# Standardizing Point of Care Testing and Harmonizing Workflows Between Hospitals and Ambulatory Locations

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JOHNS HOPKINS HEALTH SYSTEM

#### **Disclosures**

- Nonfinancial: Board of Directors- COLA Resources, Inc; President, KEYPOCC Keystone Point of Care Coordinators
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- Financial Advisory Committee: BioFire; ASM





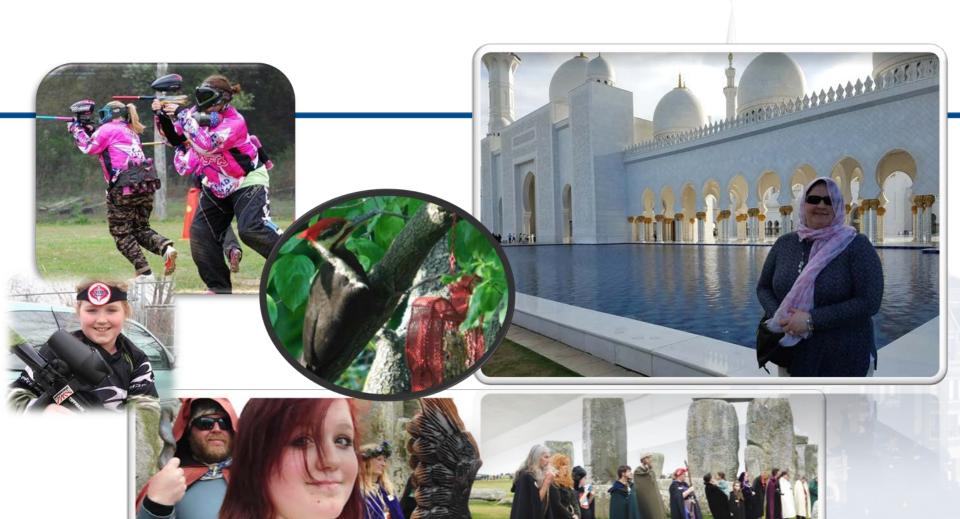
# **Objectives**

At the end of the session, participants will be able to:

- Establish open communication and identify key players in standardization of point of care tests
- Discuss tools and strategies for multidisciplinary collaboration
- Identify POCT clinical considerations and managerial challenges





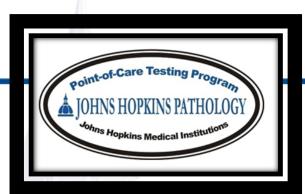




### **Point of Care Coordinators**







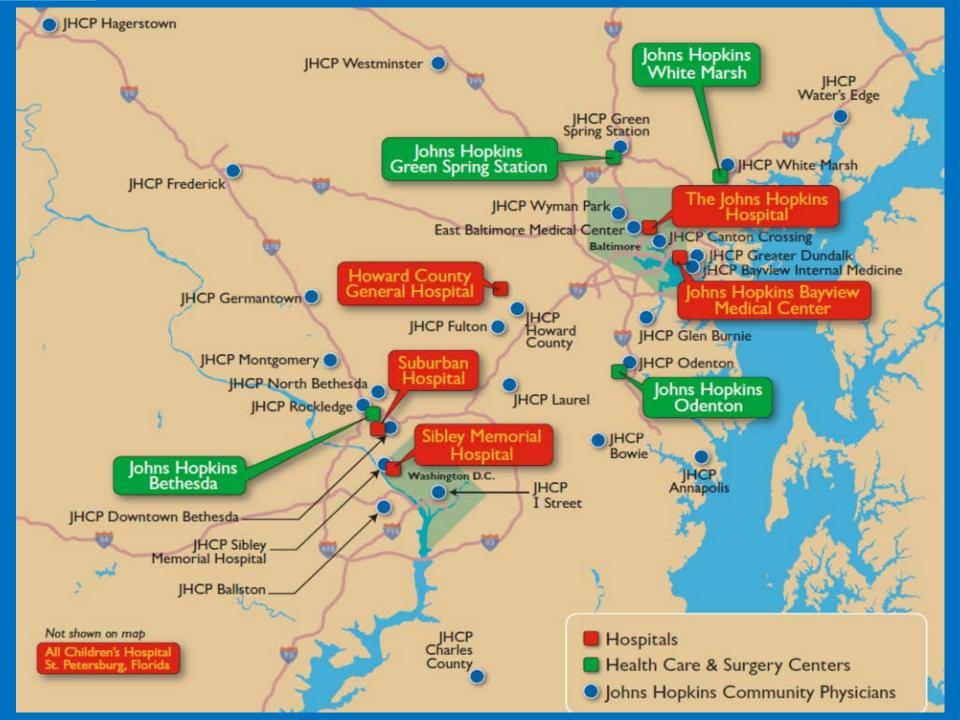












#### **List of Current POCT**

# Interfaced Devices:

- ✓ ACT-LR, ACT Plus
- ✓ Creatinine
- ✓ INR
- ✓ Hgb
- Urinalysis
- ✓ HBA1c
- ✓ Glucose, 
  whole blood
- ✓ O2 Saturation
- ✓ Blood Gases

✓ pH

- ✓ Urine HCG
- ✓ Strep A
- ✓ Rapid HIV 1/2
  Antibody
- ✓ Rapid HCV
- ✓ <u>Urine Drug</u>
  <a href="Screen">Screen</a>
- ✓ PPM
- ✓ <u>Tear</u> <u>Osmolality</u>
- ✓ Fecal Occult
  Blood
- ✓ Specific Gravity





### **Point of Care Testing**

#### JHM operates six academic and community hospitals

Hospital	Beds	Glucose Operators	POCT TYPES
Johns Hospital	1,059	4,313	26
Bayview	545	1,300	19
Howard County	267	1,466	3
Sibley	318	800	9
Suburban	229	1,343	9

Johns Hopkins Community Physicians – 39+ sites, 400+ providers, 1,600 glucose operators, 15 POCT types (primary and specialty care)





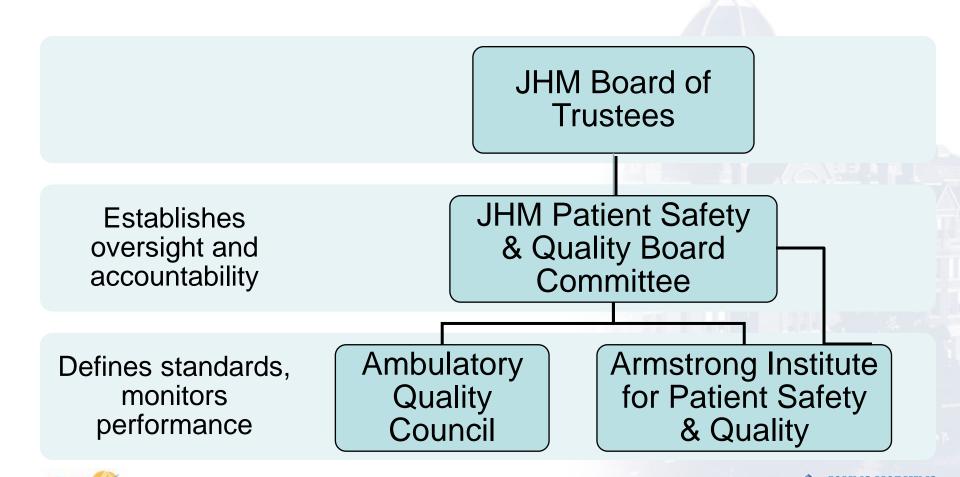
#### **POCT Structure**

- Single Medical Director of JHM POCT
- JHM Manager
- Local Lab Director and POCC at each Hospital
- Except JHCP: Single Medical Director and POCC





# **Quality Structure Across JHM**



#### **Procedures**

- Single device for each analyte (i.e., glucose) – Biggest challenge!
- Harmonizing templates and HPO

Goal – one single procedure with appendix for each facility for differences





# Integrating the System

- Whose procedures do we use
- Whose POCT devices?
- Whose workflows are the Best Practices?
- Where do we start?











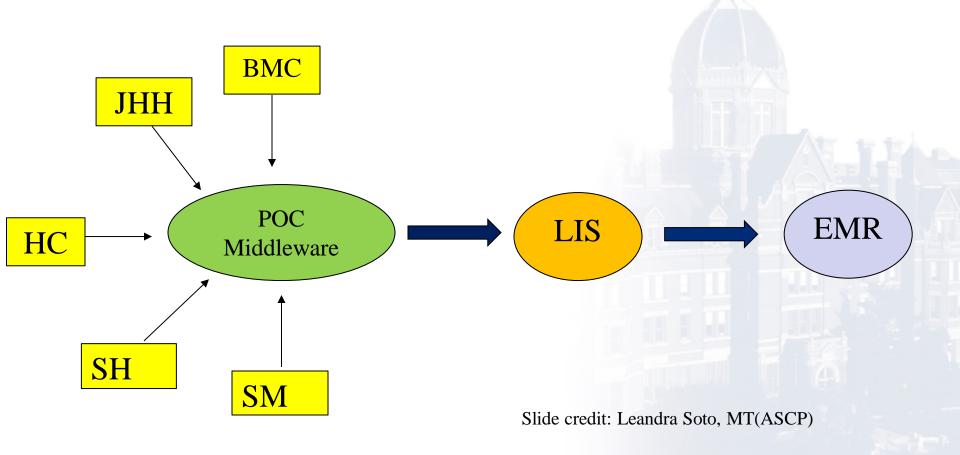
#### **POCT Devices**

- Single device and single analyte
- Single device with multiple analytes
- There is no such thing as one size fits all for POCT





# **Enterprise Interface Infrastructure Present**





# **Enterprise IT Successes**

As of July 1, Standardized electronic medical record has been completed

- Standardized interface platform for Point of Care testing across 5 Hospitals and all ambulatory sites: POCT Middleware
- Standardized laboratory information system
- Standardized testing platforms
  - Chemistry and Hematology lines



#### Workflows

- Testing personnel and use of EMR/EHR
- How does the POCT get entered into the EMR/EHR?
- Single IT platforms = harmonize POCC duties and responsibilities
- EX: Tear Osmolality





#### **Best Practices**

- Steps to standardizing and harmonizing procedures, workflows and processes
- Now what? How to keep in touch and how to run this as one big complicated program?





# **Team Meetings**

- First Friday
- Third Friday
- Quarterly (Mandatory)
- All JH POCC are invited (including All Children's)
- Conference Line Open
- In Person Optional





# Develop a QC Plan

- Quality Controls
   Follow Up
- Proficiency Testing
   Training and
- Audits/Rounds
- Troubleshooting
- Documentation

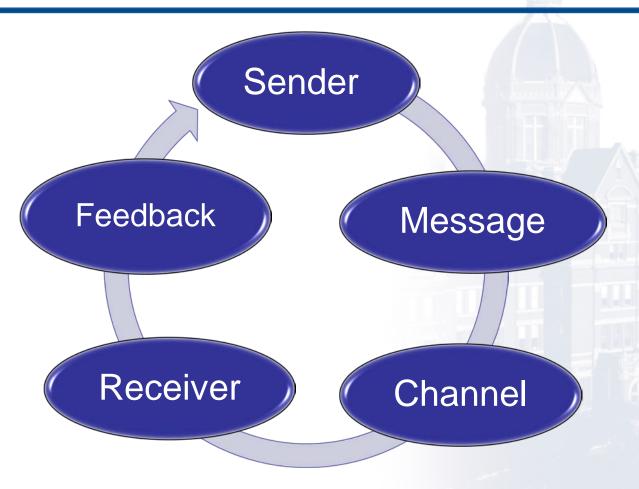
- Competency
- Annual Review
- Risk Analysis



# **Communication? Maybe?**

**Attention: Toilet** ONLY For Disabled **Elderly Pregnant** Children

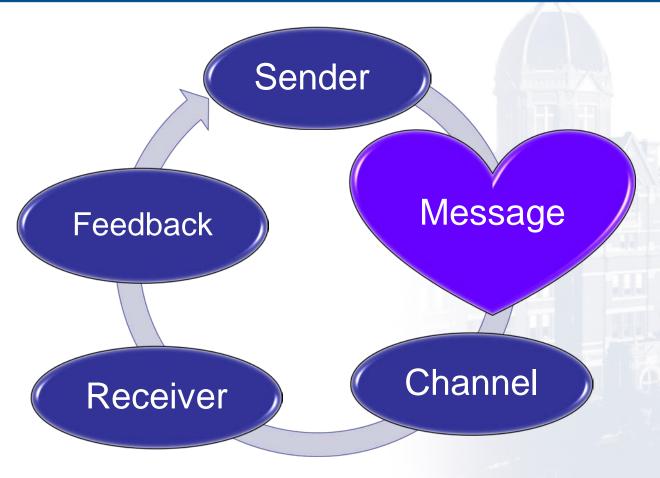
# **Communication Cycle**







# The Message







# Good Communication Is Key For Patient Safety

"Poor communication is reported as the root cause in 70% of hospital sentinel events and in 40% of malpractice cases due to medical errors."

Keynote Session, Safety, Quality and Patient-Centered Care
Peter Pronovost, MD, PhD, FCCM
Sr. Vice President for Patient Safety and Quality
Director of the Armstrong Institute for Patient Safety and Quality Johns Hopkins Medicine





# **More Communication Options**

- Quarterly Flyers Published by Nurse Educations
- Screen Savers on Computers Across Hospital Campus
- Attending Daily Team Huddles and Staff Meetings





#### **Less Is More**

- Nurse Educators can help POCC's learn how to trim down their message in order to have meaningful exchange of information
  - Nurses and clinical care teams techniques
  - Balancing clinical demands with laboratory regulation demands







They had a tendency to talk past one another.

# **Empathy In Communication**

- Understanding someone else's perspective
  - How does it impact the nurse or tech if they have to troubleshoot QC on a meter when a patient is crashing and needs an urgent glucose result?





# **Empathy In Communication**

- Let the nurse or tech state their point of view
  - While meeting regulatory requirements, you may still work with clinical teams to meet their needs
- Take the time to check regularly that the message is still meaningful



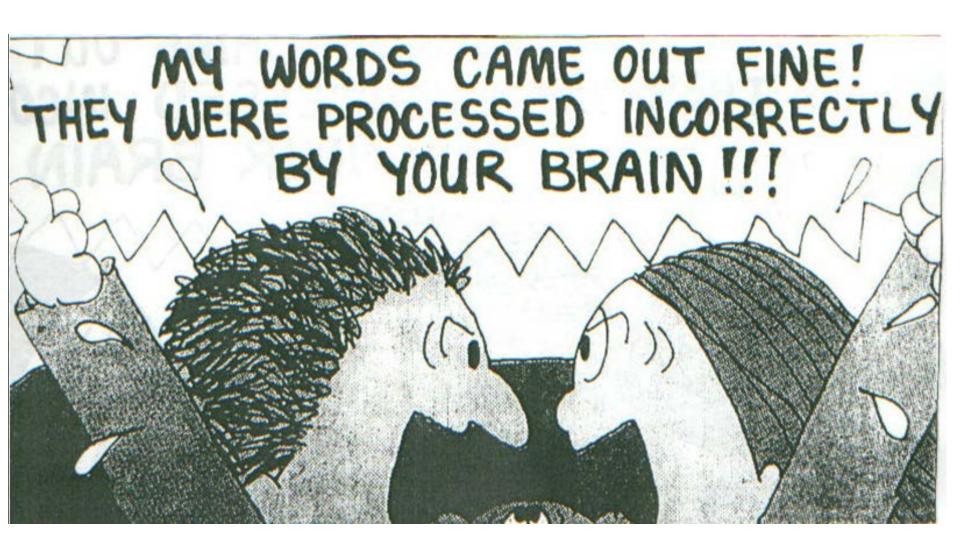


# A Nurse's Perspective: 5 Stages of Emotion

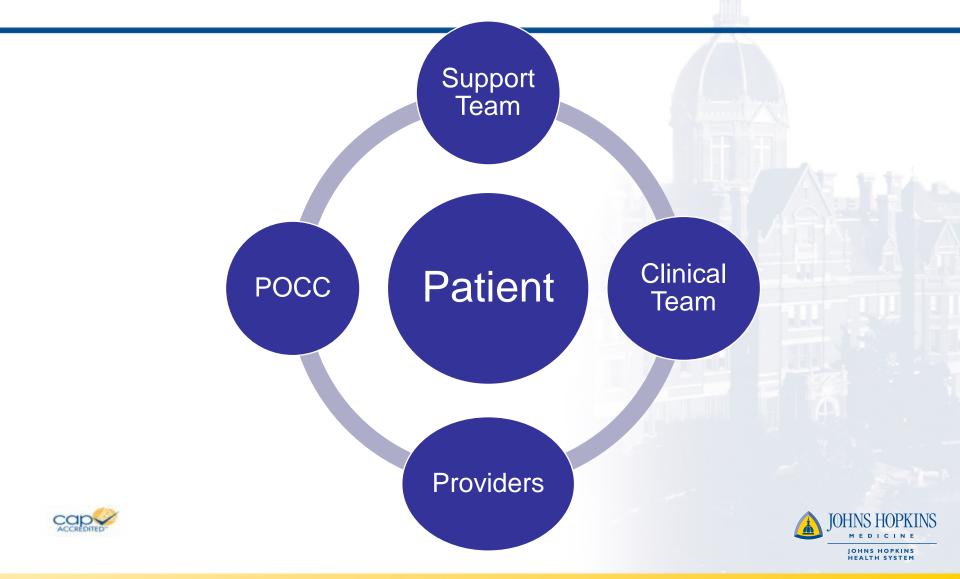
- 1st: Denial It can't be time for my unit audit, the coordinator was just here last week.
- 2<sup>nd</sup>: Anger These Lab People have nothing better to do than torture me! I'm too busy for this!
- 3<sup>rd</sup>: Bargaining God, just let me get through this and I will never forget to run controls again!
- 4<sup>th</sup>: Depression I'm going to fail, get fired and have to flip burgers for a living
- 5<sup>th</sup>: Acceptance Well, they're going to be on my unit every week, and I really want to what's right for my patient.

Adapted from: CLIA Inspection Survival Tips. Barry Craig, MLT(ASCP). 2010C POL Insight.





### What is Your Role?



#### **Patient Centered Medical Care**

- How do you as a laboratory professional enhance the patient experience?
- Supporting the clinical team helps them to better care for patients and their support team





#### **Unit/Site Audits**

- Some units are visited twice per week
- Moderate complex testing daily/weekly
- Waived testing once per month
- Opportunities for improvement easily identified and addressed with frequent site/unit visits
- Looking for electronic solution





#### **Have You Considered?**

- Monthly meeting with lab vendors such as Quest, Lab Corp and Johns Hopkins Medical Lab
- Monthly meetings with testing personnel, unit managers and trainers
- Meeting with Nurse Administration for high level topics
- Daily huddles on units/floors





# **Vendor Support/Training**

- Utilizing Vendor Reps for support in training
- Vendor reps are brought into sites to perform on site training with our competency checklist
- Vendor reps have a great report with sites and reach out several times a year for support





# **Accomplishments So Far**

- Standardized IT platform for Point of Care tests across 5
   Hospitals and Ambulatory Medicine
  - Will allow for quality indicators across the enterprise
  - Will allow for centralized reporting and oversight
- Standardized electronic medical record
  - One Patient, One Record
- Standardized laboratory information system
  - Harmonized test panels
- Standardized testing platforms
  - Chemistry and Hematology lines
  - ➤ One Patient, One Test Result





#### **Future Goals**

- Electronic Audit/Rounding Tool
  - Real time grading and feedback on tablets
- Networking Events for all POCC's
- No New POCT Devices Without Interface Capabilities
- Managing Non-laboratory Devices
   Through Middleware (i.e., transcutaneous bili)





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