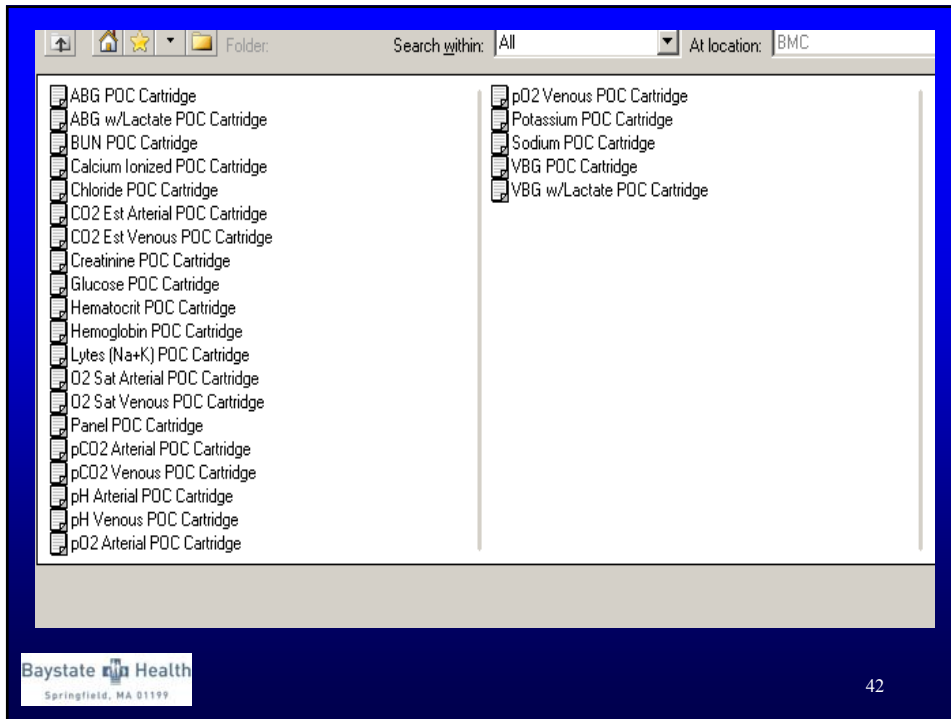
Negative (Normal)  
 Trace  
 1+ small  
 2+ moderate  
 3+ large

\*Organization/CLIA #

In Progress

## Integrating POCT with Order Entry

- How do physicians know which test to order? POCT versus central lab?
- Educational pamphlet minimally effective
- More than a 10 fold difference in cost between a glucose by central lab, glucose meter, or BG POC
- Economic downturn forced us to reexamine clinical need for stat testing given cost differences
- Two initiatives to decrease inappropriate utilization
  - Change the name from i-Stat to POC cartridge
  - Prevent routine ordering of test
  - Pop-up window reminder
- Initiatives reduced POC cartridge usage by **50 - 60%**



The screenshot shows a file explorer window with a search bar set to "All" and a location of "BMC". The file list is as follows:

File Name
ABG POC Cartridge
ABG w/Lactate POC Cartridge
BUN POC Cartridge
Calcium Ionized POC Cartridge
Chloride POC Cartridge
CO2 Est Arterial POC Cartridge
CO2 Est Venous POC Cartridge
Creatinine POC Cartridge
Glucose POC Cartridge
Hematocrit POC Cartridge
Hemoglobin POC Cartridge
Lytes (Na+K) POC Cartridge
O2 Sat Arterial POC Cartridge
O2 Sat Venous POC Cartridge
Panel POC Cartridge
pCO2 Arterial POC Cartridge
pCO2 Venous POC Cartridge
pH Arterial POC Cartridge
pH Venous POC Cartridge
pO2 Arterial POC Cartridge
pO2 Venous POC Cartridge
Potassium POC Cartridge
Sodium POC Cartridge
VBG POC Cartridge
VBG w/Lactate POC Cartridge



KENNEDY, TESTONE - 1841415 Opened by Kennedy, Cathy

Task Edit View Patient Chart Links Notifications Options Current Add Help

Inbox Patient Lists PAL Schedule Multi-Patient Tasks Shift Assignment Apache

AdHoc Charge Viewer Encounter Location History Viewer Explorer Menu Medication Manager Epr Charges Calculator Web Paging eWorkplace

Orders Medication List

Orders for Signature

Order Name	Status	Start	Details
S30NCT1; S3505; A Acct #: 489275751 Admit: 11/13/2008 8:49			

Laboratory

Order Name	Status	Start	Details
Potassium POC Cartridge Order		6/9/2009 14:41	Stat, 6/9/2009 14:41

Details for Potassium POC Cartridge

Order details

Field	Value
Priority (Stat)	Stat
Start Date and Time (6/9/2009 14:41)	06/09/2009 1441
Active Encounter Order	[Yes]

Detail values

0 Missing Required Details

Sign

BUILD: EN09815 09 June 2009 14:42

Start | Inbox - Microso... | Baystate Healt... | C:\CenterApps... | PowerChart Or... | KENNEDY, TES... | Microsoft Powe... | Desktop 2:42 PM

For all POC Cartridge Orders  
Priority is defaulted to Stat – can not be changed  
No free text fields and can not type into Order Comments field

Decision Support

IDENTIFIED ORDER:  
Potassium POC Cartridge

Reference

Potassium POC Cartridge

CarePlan information Chart guide Nurse preparation Patient education Policy and procedures Scheduling information

**POC Cartridge Lab Testing (STAT) Changes**

POC Cartridge testing is **10** times as expensive as routine and stat laboratory testing and **5** times as expensive as POC testing for glucose tests. BMC is the largest user of POC cartridges on the East Coast, adding significantly to our cost of care.

Please consider ordering a POC cartridge test only when there is an urgent need and *avoid its use for routine and scheduled lab tests.*

The indications for a POC Cartridge Test are:

- Emergent care of critically ill patient
- Severely anemic patients whom the Hgb is < 8 g/dl
- Patient with excessive blood draws (> 10 tubes drawn in last 24 hours)

OK

BUILD: EN09815 09 June 2009 14:42

Start | Inbox - Microso... | Baystate Healt... | C:\CenterApps... | PowerChart Or... | KENNEDY, TES... | Microsoft Powe... | Desktop 2:42 PM

Pop-Up' text that appears automatically upon selecting a POC Cartridge order



James H. Nichols, Ph.D., DABCC, FACB  
Baystate Medical Center, Dept. of Pathology  
Springfield, MA 01199

## Summary

- POCT is an increasingly popular means of delivering laboratory testing
- Faster isn't always equal to better outcomes unless POCT is integrated into pathways of care
- Sites adopting POCT should prove that the device achieves expected outcomes
- Reassess your current practice and investigate new POCT before and after implementation.
- POCT is a different methodology and ordering and resulting in an EMR is challenging