SUPPLEMENTARY FILE 1: Different trajectory patterns in four individual patients

A

Vegetative state

Date of assessment

B

Minimally conscious state - stable at lower level

Date of Assessment

C

Minimally Conscious state - fluctuating

Date of Assessment

D

Emerging

Date of assessment
The graphs show the trajectory of WHIM hierarchical scores in four individual patients over the course of their assessment period.

**Patient A** remained in a vegetative state. Her MAB remained consistently below 14 (and mainly below 8) throughout the assessment period.

**Patient B** remained stable in MCS. His MAB was never above 31 (imitates gestures)

**Patient C** fluctuated in response between higher levels of MCS (MCS+) and much lower levels of responsiveness, with no obvious trend over time. The dips reflected periods of lower arousal despite attempts to wake them. External causes of variable arousal (such as medication or intermittent hydrocephalus/shunt malfunction or syndrome of the trephined) should be considered when this pattern is seen, but in this case none were found.

**Patient D** gradually emerged from VS into full consciousness.