**APPENDIX S1: ENVIRONMENTAL ASSESSMENT INVENTORY**

This specific PICU / Low Secure Unit environmental inventory was published in 2006 (Dix et al. 2005) but was developed in 2004 and used to complete a national survey. As mentioned in main text, standards are grouped into four areas, the inventory can be used by any person familiar with the unit design. It is reproduced here

**Scoring:** Responses to each question are marked as:

* 1 = meeting the standard
* 0.5 = indicates partial adherence to the standard
* 0 = not meeting the standard

**Maximum score per issue:** Critical issues = 11

Difficult issues = 14

Serious issues = 11

Achievable issues = 18

**Interpretation:** The score is then added for each issue to get a total score which is then expressed as a percentage for each issue. The aggregated scores for each issue are then assessed as good, poor or acceptable in the following fashion:

• A score of 75% or more is taken as good.

• Acceptable scores are those which are more than 50% but less than 75%.

• A score of 50% or less is taken as poor

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**Reproduced from Dix et al. (2005)**

**APPENDIX S2: NURSING OBSERVED ILLNESS INTENSITY SCALE (NOIIS)**

As described in the main text, this scale is designed to objectively measure behavioural improvements and symptom reductions as derived from everyday nursing observation and interaction with patients on the ward. It was designed and published in 2010 (Bowers et al. 2011) and shown to have good inter-rater reliability.

**5 items:**

Agitation and activity; Apathy and withdrawal; Psychological distress; Conflict; Cognitive accessibility

**Scoring:**

Each item scored on scale of 1–5 according to descriptions:

(Only *Agitation and activity*, and *Conflict* presented here as the others items were not used in this study).

|  |  |
| --- | --- |
| **Agitation and activity** |  |
| Calm and relaxed all the time, no excessive movement or activity | 1 |
| Signs of restlessness from time to time (e.g. fidgeting, swinging of arms and legs, frowning, increased facial expressiveness, occasional gesticulations) | 2 |
| Brief episodes of pacing, of gross body movement or activity, with other signs of restlessness at other times, possibly with increased talking | 3 |
| Extended signs of restlessness, overactivity, agitation, tension or irritability, unable to concentrate, unable to keep still or remain seated half of the time | 4 |
| Patient agitated or overactive for nearly the whole time, constantly on the go, unable to keep still, and/or tense, irritable and hyper responsive to noises or to the actions of other, and/or interfering with others. | 5 |

|  |  |
| --- | --- |
| **Conflict (score the highest that applies)** |  |
| Patient is fully compliant with ward rules and accepts all treatment and engages in therapeutic activities | 1 |
| Patient fails to comply with ward rules (e.g. re smoking), and/or refuses to see workers, and/or to engage in activities, and/or wash, and/or get up and out of bed when asked, or refuses to go to bed, and/or is abusive | 2 |
| Patient refuses to accept treatment (e.g. medication), or is suspected (or known) to have consumed illegal drugs or alcohol | 3 |
| Patient attempts to or succeeds in absconding | 4 |
| Patient is aggressive to objects or others, or attempts or succeeds to harm self or others. | 5 |

**Interpretation:**

The scores from each item are then placed on a graph providing individual readings and a cumulative score that can be charted over the duration of admission on the ward.

**REFERENCES**

**Bowers, L., Brennan, G., Ransom, S., Winship, G. and Theodoridou, C.** (2011) The Nursing Observed Illness Intensity Scale. *Journal of Psychiatric and Mental Health Nursing*.18(1): 28–34. doi: 10.1111/j.1365-2850.2010.01615.x

**Dix, R., Pereira, S., Chaudhry, K., Dale, C. and Halliwell, J.** (2005) A PICU/LSU environment assessment inventory. *Journal of Psychiatric Intensive Care*. **1**(2): 65–69.