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## BACCN Conference, September 2018

### Acute Care Across Care Settings: Teaching Novices Expert Eye Gaze in Simulation



Kirsty Harris, MA, PCE, RN (Adult)  
Senior Lecturer in Adult Nursing  
Email: [kirsty.harris@port.ac.uk](mailto:kirsty.harris@port.ac.uk)

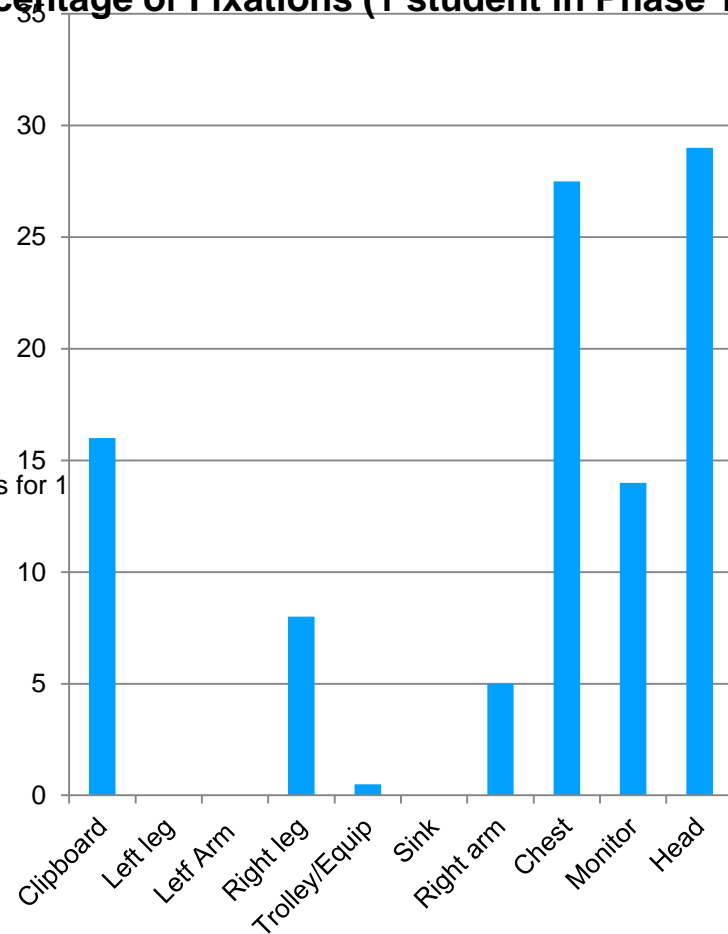


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## Percentage of Fixations (1 student in Phase 1)

■ Percentage of Fixations for 1 student in Phase 1





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- Delivery the theory in lectures with regards to medicines management
- Set the learning objectives
- How did it go?
- Address concerns
- Review learning points
- Plan ahead



5-STEP  
FEEDBACK  
AND  
DEBRIEFING  
TOOL



#### BEFORE CASE

##### Set learning objectives

What would you like to get out of this case?

#### AFTER CASE

##### How did it go?

What went well? Why?

##### Address concerns

What did not go so well? Why?

##### Review learning points

Were your learning objectives met for this case?

What did you learn about your clinical/technical skills?

What did you learn about your teamwork skills?

##### Plan ahead

What actions can you take to improve your future practice?

#### References:

Imperial College London (2012).



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### NEWS

Your area ▼ Topics ▼

ITV REPORT 9 August 2018 at 12:00am

## Serious harm warning over delays in treating patients with high potassium levels



NHS Improvement has warned that patients with high levels of potassium in their blood should be treated urgently (Peter Byrne/PA)  
Photo: PA Archive/PA Images

Patients with dangerously high levels of potassium in their blood may have come to severe harm because medics left them for hours on end without review or said the next



### Patient Safety Alert

Resources to support safe and timely management of hyperkalaemia (high level of potassium in the blood)

8 August 2018

Alert reference number: NHS/PSA/RE/2018/006

Resource Alert

Potassium is essential for the body's normal function, including maintenance of normal heart rhythm. The way the body responds to hyperkalaemia – a higher than normal level of potassium in the blood – is unpredictable; arrhythmias and cardiac arrest can occur without warning. Hyperkalaemia can affect patients in hospital and being cared for at home.

**Hyperkalaemia is a potentially life-threatening emergency which can be corrected with treatment.**

Over a recent three-year period, the National Reporting and Learning System (NRLS) received 35 reports of patients suffering cardiac arrest while hyperkalaemic. These suggest that some health professionals may not appreciate that clinical assessment, treatment and ongoing monitoring of hyperkalaemia is time critical.

Typical extracts from incident reports read:

"the patient had a raised potassium which required treatment and [a member of staff] apparently stated that the day team could deal with it."

"[Treatment for hyperkalaemia] was prescribed and administered at approx 16:30; however, no further review of the patient was undertaken and no repeat treatment or bloods were done until the patient arrested at 09:26."

Review of local guidance to manage hyperkalaemia found some examples that were not evidence-based, and/or were not written in a way that was easy to follow during an emergency.

This alert signposts to resources on the NHS Improvement website that can help organisations ensure their clinical staff have easily accessible information to guide prompt investigation, treatment and monitoring options. The resources include an example of how hospitals could make this easier for their staff by pre-preparing sets of the equipment, guidance and medication they would need in an emergency.

The resource webpage also includes short videos organisations can use to help frontline staff recognise that hyperkalaemia is a medical emergency and encourage them to familiarise themselves with local guidance and equipment.

#### Sharing resources and examples of work

If there are any resources or examples of work developed in relation to this alert you think would be useful to others, please share them with us by emailing [patientsafety.enquiries@nhs.net](mailto:patientsafety.enquiries@nhs.net)

Patient Safety improvement.nhs.uk/resources/patient-safety-alerts

NHS Improvement (August 2018)

Contact us: [patientsafety.enquiries@nhs.net](mailto:patientsafety.enquiries@nhs.net)

See page 2 for resources, references and advice on who this alert should be directed to.

NHS Improvement

#### Actions

**Who:** All organisations providing NHS funded-care for adults or children where blood test results may be received and reviewed, including GP services

**When:** To begin as soon as possible and be completed by 8 May 2019

- 1 Identify a senior clinician in the organisation to lead the response to this alert
- 2 Review or produce local guidance (including key steps or easy reference guides) for the management of hyperkalaemia that aligns with the evidence-based sources highlighted in the linked resources
- 3 Ensure that local guidance can be easily accessed by all staff including bank and agency staff
- 4 Ensure relevant guidance and resources are embedded in clinical practice by revising local training and audit
- 5 Use local communication strategies (such as the videos, newsletters, local awareness campaigns, etc) to make all staff aware that hyperkalaemia is a potentially life-threatening emergency and that its timely identification, treatment and monitoring during and beyond initial treatment is essential

"While general practices will not need hyperkalaemia treatment protocols or equipment, they will need to ensure they implement all actions that will support the right response to any blood test results they receive indicating hyperkalaemia."

nursingnotes

## Hyperkalaemia needs to be treated in a safe and timely way

There have been 35 reports of patients suffering cardiac arrest while hyperkalaemic.

James M | 9th August 2018



NHSI has issued a patient safety alert over the treatment of hyperkalaemia.

<https://www.nursingtimes.net/news/policies-and-guidance/alert-issued-after-cardiac-arrests-in-hyperkalaemia-patients/7025545.article>

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## Introduction/Learning Outcomes:

The learning outcome for this activity was to teach novices to recognise the deteriorating patient using simulation and to advocate the “end of the bed look”, as nurses often develop visual skills over time by anticipating patient’s decline before objective evidence becomes available (Douw, Schoonhoven, Holwerda, Huisman-de Waal, Zanten, Achterberg & Hoeven, 2015).

At the University of Portsmouth, nursing students have lectures on pharmacology and drug errors, including the anticipated physiological response. These drug errors were then replicated in simulation using high fidelity simulators.



## Study Design/Methodology:

The simulated monitor was switched off to encourage the development of the novice's eye gaze to recognise the deteriorating patient from visual cues. In order to develop visual cues, we designed 4 drug error scenarios; asthma, hyper-kalemia, pulmonary embolism and anaphylaxis. All four scenarios ran simultaneously.

Groups of 4 nursing students rotated between the stations, each having the opportunity to take the role of: recording the patient's history, completing the National Early Warning Score (NEWS) 2 (Royal College of Physicians, 2017) completing a physical examination and asking debrief questions. The scenarios had a 10 minute time limit to encourage teamwork.







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## Summary of results:

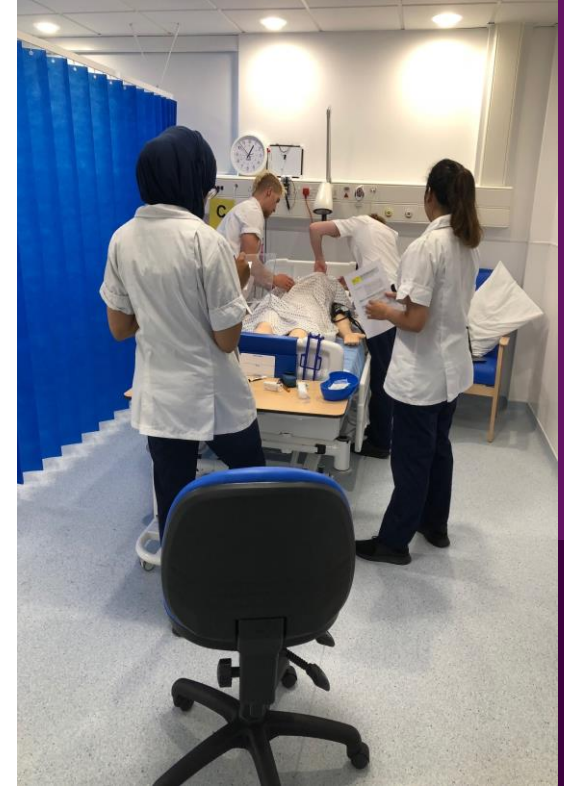
All 84 students were able to identify the correct medical condition for all 4 of the drug error scenarios.



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## Conclusion/Major Findings:

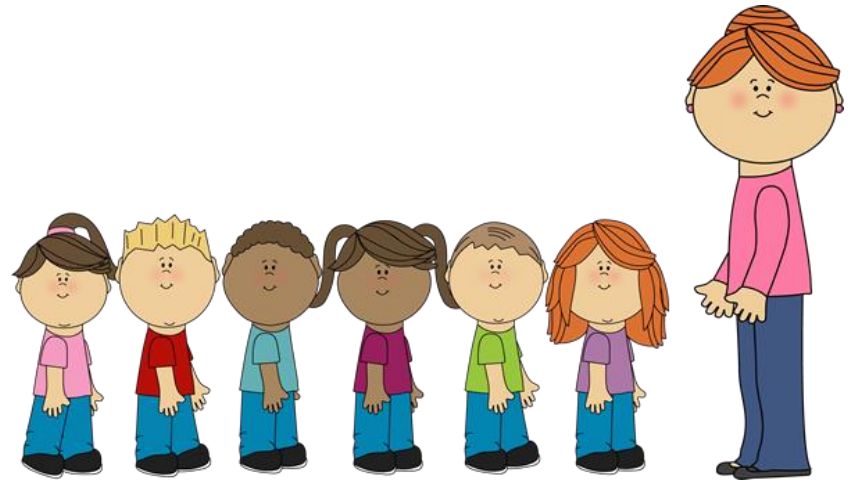
The informal student feedback was positive and indicated that the session was perceived to be beneficial. The time limitation factor encouraged good teamwork, leadership skills, good communication, decision making, task management and time management.







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## STUDENT FEEDBACK

Hi Kirsty.

Thank you for your email.

It was wonderful to speak with Suzanne yesterday regarding my placement so far and how much I have gained in such a short time.

We discussed how my knowledge and understanding had developed through the use of simulation. The scenarios have encouraged me to be prepared in situations that I would have little or no knowledge in. My first week I encountered a patient with hyperkalemia and was asked about medication I discussed with the nurse and stated we had learnt about this situation with simulations and the nurse was impressed with my knowledge. I had not before realized how much I had learnt within simulations until I put it to practice (in real life) it was very empowering and has helped towards my confidence.

I value simulations and the depth of knowledge and understanding that can be gained through the use of them allowing me to develop skills and the understanding of conditions that I may not necessarily see out in practice. Thank you for all the effort you put in to the unit as without them I most certainly would not be at the level I am currently at. And as Suzanne said. I am doing a good job and I am proud. :) Best wishes



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# Any Questions?



Jim was famous for his riveting  
research debriefs

#### References:

Douw, G., Schoonhoven, L., Holwerda, T., Huisman-de Waal, G., van Zanten, A.R., van Achterberg, T. and van der Hoeven, J.G. (2015). *Nurses' worry or concern and early recognition of deteriorating patients on general wards in acute care hospitals: a systematic review*. [online] Available at: <https://www.ncbi.nlm.nih.gov/pubmed/25990249> [Accessed 14 Mar. 2018].

Imperial College London (2012). *The London Handbook for Debriefing: Enhancing Performance Debriefing in Clinical and Simulated Settings*. London: London Deanery.

Royal College of Physicians (2017). *National Early Warning Score (NEWS 2). Standardising the assessment of acute-illness severity in the NHS*. [online] Available at: <https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2> [Accessed 14 Mar. 2018].

# Acknowledgements

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