

Kelly Steel,<sup>1</sup> Alisha Johnson,<sup>1</sup> Malcolm Stokes,<sup>1</sup> Geoffrey L. Dickens,<sup>2,3</sup> Yenna Salamonson,<sup>2</sup> Lucie M. Ramjan,<sup>2</sup> Rachel Langdon,<sup>2,3</sup> Bronwyn Everett<sup>2</sup>

South Western Sydney Local Health District<sup>1</sup>

School of Nursing and Midwifery, Western Sydney University<sup>2</sup>

Centre for Applied Nursing Research<sup>3</sup>

## Introduction

Failure to recognise and appropriately respond to physiological deterioration in patients admitted to mental health units has been highlighted as a significant factor in a number of adverse events within these settings, likely related to the relative infrequency of acute physiological deterioration in mental health settings.<sup>1</sup> The CUBIC Study is being conducted within inpatient mental health units across SWSLHD.

**Aim:** To describe nurses' knowledge, attitudes and confidence related to recognising and responding to clinically deteriorating patients in mental health settings.

## Methods

Nurses working in inpatient mental health units in SWSLHD were invited to complete the Lambeth Triage In-Situ Questionnaire (LTIQ),<sup>2</sup> a UK-developed tool which employs vignettes to measure knowledge, confidence, and attitudes towards managing medical deterioration and incident reporting in patients in mental health settings. Clinical Incident data (including MET calls) were collected for the 12 months preceding this study. (Study approval HE17/198)

## Results

Between March and September 2018, 137 nurses from inpatient mental health units across three sites in SWSLHD completed the survey (response rate: 42.9%). Four surveys were excluded due to excessive missing data leaving N=133 for analysis. Most (89.5%) of the respondents were ward-based clinicians with 60.9% having five years or less experience working in mental health.

In the LTIQ, respondents correctly identified 47.6% of steps ('knowledge') related to identifying and managing a medically deteriorating patient (range 21.4% – 72.6%). Differences across the three sites were identified for basic life support skills ( $p = 0.005$ ) and skills in preserving the scene post-MET ( $p = 0.038$ ). The mean score for 'confidence in providing healthcare to the deteriorating patient' was 24.2 (SD: 5.61; Range: 7 to 36) (possible range 6-36). The internal reliability of the 4-item attitudes scale was unacceptable ( $\alpha = 0.395$ ) and not used in analyses. Of the 134 clinical incidents during the 12 months preceding this study, MET calls were the most frequent (34%) followed by Transfer of Care (29%).

## Funding

This study was funded by Nursing and Midwifery Strategy Reserve Funding and SWSLHD Nursing and Midwifery.

## Results

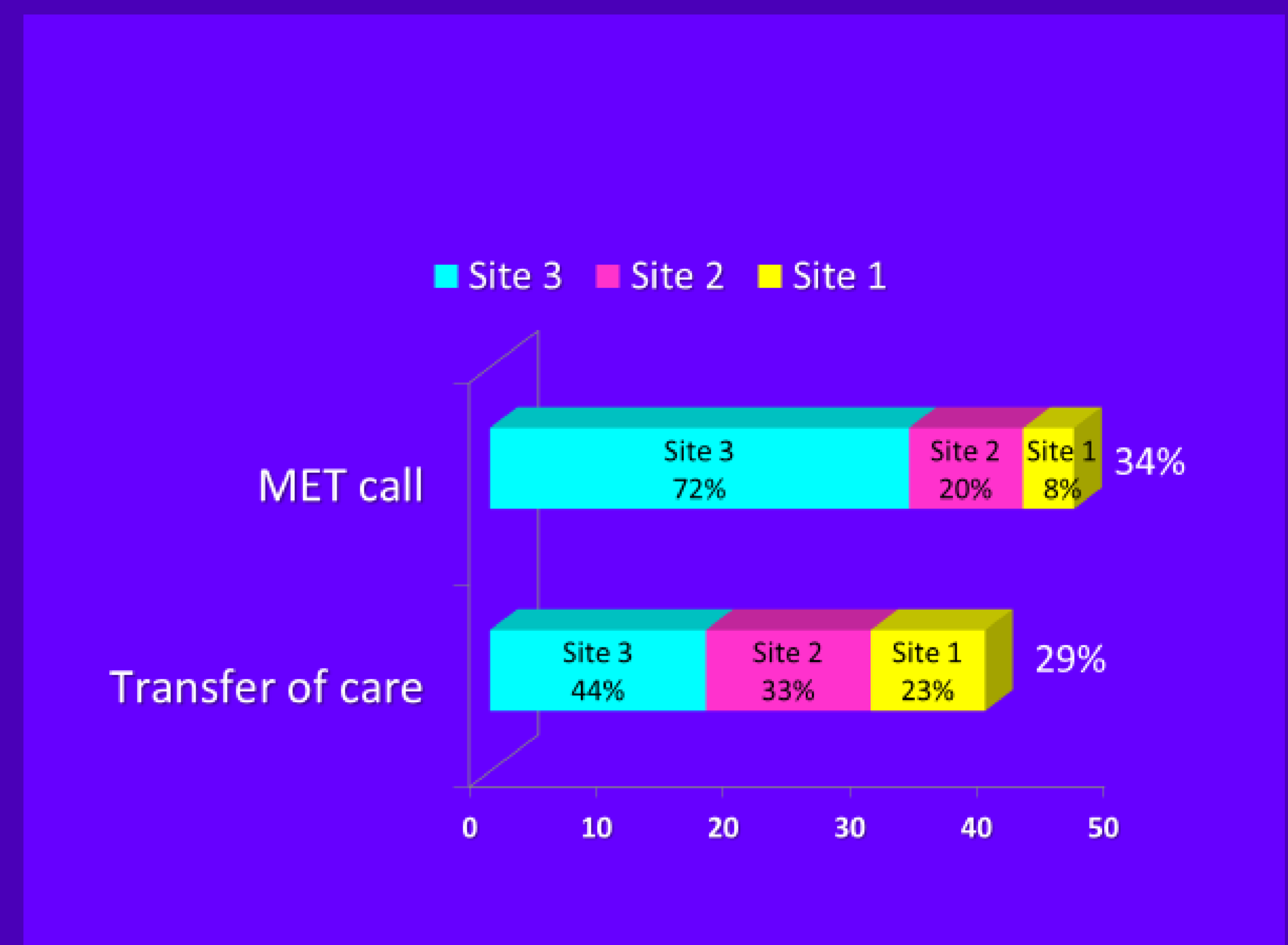


Figure 1. Comparison of Incident data across sites

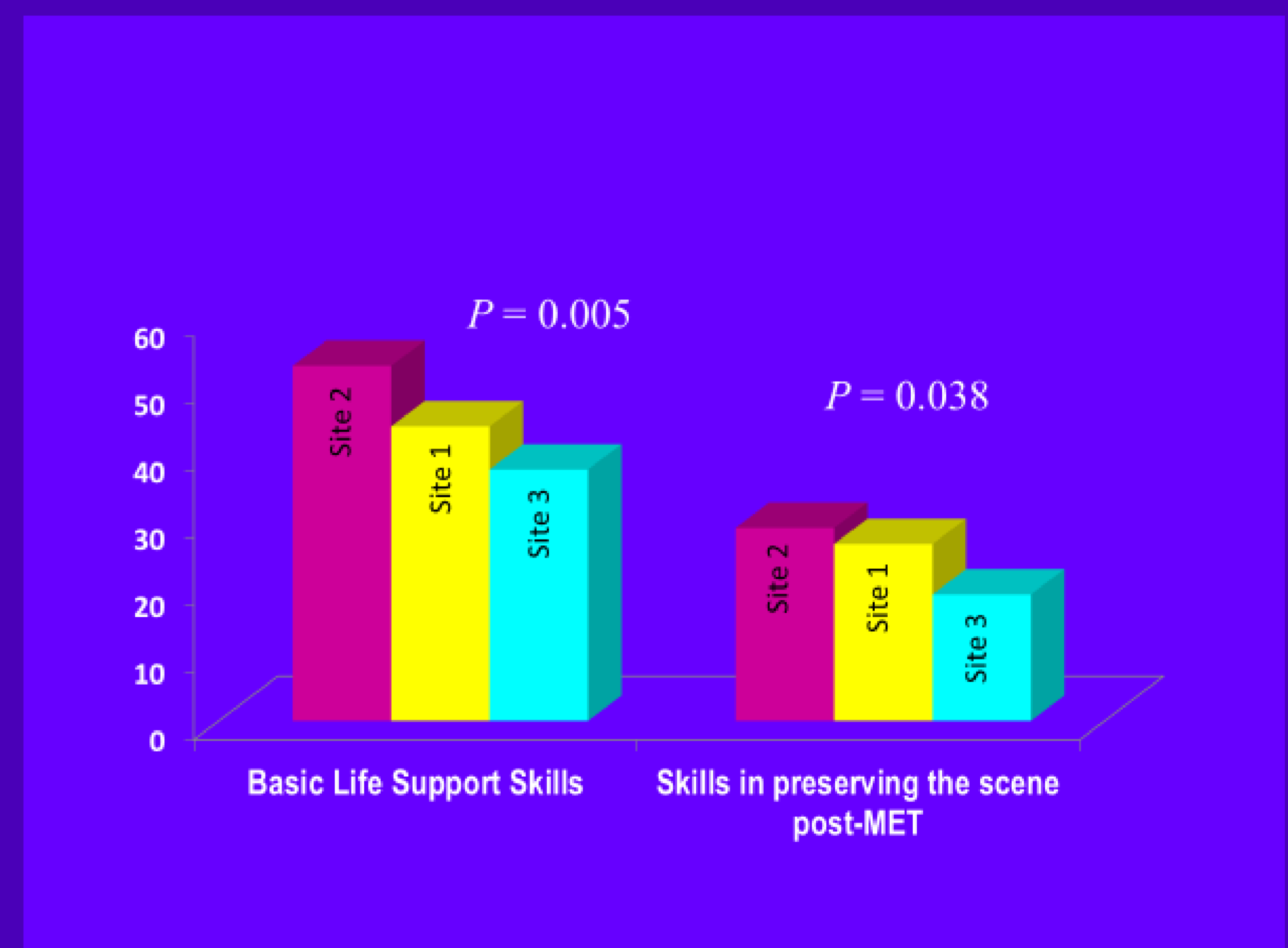


Figure 2. Site comparison of knowledge of BLS and preserving scene post-MET

## Conclusion

While LTIQ knowledge and confidence scores were similar to those reported by the tool's developers, given the most frequent clinical incident in this setting was MET calls, and the differences across sites in relation to BLS skills, strategies to support nurses to manage a physiologically-deteriorating patient in the mental health setting are needed.

## References

1. Australian Commission on Safety and Quality in Health Care. "Mental health fact sheet 1: An overview of recognition and response systems." from <https://www.safetyandquality.gov.au/wp-content/uploads/2012/02/MH-fact-sheet-1-overview.pdf>.
2. Lavelle, M., Attoe, C., Tritschler, C. & Cross, S. (2017). Managing medical emergencies in mental health settings using an interprofessional in-situ simulation training programme: A mixed methods evaluation study. *Nurse Education Today* 59(103-109).

## Acknowledgements

The study investigators would like to acknowledge the mental health nurses who participated in this study, and the Clinical Nurse Educators who supported nurse recruitment.