NEWEST FIRST

Yvonne Feders: Just in case Devorah checks, we had the exact same issue. We switched vendors as we had this occur in multiple areas with different staff. These people had been running the UPT testing for years and I fully believe them when they told us they read the test at the 3 minute mark.

Peggy Mann: Dr. Rao has left Q&A. Thanks all! Off to Session 4 "Use of Blood Glucose Monitors in a Critically Ill Patient Population: Can we use this device on this patient?"

Nelda Griffin: can you supply some kind of information link about not performing iSTAT troponins in the ED and changing to the lab troponins after admission. Our ED have been wanting the iSTAT troponins.

Devorah Alexander: We replaced the kits with a different lot of HCGs. These were fine

Devorah Alexander: Yes it was urine. The Only reason why I question the time factor is because it was checked by another staff member and the zigzag appeared again, The zigzag alerted the staff member and it was repeated with the same result. This happened for a few patients. The sample was retested by lab and the zigzag did not occur.

Peggy Mann: Thanks Wallace

Wallace White: Re Rice study: Yes, I've worked with Rebecca Richards-Kortum, the corresponding author on that study, and she is a professor of bioengineering and head of a global-health program. I've not discussed the study with her but I imagine that it came out of general questions in clinical practices about the reliability of the finger-stick samples that many POCT systems are counting on.

Peggy Mann: With what Devorah described, why did the zigzaggy line appear? Something to do with the capillary action being disrupted?

Susan O'Mara: Wonderful presentation.

Lokinendi Rao: Peggy. Yes I think this study is just the beginning.

Peggy Mann: RICE Biomed does a lot of cool things related to global healthcare - I wondered if they were digging deeper into a previous study and looking at whole blood due to developing POCT devices for global/disaster use. Something that can be carried in their 'lab in a backpack' concept.

Lokinendi Rao: Devorah, I believe you are referring to Urine HCG? False positives can happen if it is not read in the specified time. Any time beyond recommended can cause this

Peggy Mann: Wallace and Dr. Rao, was this a follow-up study that had been done in 'healthcare' but at RICE it was done in biomedical dept?

Kimberly Skala: Yes, that unit thought they would save money and did not understand the ramifications but it has been rectified at her site now, thanks to IQCP!

Lokinendi Rao: Kim, Yes. That could be significant risk. They should standardized tubes across the system. That we should not allow it.

Wallace White: Thanks, Dr. Rao. My company develops POCT instrumentation. We've known that finger-stick samples have challenges but it was both helpful and chilling to see it quantified in that study.

Mary Snyder: Thank you for a great presentation.

Peggy Mann: "Reposting Wallace White's: Thanks, Dr. Rao. Do you have any comment on the increased CVs when finger-stick samples were used in the Rice study published late last year? http://ajcp.oxfordjournals.org/content/ajcpath/144/6/885.full.pdf"

Lokinendi Rao: That is an interesting study. Yes that will cause wide variations and will affect the patient management. But it depends on many factors including ensuring patient is not compromised with poor circulation among others.

Jo Ann Crain: Dr Rao, Excellent presentation!

Lou Ann Wyer: Thanks Dr Rao!

Kimberly Skala: Thank you Jo Ann.

Lokinendi Rao: Susan, I believe that will affect as it is circulating in the same side.

Peggy Mann: On whole blood testing...any advice on what we could tell POC Operators as far as steps to take to minimize hemolysis, for example?

Jo Ann Crain: During our IQCP, we added a few limitations to our SOPS and also training material for the nurses concerning hemolysis for potassiums and fingersticks for PT/INR

Devorah Alexander: A few months ago we were getting false-positive HCGs. It was determined that the strips were not read at 3 mins. The line did not appear as a straight pink line but was zig zagged and faint. I'm not sure if I but the time factor. Any clue on what might have occurred here?

Lokinendi Rao: Lou Ann, Good question. Manufacturers should work on developing hemolysis sensors and that will help. Also standardization which is a global problem. Also continuous education.

Jo Ann Crain: Hi Kim,

Chesinta Voma: thanks, Dr. Rao.

Lokinendi Rao: Peggy, No I did not yet but intend to.

Lokinendi Rao: Chesinta, We did not allow POCT Tn testing in our medical center. We try to provide rapid results from lab and they are OK with it. We do not want 2 types of Tn running from the same medical center. So far our ED and others are OK with it.

susan salerno: Do you think urine pregnancy tests should be removed from testing inpatient or ED settings .

Kimberly Skala: Dr Rao-excellent presentation. Can you share any risks your site may have found while doing risk assessments for IQCPs? Ex. One POCC found during her assessment for blood gas testing IQCP for a hand held. Her cath lab staff was heparinizing their own syringes rather than use the preapproved standardized syringes the system was using.

Marissa Chupp: Any advice on defining critically ill for glucose meters?

Peggy Mann: We are welcome to stay on this platform and continue Q&A as long as Dr. Rao is available.

Lokinendi Rao: Nicolle, I would not recommend using Urine Pregnancy in general under those circumstances. Unfortunately we do not have serum or blood POCT tests are not available. I know couple of manufacturers are working on it. But the TAT is important. A study published that 2 out 11 Urine tests can be falsely low due to variants.

Peggy Mann: Thanks Wallace for posting that link!

Lokinendi Rao: Shana, Unfortunately current medical education does not include these type of training. It is a continuous effort our POCC should play to educate them. They typically blame lab or analyzers.

Wallace White: "Thanks, Dr. Rao. Do you have any comment on the increased CVs when finger-stick samples were used in the Rice study published late last year?

http://ajcp.oxfordjournals.org/content/ajcpath/144/6/885.full.pdf"

Susan Kretz: Dr. Rao, you referenced not to do a fingerstick on a patient with an insulin or dextrose IV on the same side. Does this apply to a fingerstick sent to lab for glucose testing?

Lou Ann Wyer: Great presentation Dr Rao! What can the manufacturers of devices and reagents do to help with the challenges you discussed?

Peggy Mann: I very much enjoyed your talk, Dr. Rao. Have you published this material recently? I apologize if I missed the citation. I'll go back and review your slides again.

Chesinta Voma: Dr. Rao, what would you advice as the most concerned aspect in implementing Troponin for POC testing at the E.D

Lokinendi Rao: Monica, It will not give proper blood specimen or can cause hemolysis

Nicolle Ellious: Would you recommend not using urine pregnancy due to false negative issues or do you believe that physicians are aware of these issues when ordering these tests?

Shana Nowelani Gaug: Aloha Dr. Rao, do you know on average how much or maybe how little pre-analytical variations are emphasized during training? And any recommendations to improve the communication/knowledge to our testing personnel?

Lokinendi Rao: Which tests you wants to perform over there?

Monica Ianosi-Irimie: How does re-sticking the same site affect the test result?

Peggy Mann: Dr. Rao, we just opened up a Wound Care Clinic. Do you have advice for me on what to tell the RN collecting specimens and performing POCT in that special setting?

Peggy Mann: Welcome Dr. Rao! Feel free to answer questions!

Lokinendi Rao: Thanks Peggy.

Peggy Mann: Welcome! and this time I will spell check 'greetings' ;-) *Greetings* fellow participants of 'Leading the way to positive outcomes: the role of the POCT in patient-centered care'. Thank you for joining us here for Dr. Rao's Q&A.

Peggy Mann: Thank you, Dr. Rao, for giving us a look at all of the pre-analytical variables that can (and does!) confound POCT patient results. The lab can't 'control' for all of these factors, but it's good to know what to look for.

Peggy Mann: Greetings to participants and thank you for joining Dr. Rao for this Q&A. I am honored to be the moderator for Dr. Rao's Q&A session - we will begin shortly.