

Frequently asked questions with regards to Adult Critical Care

Question: Drugs: dosing and delivery (especially sedatives/opiates) we work in mcg/kg/hour....

[The Intensive Care Society supports the adoption of standard concentrations and endorses the recommendations of a multi-professi](#)

[Wellington ICU Drug Manual v3 © 2019](#)

Question: Delivery of drugs (we use all syringe drivers, never IVACs/IMEDS etc) and as our drugs are quite concentrated we have a specific changeover procedure for inotropes?

This will depend on what pumps you are using i.e a syringe driver vs volumetric pump. If it is volumetric pump you (and you're not changing over the line) you should just be able to change over the bag itself.

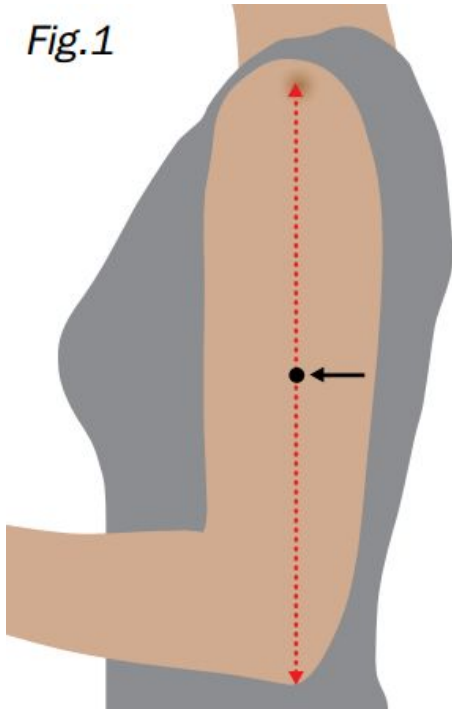
If you're changing over the line and or using a syringe driver it usually involves the process of "double pumping" from one to the other (if this makes sense?)

Question: Calculating 'real body weight' for drugs and ventilation?

Other than actually weighing the patient using some sort of weighing scale <https://www.marsden-weighing.co.uk/index.php/m-999-patient-transfer-scale.html> you can only work out a estimated BMI using the muac method:

Ask the subject to let arm hang loose and measure around the upper arm at the mid-point, making sure that the tape measure is snug but not tight. If MUAC is <23.5 cm, BMI is likely to be <20 kg/m². If MUAC is >32.0 cm, BMI is likely to be >**30 kg/m²**.

Fig.1



Question: Assessment tools for sedation level & pain – what tools used?

The 2018 Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU, known as the PADIS Guidelines, provide a roadmap for developing integrated, evidence-based, and patient-centered protocols.

[Guidelines for the prevention and management of pain, agitation](#)

Sedation Assessment and safety:

<https://www.ics.ac.uk/ICS/GuidelinesAndStandards/ICSGuidelines.aspx>

[Quick Look Procedure Resource for NON-CRITICAL CARE staff](#)

Question: How to try and prevent and reduce delirium?

NICE Guidance: [Overview | Delirium: prevention, diagnosis and management | Guidance](#)

ICU Liberation Bundle: [ABCDEF Bundles](#)

<https://www.icudelirium.org/medical-professionals/delirium/management-of-delirium-in-the-icu>

Question: Nutrition and feeding (I think the same as us, but I've seen recent dietician info saying accept lower GRV for patient in prone position up to 300ml not greater)

[Covid-19 & enteral tube feeding safety.](#)

Please check for gastric stasis every 6 hours. It's important to know if your patient is absorbing the NG feed that has been given.

Consider changing the type of feed delivered according to electrolytes.

If gastric content volume is more than 250mls, please return the 250 mls and discard the rest. We may need to think to start Prokinetics and try to find the reason why patient is not absorbing

Question: Bowel regimes and preventing constipation

Will depend on local policy but this is an example:

[North Wales Critical Care Network North Wales Critical Care Network GUIDELINES FOR PREVENTION GUIDELINES FOR PREVENTION AND TR](#)

Question: Eye and oral care and VAP prevention

[Eye Care in Critical Care](#)

[Mouth Care in Critical Care](#)

Question: FASTHUG mnemonic...

Feeding: early and enteral

Analgesia

Sedation

Thromboprophylaxis

Head of the bed: up at 30 degrees. To reduce the risk of aspiration and nosocomial infection

Ulcer prophylaxis: usually NG feeding is enough, unless not absorbing then they should be receiving a form of PPI

Glycaemic control: usually between 4-10mmol/L

Question: DVT prophylaxis – enoxaparin is not usual for us... dosages etc

Majority of patients (unless contra-indicated) will have flowtrons alongside a pharmacological agent i.e tinzaparin / enoxaparin - but this will depend on local policy.



Flowtrons is a clinically proven, effective, non-invasive, mechanical prophylaxis system designed to reduce the incidence of Deep Vein Thrombosis (DVT). It has been designed to provide calf and/or thigh compression and can be used in dual or single leg mode, providing choice and flexibility.

NICE Guidance: [Overview | Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism | Guidance](#)

Question: Stress Ulcer prophylaxis – we rarely do

PPIs are indicated in at-risk patient in ICU who are intolerant of enteral feeding, and who are otherwise at risk of gastrointestinal bleeding (the agent used will depend on local policy) Currently there is a national shortage for Ranitidine, hence your patient may need to start omeprazol, oral lansoprazole

[Stress ulcers in the intensive care unit: Diagnosis, management, and prevention](#)

Question: Fluids (maintenance) and max per day, and also volume boluses (we use 10ml/kg, sometimes 20ml/kg) but I recall in adult I just used a 500ml bag.. what solution do you use? Gelofusin?

Fluid resuscitation is usually done with Hartmann's / Plasmalyte (depending on what you have) and depending on their overall fluid status which is usually assessed via FICE ECHO / passive leg raise to determine if volume depleted. We would use anything between 250 - 1L at time, depending on the scenario.

Unless we're in the "fluid resuscitation" phase of in particular sepsis / septic shock we don't give routine IV maintenance. The patient should be NG fed asap

Question: Blood transfusion – what thresholds do you use to transfuse?

Our transfusion threshold is 7.0g/dl unless they are actively bleeding. Usually only transfuse 1 unit a time.

Special attention of transfusion threshold in patient with renal disease and or haematology problems.

<https://www.transfusionguidelines.org/transfusion-handbook/7-effective-transfusion-in-surgery-and-critical-care/7-2-transfusion-in-critically-ill-patients>

Question: Pressure ulcer prevention – risk tools? Anything different from us?

[Pressure Area Management in Critical Care](#)

Question: Resuscitation of adults – drug doses, joule dosages and CPR (in prone position) and defib paddles position if prone

ALS Guideline:

<https://www.resus.org.uk/resuscitation-guidelines/adult-advanced-life-support/#algorithm>
[Guidance For: Prone Positioning in Adult Critical Care](#) (in particular page 27/28 dealing with cardiac arrest)

Question: Prone position checklist – is there a national one?

Guidance For: Prone Positioning in Adult Critical Care

https://www.ficm.ac.uk/sites/default/files/prone_position_in_adult_critical_care_2019.pdf

Question: PTSD and PICS

Rehabilitation after critical illness in adults

Question: End of life care and managing death of an adult

CARE AT THE END OF LIFE:

Question: Common adult conditions and occurrences:

Acute coronary syndrome: what is it, how to recognise it and management of it:

The term 'acute coronary syndromes' encompasses a range of conditions including unstable angina, non-ST-segment-elevation myocardial infarction (NSTEMI) and ST-segment-elevation myocardial infarction (STEMI). All are due to a sudden reduction of blood flow to the heart, usually caused by the rupture of an atherosclerotic plaque within the wall of a coronary artery, and may cause the formation of a blood clot.

The most common symptom of acute coronary syndromes is severe pain in the chest and/or in other areas (for example, the arms, back or jaw), which can last for several hours. Other symptoms include sweating, nausea and vomiting, breathlessness and feeling faint.

The highest priority in managing STEMI is to restore an adequate coronary blood flow as quickly as possible using drug treatment and/or revascularisation. This applies to all people with STEMI, including those who have been resuscitated after cardiac arrest. The time taken to restore coronary blood flow is very important because heart muscle starts to be lost as soon as the coronary artery is blocked.

In people with NSTEMI and unstable angina, the aim of treatment is to alleviate pain and anxiety and prevent recurrence of ischaemia. For people with unstable angina, treatment also aims to prevent or limit progression to acute myocardial infarction. The type of treatment is determined by the person's individual risk of future adverse cardiovascular events (heart attack and stroke, repeat treatment or death).

Treatment includes:

Initially: oxygen (only if SaO₂ decreased), GTN, analgesia and anti-emetic as required, followed by:

Aspirin (300mg orally) (antiplatelet)

Ticagrelor (180mg orally) (prevents platelet activation and aggregation)

Fondaparinux (2.5mg s/c) (inhibits activated factor x)

Cardiology review asap (PCI and or medical management)

[Overview | Acute coronary syndromes in adults | Quality standards](#)

<https://pathways.nice.org.uk/pathways/chest-pain#path=view%3A/pathways/chest-pain/chest-pain-overview.xml&content=view-index>

Diabetes:

COncise adVice on Inpatient Diabetes (COVID:Diabetes): FRONT DOOR GUIDANCE

(type 1 - pancreas failure to produce insulin due to the loss of beta cells (autoimmune response))

(type 2 - insulin resistance - cells fail to respond to insulin - which can get progressively worse)