Introduction:
We hypothesised that changing the pain management for our post cardiac surgical patients to an assessment-driven, protocol-based approach using fast acting and easily titratable agents will significantly improve patient satisfaction by reducing pain intensity in the first 24h after surgery as suggested by Society of Critical Care [1] guideline.

Methods:
We prospectively assessed 101 and 99 (05.2018 vs 06.2019) consecutive patients before and after introducing our pain management protocol. The nursing and medical team received rigorous training on the guideline as well as the correct assessment using appropriate pain scores measured at least hourly (Numeric Pain Score, ≥ 2 is moderate to severe or Critical Care Observation Tool, > 2 is moderate to severe).
We introduced a multimodal approach with a combination of fast acting iv, long acting oral opiates, regular paracetamol and rescue iv boluses for difficult to control situations and we created a prescription bundle on our electronic prescribing record.
Among other variables we assessed hours spent in moderate to severe pain in the first 24h after surgery and compared to the data collected before the guideline was introduced.

Results:
We analysed 101 patients from 2018 and 99 from 2019. Baseline characteristics were similar between the two groups.
In 2018 only 41.6% of the patients spent less than 5 hours and 29.4% spend more than 10 hours in moderate to severe pain. The 2019 data showed significant improvement in that 79.5% of patients spent less than 5 hours and only 5% patients who spent more than 10 hours in moderate or severe pain. (p <0.0001, Chi Square) (Figure 1). Only 9% of the patient needed rescue medications. 3% of time was the protocol inadequate necessitating other approach.

Conclusion:
Introducing an assessment driven, stepwise, protocolized pain management significantly improved patient satisfaction by reducing pain intensity in the first 24h on our Cardiothoracic Intensive Care Unit.

References:

Hours Spent in Moderate to Severe Pain Post Cardiac Surgery in the first 24h.