

CCMDS interpretation summary

produced by North West London Critical Care Network

DRAFT

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This note sets out clinical interventions relating to organ support

Based on: PbR guidance 2011-12 - gateway 15618
 NHS data dictionary
 ISB CCMDS full specification 2010
 Casemix service notice HRG4 adult critcare RT 11/12

Points to note

- ▶ HRG allocation is based on number of organs supported
- ▶ HRG is allocated to entire critical care spell not days within the spell
- ▶ If **Basic respiratory** support occurs with **Basic cardiovascular** support on any one day this equates to **ONLY 1** organ support
- Advanced** and **Basic** cannot be recorded for same day (Advanced always supercedes Basic)
- ▶ GI support included in CCMDS dataset BUT DOES NOT contribute to organ support score
- ▶ Liver support - requires onsite input from hepatologist
- ▶ **EXCLUDES** blood and high cost drugs

Trust should be able to illustrate CCMDS mapping from patient bedside to SLAM report to SUS

Trusts should review their CCMDS casemix for an agreed period in 2010-11 and check local case mix against national benchmark data as shown (to demonstrate variance - in order to inform contracts)

Benchmark critical care data from National pilot

HRG code	Number of organs supported	Average casemix	Days that > 80% of patients stay in critical care	Proportion of patients that stay for one night only	Benchmark bed day data prices
XC01Z	6+	1.00%	NA	NA	
XC02Z	5	5.30%	NA	NA	
XC03Z	4	11.30%	13	19%	
XC04Z	3	20.70%	9	29%	
XC05Z	2	27.10%	5	33%	
XC06Z	1	32.90%	3	50%	
XC07Z	0	1.00%	2	67%	

**This list describes the minimum data items to be sent in support of critical care days for which payment is required
SLAM Backing data**

Critical Care		Excluded Drugs	
Data Item Name	Data Item Description	Data Item Name	
1	ProviderCode	3 Character Provider Organisation Code	ProviderCode
2	SiteCode	Provider Site code	SiteCode
3	CommissionerCode	Commissioner Organisation code	CommissionerCode
4	PatientPostCode	Post code of patient usual address	PatientPostCode
5	NHSNumber	NHS Number	NHSNumber
6	LocalPatientIdentifier	Local Patient Identifier at Provider	LocalPatientIdentifier
7	DateofBirth	Patient date of Birth	DateofBirth
8	GPPpracticeCode	CODE OF GP PRACTICE (REGISTERED GMP)	GPPpracticeCode
9	ActivityIdentifier	Hospital Provider Spell Number where this critical care occurred.	
10	CriticalCarePeriodStartDate	Start date of critical care period	
11	CriticalCarePeriodEndDays	End date of critical care period charged for	
12	CriticalCarePeriodNumber	Number of this critical care period in this episode	
13	CriticalCareDays	Number of days claimed for	
14	HRGCode	HRG Code of days claimed for	
15	HRGDescription	HRG Description of days claimed for	
16	ChargeApplied	Full charge for critical care period days	
17	Comments	To be used by provider to submit supporting detail as agreed	
18		Date drug prescription actioned	DateofActivity
19		Brand name of prescribed drug	DrugNameBrand
20		Generic name of drug provided	DrugNameGeneric
21		Dosage of drug prescribed	DrugDosagePrescribed
22		Route of administration for drug	DrugRouteofAdministration
23		Frequency of drug prescribed	DrugFrequency
24		Quantity of drug supplied where relevant	DrugQuantitySupplied
25		Full charge for this item of service	ChargeApplied
26		Diagnosis being treated, ICD10	DiagnosisBeingTreatedICD10
27		Diagnosis being treated, textual description	DiagnosisBeingTreatedTextual
28		Unique key to activity from which this prescription arose. Either a Hospital Provider Spell Number or an Attendance Identifier	ActivityIdentifier
29		National code of consultant	ConsultantCode
30		Free text name of consultant	ConsultandName
31		To be used by provider to submit supporting detail as agreed	Comments

Source PCT guidance (information office NB)

(Extracted from NWLCP Commissioning /reporting guidance on SLAM backing data)

? Colour coding reference not known???

Advanced Respiratory Support

ARS

Includes

ECMO, IVOX (Extra corporeal respiratory support)
Invasive mechanical ventilatory support (i.e: IPPV or BIPAP) Via Endotracheal tube (ETT)
BIPAP pressure support ventilation via ETT/Trachy
CPAP via ETT
Patients remaining intubated post operatively pending respiratory, cardiovascular, other instability being resolved (to support specific end organ protection)

Excludes

BIPAP/CPAP via facial mask
CPAP via Trachy
Post-op patients intubated and ventilated for <12 hours unless clear indication to do so

Notes

Advanced RS and Basic RS cannot be recorded for same day (ARS supercedes)
Patients who remain intubated post operatively for up to 12 hours will include some upper GI, head and neck and emergency surgery patients but others may also require this measure on occasion. It will however need to be justified in terms of the necessity for continued ventilation.

Basic Respiratory support

BRS

Includes

More than 50% oxygen delivered by a facemask
BIPAP/CPAP via a facial mask or hood
CPAP via a tracheostomy
Close observation (eg severely compromised airway or deteriorating respiratory muscle function) with potential for acute deterioration to the point of needing advanced respiratory support
Physiotherapy or tracheobronchial suction to clear secretions at least two hourly, via tracheostomy tube, or ET tube, mini-tracheostomy, naso-pharyngeal or Guedel airway or in the absence of an artificial airway
Patients extubated in last 24 hours after a period of intubation and/or mechanical ventilation via an endotracheal tube which lasted more than 24 hours.
Patients with ETT to protect the airway but with no ventilatory support.
Post-operative patients who were intubated and ventilated for <12 hours

Excludes

Patients with tracheostomy tube with no ventilatory support.
Short-term increases in FiO2 such as for physiotherapy or transfer

Notes

If basic respiratory support occurs with basic cardiovascular support on any one day this equates to ONLY 1 organ support
Advanced RS and Basic RS cannot be recorded for same day (Advanced RS supercedes)

Advanced Cardiovascular Support		ACVS	
Includes	Excludes		
Multiple intravenous vasoactive and/or rhythm controlling drugs used simultaneously to support arterial blood pressure, cardiac output or organ perfusion (eg vasopressors, inotropes, chronotropes, nitrates)		Intravenous drugs to control cardiac arrhythmias	
Patients resuscitated after cardiac arrest where critical care is considered clinically appropriate - NO LONGER Included		Single intravenous vasoactive drug use	
Observation of cardiac output and derived Indices (eg PA catheter, lithium dilution, pulse contour analysis, oesophageal Doppler)			
Intra-aortic balloon pump support			
Insertion and/or continuing use of a temporary trans-venous cardiac pacemaker			
		Notes	
		Advanced Cardiovascular support and Basic Cardiovascular support cannot be recorded for same day (ACVS supercedes)	
		Patients resuscitated after cardiac arrest where critical care is considered clinically appropriate - NO LONGER Included	
Basic Cardiovascular support		BCVS	
Includes	Excludes		
Use of a central venous catheter (CVC) for basic monitoring of CVP pressure and/or for the use of delivering drugs or fluid challenges to treat hypovolaemia		CVCs which <i>are not</i> being used to measure CVP nor to deliver drugs or fluid challenges	
Use of an arterial line for basic monitoring of arterial blood pressure or for obtaining blood samples for analysis.		Arterial lines that <i>are not</i> being used to measure arterial blood pressure and not being used to obtain blood samples	
Administration of a single intravenous vasoactive drug (regardless of dose) used to support low arterial blood pressure, cardiac output or organ perfusion or control high blood pressure			
Intravenous drugs to control cardiac arrhythmias.		Intermittent arterial stabs for blood gases	
		Notes	
		If basic cardiovascular support occurs with basic respiratory support on any one day this equates to ONLY 1 organ support	

Renal Support	
Includes	Excludes
Acute renal replacement therapy (eg haemofiltration)	
Patients receiving haemofiltration for chronic renal failure and requiring other organ support within critical care	Patients with abnormal electrolytes but no renal replacement therapy
	Notes
	INCLUDES Renal support in the context of critical illness. Renal support for life saving treatment of acute kidney injury patient

check exact wording for acute kidney patients

Neurological Support

Includes

CNS depression sufficient to prejudice the airway and protective reflexes (eg gag)	
Invasive neurological monitoring (eg ICP, jugular bulb sampling)	
Continuous IV medication to control seizures and/or continuous cerebral monitoring	
Therapeutic hypothermia using cooling protocols and/or devices	

Excludes

CNS depression caused by prescribed and controlled therapeutic sedation to facilitate mechanical ventilation.	
Cooling with use of ice - although first point of contact cooling external to critical care could be instigated with the aid of ice	
self poisoning with alcohol +/- drugs	

Notes

Cooling protocol within critical care must be with aid of a device and patient be cooled to a constant average temperature	
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Liver support	
Includes	Excludes
<p>Acute on chronic hepatocellular failure requiring management of coagulopathy and/or portal hypertension.</p> <p>Primary Acute Hepatocellular failure patients who are being considered for transplantation and require management of coagulopathy and/or portal hypertension</p> <p>Hepatic purification</p> <p>Acute on chronic hepatic failure requiring active treatment to reduce portal hypertension e.g. variceal bleeding; sengstaken tube; TIPPS</p> <p>All patients must have the onsite input of a hepatologist</p>	<p>Excludes use of FFP and platelets for managing coagulopathy as blood products are excluded</p> <p>Terlipressin, Amylase, use of Vitamin K, Propranolol do not qualify</p> <p style="background-color: #FFA500;">Notes</p> <p>The chronic hepatocellular failure would require a documented diagnosis prior to admission</p> <p>Primary acute failure would require the input of a hepatologist.</p>

NB - blood products can obviously be used to treat patients but their use does not contribute to organ support calculation as blood and high cost drugs paid for separately (see note front page)

Dermatological support

Includes

Major skin rashes, exfoliation or burns (greater than 30% body surface area affected)

Use of multiple large trauma dressings (eg multiple limb or limb and head dressings).

Use of complex dressings (eg open abdomen, large skin areas >30% of body surface area).

Includes vacuum dressings or barrier dressings applied over a wide area.

Excludes

Excludes skin rashes, exfoliation or burns of <30% body surface area

Excludes use of simple dressings

Notes

Burns patients should be in a tertiary centre

Gastrointestinal support	
Includes	Excludes
Feeding with parenteral or enteral nutrition.	Patients requiring assistance with eating
NB: does NOT contribute to the Organ support score.	Notes
	GI system support is not part of the CCMDS subset

GI support does not contribute to the Organ support score calculation