PICU Analgesia and Sedation Algorithm
>12 months Unintubated

Aim = MAPS < 4 and SBS as prescribed (usually -1 to 0)
If on morphine infusion, continue at set rate
ASSESS MAPS:
- If MAPS >4, bolus morphine 40mcg/kg (max 2mg) every 10 mins to achieve goal MAPS
- If >3 boluses needed, start/increase infusion – 10mcg/kg/hr

ASSESS SBS:
- If under-sedated but pain control satisfactory, if <5 yrs NG chloral hydrate 25mg/kg
- If > 5 yrs Diazepam 0.1mg/kg (max 2mg), repeat 10mins PRN to max of 5 doses

↓

Optimise non-pharmacologic measures
Optimise adjunct pain medication if appropriate – tramadol, paracetamol and NSAIDs

↓

REASSESS MAPS:
- If MAPS >4, bolus morphine 40mcg/kg (max 2mg) every 10 mins to achieve goal MAPS
- If >3 boluses needed, increase infusion by 10mcg/kg/hr

REASSESS SBS:
- If under-sedated but pain control satisfactory, if < 5 yrs NG chloral hydrate 25mg/kg
- If > 5 yrs, Diazepam 0.1mg/kg (max 2mg)

↓

Pain and Sedation Adequate

↓

- MAPS & SBS in target range: continue current treatment
- MAPS <2: decrease morphine infusion by 5mcg/kg/hr
- SBS over-sedation: halve sedative dose

↓

Reassess MAPS & SBS 4 hrly

Pain and/or Sedation Inadequate

↓

PAIN:
- Increase morphine infusion to max of 40mcg/kg/hr
- Optimise paracetamol and NSAID

SEDATION:
- If < 5 yrs add chloral hydrate 40mg/kg Q8H
- If > 5 yrs add midazolam infusion 1mcg/kg/min

↓

MAPS >4 or SBS under-sedated

↓

Bolus clonidine 1mcg/kg

↓

MAPS >4 or SBS under-sedated

↓

Re-bolus clonidine 1mcg/kg 30 min PRN
If >3mcg/kg in <4 hrs, start infusion at 1mcg/kg/hr

↓

MAPS >4 or SBS under-sedated

↓

Increase clonidine to 2mcg/kg/hr

↓

MAPS >4 or SBS under-sedated

↓

DISCUSS WITH CONSULTANT

↓

SEDATION:
- Increase clonidine to 3mcg/kg/hr
- Chloral hydrate 40mg/kg Q6H
- Promethazine 0.5-1mg/kg Q6H
- Phenobarbitone 10mg/kg prn (max 40)
- Dexmedetomidine load 1mcg/kg/hr
  ⇒ Infuse 0-1mcg/kg/hr

PAIN:
- Add ketamine 1-4mcg/kg/min
- Tramadol 2mg/kg Q6H
- Increase morphine infusion