



Title ESTABLISHING PAEDIATRIC DELIRIUM SCREENING IN PICUS (PART 1) CONSENSUS & CAPABILITY

Authors and Co-Authors: Lisa McIlmurray ^{1,2}, Maeve Murray ³, Leanne Aitken ⁴, Jennie Craske ⁵, Sandra Gala-Peralta ⁶, Ashley Liew ⁷, Antonia Hargadon-Lowe ⁸, Lyvonne Tume ^{5,9} & Bronagh Blackwood ¹ on behalf of the Paediatric Delirium Group UK and Ireland

Corresponding Author: Lisa McIlmurray,

Address: Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast, BT7 1NN

phone: +353877401086

email: l.mcilmurray@qub.ac.uk

Co-Authors:

¹ Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast, University Road, Belfast, Northern Ireland, BT7 1NN

² Children's Health Ireland @ Temple Street Hospital Dublin, Temple Street, Rotunda, Dublin 1, Ireland

³ Antrim Area Hospital, Northern Health & Social Care Trust, Bush Road, Antrim, Northern Ireland, BT41 2RL

⁴ School of Health and Psychological Sciences, City, University of London, Northampton Square, London, UK, EC1V 0HB

⁵ Alder Hey Children's Hospital, NHS Foundation Trust, East Prescott Rd, Liverpool, UK, L14 5AB

⁶ Royal Brompton & Harefield Hospital, Sydney Street, London, UK, SW3 6NP

⁷ Evelina London Children's Hospital, Westminster Bridge Rd, London, UK, SE1 7EH6NP

⁸ Southampton Children's Hospital, Southampton General Hospital, Tremona Road, Southampton, Hampshire, UK, SO16 6YD

⁹ Faculty of Health, Social Care and Medicine, Edge Hill University, St Helens Rd, Ormskirk, UK L39 4QP

INTRODUCTION & AIM

Paediatric delirium (PD) is associated with increased morbidity, mortality, length of stay, long term cognitive impairment and costs.[1] The international prevalence is 34%, but nationally is unknown due to a lack of screening. [2] The PD Group UK and Ireland (PDGUKI) founded in 2020 with the aim of establishing routine screening using a common PD tool.

METHODS

A rapid review of PD screens ranked tools from most (1) to least (3) applicable according to their predictive power, suitability for age and delirium subtypes and practicability. An online vote was undertaken with PICUs to obtain agreement on a common tool.

RESULTS

The rapid review found 7 PD tools. The top ranked tools were the Cornell Assessment of Pediatric Delirium (CAPD) (average rank 1.25) and the Sophia Observation withdrawal Symptoms-Paediatric Delirium scale (SOS-PD) (average rank 1.50). Online voting (June 2021) resulted in a majority vote for

the CAPD (13), and SOSP-PD (6), with the remaining units having no preference. Training materials were developed for a dedicated website. [3] (*Training & implementation process explored in part 2*) Progress reported (May 2022) revealed that from 29 PICUs, 15 (52%) have started PD staff training and 12 (41%) have initiated twice-daily screening. Capability to capture PD prevalence and burden via PICANet is underway.

CONCLUSION

Through collaborative PICU engagement the PDGUKI has made substantial progress in establishing PD screening in 41% of PICUs over 6-months. This achievement paves the way for enabling assessment of interventions aimed at preventing and treating PD in the UK and Ireland.

REFERENCES

1. Turkel, S.B., *Pediatric Delirium: Recognition, Management, and Outcome*. Curr Psychiatry Rep, 2017. **19**(12): p. 101.
2. Semple, D., et al., *A Systematic Review and Pooled Prevalence of Delirium in Critically Ill Children*. Crit Care Med, 2022. **50**(2): p. 317-328.
3. Paediatric Delirium Group UK and Ireland website [<https://www.qub.ac.uk/sites/uk-paediatric-delirium-group/>]