PICUPS Tool

(credited to UKROC Rehabilitation Collaborative, Kings College London, and Prof Lynne Turner-Stokes together with members of the Intensive Care Society working group)

The Post-ICU Presentation Screen (PICUPS)

A brief functional screening tool to inform the rehabilitation needs after treatment in Intensive Care Settings

The PICUPS is a 14-item developed to support triage and handover of patients stepping down from ITU into the acute wards, and onwards into rehabilitation.

It is designed to:

- Inform the immediate plan for care on the acute ward
- Identify problems that are likely to require further more detailed assessment / evaluation by members of the multi-disciplinary team and
- Inform development of the **Rehabilitation Prescription** as patients leave the acute care setting (which will include the Rehabilitation Complexity Scale) to indicate the patients needs for rehabilitation at their next stage of care.

As well as helping to guide decision-making for individual patients, this information will help to identify where their needs are and are not being met. Used at population level, the information will enable us to quantify shortfalls in service provision and to estimate the gap between capacity and demand for future planning.

The PICUPS is essentially just a **checklist and guide**, so accuracy is not critical –

- The item levels are in rough order, but it is not intended that it should be used as a numerical scale
- If a patient falls between two scores or their condition fluctuates, then record the lower score.

The PICUPS Plus represents 10 additional optional items that may be used on a *'pick 'n' mix'* basis depending on the individual's presentation, to identify potential higher level items that may need to be addressed as patients progress during acute care, and to further assist towards development of the Rehabilitation Prescription that will help to direct their on-going care. *These items may be adjusted or added to as the tool develops.*

Ultimately the tool will have additional functionality so that score levels on the individual items may trigger actions such as referral to the appropriate discipline. Higher scores on some of the PICUPS items may prompt completion of the relevant PICUPS plus items or could suggest further tools that could provide more detailed clinical information.

Both tools may be applied serially to monitor changes that may occur as the patient progresses

The Post-ICU Presentation Screen (PICUPS) - to inform rehabilitation needs after treatment in Intensive Care Settings

Item	0	1	2	3	4	5
Medical and essential care (Not needed if RCS-E is recorded alongside this tool)						
Medical stability (1)	**Critically unstable.** Requiring management in a critical care or HDU setting (Level 2-3)	**Medically unstable.** Primary needs are medical/surgical, requiring an acute ward setting (Level 0-1)	**Primary needs are for rehab, but potentially unstable.** Requires inpatient treatment in acute setting with 24 hr medical care (eg HA unit)	**Requires inpatient rehabilitation, but stable** – can be managed in non-acute setting with day-time medical cover only	**Can be managed in the community with enhanced support** – eg hospital at home or nursing home	**No medical needs** – can be managed in community with normal access to GP as required
Basic care needs and safety (Score worst case of care or risk for safety)	**Constant 1:1 supervision** For safety or behavioural management (Will usually require DOLS)	**Very high care / risk** Requires assistance from ≥3 people for most basic care **OR** Very frequent checks (¼ hrly)	**High care / risk** Requires assistance from 2 people for most basic care **OR** Frequent checks (½ hrly)	**Moderate care / risk** Requires assistance from 1 person for most basic care **OR** 1-2 hourly checks	**Mild care / risk** Requires incidental assistance from 1 person for basic care **OR** 3-4 hourly checks	**No care needs** – largely independent in basic care and able to maintain own safety - no risk
Breathing and Nutrition						
Respiratory function/ ventilator assistance (2)	**Complete invasive ventilator dependence** – Continuous ventilatory support (eg on home ventilator)	**Partial invasive ventilator dependence** Manages short periods off ventilator	**Non-invasive ventilation via mask (eg CPAP):** Continuous or near continuous support	**Intermittent non-invasive only** (Eg CPAP at night only) **OR** **Continuous high flow oxygen** (>15 l)	**Self-ventilating with Standard oxygen therapy** (<15l)	**Self-ventilating with no oxygen therapy**
Tracheostomy nursing management (3)	(**E: Ceiling of care** (including planned end-of-life care) limited trachy interventions for comfort only)	**A: Unstable airway** Very frequent trachy intervention (eg ½ -1 hourly) +/- de-saturation / mucous plugging	**B: Complex tracheostomy** Frequent trachy intervention eg 1-2 hrly) including regular deep suction. Trachy needs may be unpredictable.	**C: Standard trachy** requiring intervention usually every 2-4 hours	**D: Simple stable trachy** requiring occasional intervention only	**No Tracheostomy**
Tracheostomy weaning stage 4)	**Cuffed tracheostomy**. **Cuff up all the time**	**Cuff partially deflated** or periods of cuff deflation	**Tolerating continuous cuff deflation** or cuffless tracheostomy in situ	Cuff deflated/cuffless tube. **Tolerating one way valve continuously**	Cuff deflated/cuffless tube. **Tolerates capping trials**	**Decannulated** **OR** **N/A - No tracheostomy**
Cough (2)	**Absent cough,** may be fully sedated or paralysed	**Cough stimulated on deep suctioning only**	Weak ineffective voluntary cough, **unable to clear secretions independently** (e.g.requires deep suction)	**Weak, partially effective voluntary cough,** sometimes able to clear secretions (e.g.requires Yankauer suctioning)	**Effective cough,** clearing secretions **with airways clearance techniques**	**Consistent effective voluntary cough**, clearing secretions independently
Nutrition/feeding (1)	**Nil by mouth requiring full enteral or parenteral nutrition.**	**Minimal oral intake or food/liquid requiring full enteral or parenteral nutrition.**	**Partially tube-de-pendent -** Eating and drinking less than ½ hospital meals requiring supplemental enteral tube feeding.	**Eating and drinking less than ¾ hospitals meals and requiring oral nutrition supplements** and/or assistance or supervision required throughout meal.	**Eating and drinking 3/4 hospital meals but needs set-up or prompting** to ensure sufficient intake.	**Eating and drinking full hospital meals independently and is not prescribed oral nutrition supplements.**

Item	0	1	2	3	4	5
Physical / movement						
Repositioning within bed (1, 2)	**Unable, to be moved** except with extreme care (eg requires log-rolling)	**Requires assistance of 3 or more people** to reposition in bed	**Requires assistance of 2 people** to reposition	Requires **moderate hands-on assistance of 1 person** to change position	Requires **minimal assistance of 1 person** or prompting only to change position	**Able to change position fully independently**
Transfers: bed-chair and back **(1)**	**Unable/unstable**	**Full hoist** transfers	Transfers with **assistance of two people** (with or without aid)	Transfers with **physical assistance of one person** (with or without aid)	Transfers with **standby supervision/promoting** only (with or without aid)	**Fully Independent** transfer without equipment
Communication / Cognition / Behaviour						
Communication (1,4)	**No consistent functional communication**	**Unable to attract attention**, but **responds to direct questions** about basic care needs using Yes/No or gestures.	**Able to attract attention** and communicate at the level of expressing **basic needs/ information**	**Communicates within context to familiar people** – but substantial listener burden	Some listener burden, but **communicates with a unfamiliar people** and out of context	**Unrestricted communication** Able to understand and express complex information and to communicate with anyone
Cognition / delirium (1)	**Unconscious – in coma** (Including if still fully sedated)	**Awake** but still **disordered consciousness** (ie inconsistent responses equivalent to vegetative or minimally conscious state)	**Emerged into consciousness,** but **severe cognitive deficit** or severe confusional state	**Moderate cognitive problems.** Not fully orientated	**Fully orientated but some higher level problems** with memory and attention and/or executive function	**Normal cognition**
Behaviour (1)	**Agitated, physical aggression** requiring restraint at times (Should be on DOLS)	**Challenging behaviour** with verbal (but not physical) aggression	**Marked behavioural problems,** but largely **controlled in structured environment**	**Moderate behavioural problems.** Some problems with temper control. Needs persuasion to comply with rehabilitation or care.	**Mild behavioural problems.** Needs prompting for daily activities. Occasional outbursts only	**No behavioural problems** Socially appropriate, co-operative, able to engage actively in rehabilitation. **OR** N/A – eg in coma / Vegetative state
Psychosocial						
Mental health (1)	**Known active pre-existing mental health condition** requiring on-going secondary mental health input and psychiatry eg bipolar disorder, schizophrenia, other psychosis	**Severe new mental health problems** (eg stress/ severe depression /psychosis) that effectively prevent engagement in daily activities (requires psychiatric input)	**Marked anxiety / depression /mood / stress** problems that **impact significantly on daily function** and ability to engage in rehab, requiring frequent support	**Moderate anxiety / mood** issues with **some impact on function**/ rehab requiring active intervention/ treatment	**Mild anxiety / mood issues** which does not impact on engagement daily function / rehabilitation, but requiring further exploration /support	**No mental health issues** No problems with anxiety/ depression/ stress **OR** N/A – eg in coma / Vegetative state

PICUPS plus: *"pick 'n' mix"* –

Optional items for post ICU patients who are progressing towards discharge to the community

The PICUPS Plus represents some additional optional items that may be used depending on the individual's presentation, to identify potential higher-level items that may need to be addressed as the patient progresses within acute care, and to further assist towards development of the Rehabilitation Prescription. For example, a non-brained injured patient who was intubated and extubated on ITU and who has ICU-acquired dysphagia, dysphonia or upper airway dysfunction may not trigger referral to SLT on the PICUPS, but the Dyspnoea/Voice/Swallowing items on the PICUPS plus will identify these problems and trigger referral to an SLT for further evaluation and intervention.

The PICUPS Plus items should be addressed as early as possible after step-down from ICU. It is not expected that all of these will be relevant to everyone, but that they may be used on a *'pick 'n' mix'* basis as relevant.

Item	0	1	2	3	4	5
Upper airway						
Breathing (5)	**Extreme dyspnoea** Too breathless to leave the house or breathless when dressing	**Severe dyspnoea** Stops for breath after walking 100 yards or after a few minutes	**Significant dyspnoea** Walks slower than people of the same age because of breathlessness, or has to stop for breath when walking at own pace	**Moderate dyspnoea** Breathless when hurrying or walking up a slight hill	**Mild dyspnoea** Breathless only with strenuous exercise	**No dyspnoea**
Voice (6)	**Aphonia** No voice	**Severe dysphonia** Can only produce a weak whisper; at times no voice	**Significant dysphonia** Voice sounds very abnormal or is effortful to produce all of the time; consistent difficulties being heard on the telephone and in conversation	**Moderate dysphonia** Voice occasionally sounds abnormal or effortful to produce; occasional difficulties being heard in conversation	**Mild dysphonia** Difficulty being heard in loud environments; sound of the voice varies throughout the day or gets worse towards the end of the day	**No dysphonia**
Swallowing (7)	**Extreme dysphagia** Difficulty managing secretions or aspirates secretions requiring nil by mouth	**Severe dysphagia** Commencing oral intake Tolerates small amounts of oral intake for therapeutic purposes	**Significant dysphagia** Requires more than two IDDSI diet/fluid level restrictions; fatigue limiting oral intake	**Moderate dysphagia** Requires 1-2 IDDSI diet/ fluid level restrictions, and/or consistent use of compensatory strategy for safe/efficient swallowing	**Mild dysphagia** Able to eat (near) baseline diet with some difficulty or supervision required, e.g. no more than one IDDSI diet level restriction; difficulty with specific foods; longer mealtimes; coughing when drinking liquids quickly	**No dysphagia**

Physical / activities of daily living						
Postural management and seating	**Unseatable – Unable to sit in any modified seating system** (eg due to severe posturing, severe pressure ulcers etc)	**Severe postural problems that limit seating** (ie, severe contractures, pressure ulcers) **requiring a Tilt-in-space seating system with bespoke customisation** (requiring highly specialist seating assessment/provision)	**Marked postural problems** Poor head and trunk control requiring standard **Tilt-in-space or reclining seating system** +/- some modification	**Able to sit out in standard wheelchair with minor modifications** (eg pressure relief cushion)	**Mild postural problems** but able to maintain good sitting position **in standard wheelchair with no modifications**	**No postural problems** able to sit in ordinary armchair **Or not applicable** Eg seating prevented by other conditions eg severe agitation, medical instability etc
Personal hygiene eg grooming, washing, bathing, dressing, managing continence (1)	**Unable to contribute in any way** All hygiene tasks are done for them	**Maximal help** Able to contribute in a very small way, but nearly all hygiene maintenance is done for them	**Moderate help** Able to manage some hygiene tasks themselves, but needs help for > half	**Moderate help** Able to manage > half of hygiene tasks themselves but needs some hands-on help	**Minimal help** eg just reminding to wash or setting up for them	**Fully Independent**
Care needs for basic activities of daily living, maintaining safety etc (1)	**Totally dependent 2 or more carers** required throughout 24 hours	**Severe dependence 1 carer** required throughout 24 hours with second carer for some tasks (eg bathing)	**Marked dependence 1 carer** required throughout 24 hours (may be sleep-in at night, but unable to live alone)	**Moderate dependence 1 -2 carers** required on visiting basis – able to summon help and so be left alone between visits	**Mild dependence Incidental help**, safety checks or support for extended activities only eg visit once daily or less often	**Fully independent**
Moving around (1) (Indoors)	**Bed bound**	**Wheelchair bound – attendant propelled**	**Independently mobile in wheelchair**	**Walks with assistance from someone** (+/- aid)	**Walks independently** (+/- aid) but **concerns for safety** (eg falls risk)	**Normal mobility indoors** – no safety concerns
Arm and hand function	**No functional use of either arm/hand**	**Poor functional use of both hands –** very limited dexterity affecting all activities	**Some functional use of one hand –** but dexterity is poor even in good hand	**Good use of one hand** but upper limb activities limited (eg by lack of bimanual function)	**Good functional use of one or both hands** but problems with fine dexterity affect higher-level function	**Normal dexterity and hand function**
Symptoms that interfere with daily activities						
Fatigue	**Extreme Fatigue** Only able to get up for very short periods – spends most of the day in bed or in a chair due to fatigue	**Severe Fatigue** Fatigue impacts severely on daily activities – requires several rest periods during the day	**Marked Fatigue** Fatigue impacts significantly on daily activities – requires a rest period during the day	**Moderate Fatigue** Fatigue requires modification of some activities – eg part time working, limited exercise - but able to manage basic daily activities	**Mild Fatigue** Able to carry out normal activities (including work) but tired at the end of the day	**No fatigue – normal stamina**
Pain	**Extreme Pain** Interferes with sleep and almost all activities. Medication / pain interventions have little or no effect	**Severe Pain** Severe pain, not controlled by medication / pain interventions. Interferes with daily activities every day	**Marked Pain** Reports marked pain. Medication/ pain interventions partially effective. Interferes with some activities most days	**Moderate Pain** Reports moderate pain. Helped by medication / pain interventions and only occasionally interferes with activities	**Mild Pain** Reports mild pain symptoms but they are well controlled and do not interfere with activities	**No Pain**

Other optional pick ‘n ‘ mix items may be added as necessary as the tool develops to help clinicians in their decision-making process

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References

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2. Adapted from the Chelsea Critical Care Physical Assessment (CPAX) Tool ©Chelsea and Westminster. Corner EJ, et al. Physiotherapy (2012), doi:10.1016/j.physio.2012.01.003
3. Adapted from the NHSE Standard Contract D02 supplement Levels of nursing care and supervision for tracheostomised patients ©Lynne Turner-Stokes 2015.
4. Adapted from the Therapy Outcome Measures (TOMS). Enderby, P., John, A. (2019) Therapy Outcome Measure User Guide. Croydon: J & R Press Ltd
5. Adapted from the Modified Medical Research Council Dyspnoea Scale
6. Adapted from Airway-Dyspnoea-Voice-Swallow (ADVS) scale (Nouraei, S., et al Clin Otolaryngol. 2017;42(2):283-294) and Grade, Roughness, Breathiness, Asthenia, Strain (GRBAS) Perceptual Voice Rating Scale
7. Adapted from ADVS and International Dysphagia Diet Standardisation Initiative (IDDSI)