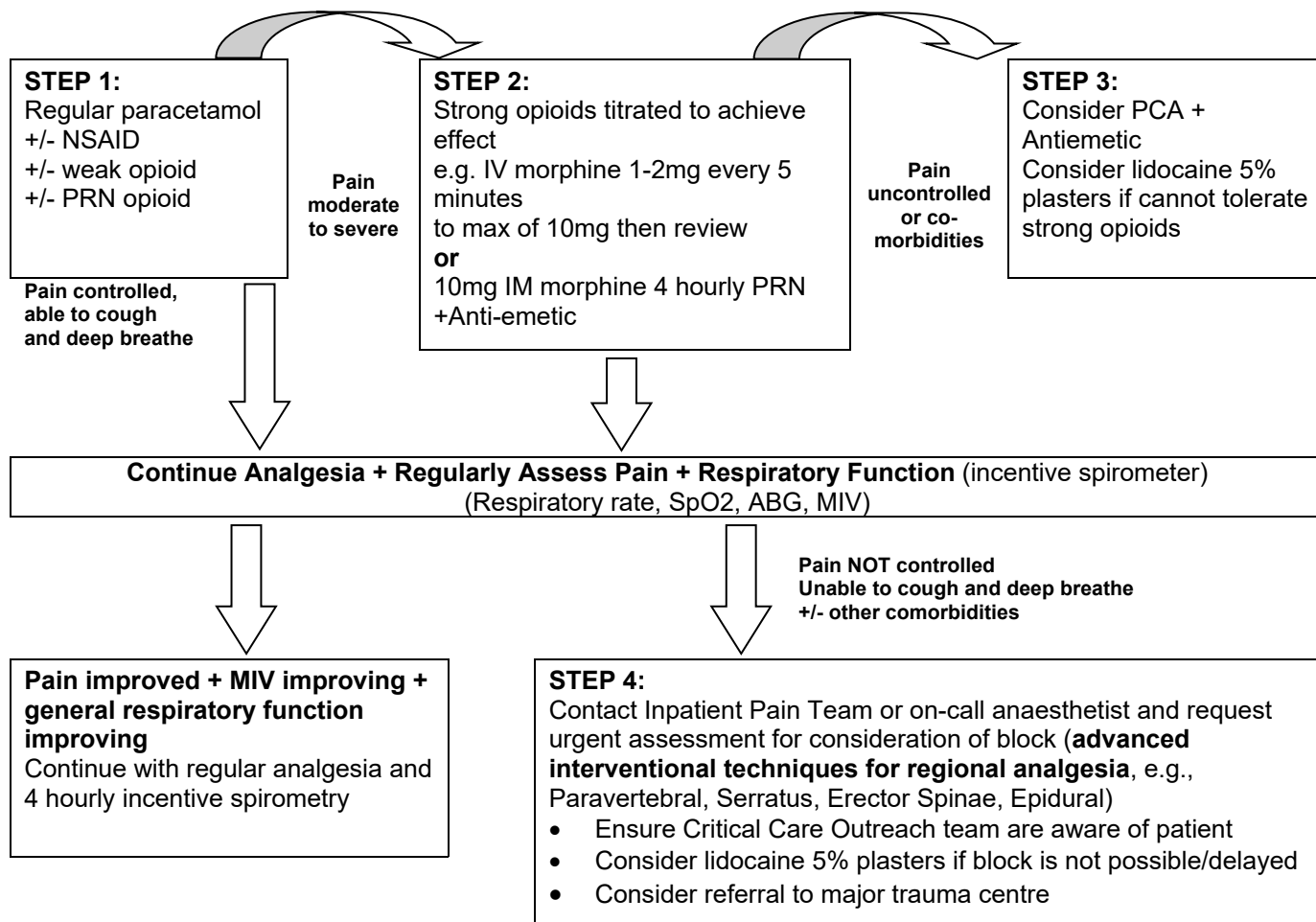


Summary - Rib Fracture Flowchart

Within 1 hour of diagnosis of rib fractures: - Start incentive spirometry (monitor maximum inspiration volume [MIV]) refer to physiotherapy - Monitor SpO₂, provide supplemental O₂ if required - Assess pain score and respiratory function Establish Analgesia (see Step 2)	Assess risk factors: - Age >65 years - Pulmonary contusions - Pre-existing respiratory disease - Pre-existing cardiovascular disease - Smoker/Obesity/Sleep apnoea
Refer all inpatients to Inpatient Pain Team (See foot of chart) (Consider STEP 4)	



- Older patients and or those with frailty require significantly less opioid to achieve the same level of analgesia:** Initial doses should be reduced to **25-50%** of the doses used in young healthy patients.
- Δ Think Kidney:** These medications and their metabolites may also accumulate especially in patients with renal impairment (**eGFR <60**) necessitating an **increase in the dosing interval**.
- In the frail elderly (because of low muscle mass) eGFR may **over-estimate** renal function.
- Remember:** Codeine is broken down to morphine.
- Prescribe paracetamol according to weight:

PARACETAMOL DOSING	Adult 30-40kg	Adult 41-49kg	Adult 50kg and above
Oral and IV maximum dose	500mg three times a day	500mg four times a day	1g four times a day
Maximum daily dose	1.5g	2g	4g (reduce to 3g if risk factors for hepatotoxicity)
Irrespective of weight where the patients eGFR is < 30 interval between dosing must be minimum of 6 hours			

- NSAIDs:** consider contraindications before prescribing or giving.
- Lidocaine 5% plasters:** should be applied to unbroken skin 12 hours on 12 hours off maximum 2 patches at a time for up to 14 days. They are not a substitute for anaesthetic assessment for regional analgesia or a subsequent block.