MULTIMODAL ANALGESIA PRESCRIBING IN PATIENTS DISCHARGED FROM THE EMERGENCY DEPARTMENT: A FOLLOW-UP INTERVENTION

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Background

In 2019, an internal audit at Eastern Health, revealed a concerning pattern where among the 10,039 ED patients who were prescribed opioids, only 18% had received multimodal analgesia, highlighting a significant gap in pain management. Recognising the urgency, an intervention was implemented in 2022 to revamp pain management practices. It aimed to promote multimodal analgesia, combining diverse pain relief methods for holistic patient care.

Objective

The objective of this study was to leverage electronic prescribing functionalities to enhance the prescription rates of multimodal analgesia for patients being discharged from the ED.

Action

We created an electronic tool called the ED Analgesia PowerPlan (PowerPlan) in Cerner PowerChart® (**Figure 1**). ED prescribers received thorough training on its use. It included common analgesics like opioids, paracetamol, and NSAIDs. Prescribers placed orders using checkboxes, with paracetamol as the default option.

Evaluation

In September 2022, an audit found that only 12% of ED prescribers used the PowerPlan for analgesia prescriptions. Remarkably, when employed, 100% of these cases resulted in patients receiving multimodal analgesia prescriptions. Regardless of PowerPlan use, 44.7% of all ED patients received prescriptions with multimodal analgesia regimens (Figure 2).

Discussion

- ✓ Multimodal prescribing in the ED has risen due to the successful implementation of the ED Analgesia PowerPlan and an associated educational program.
- ✓ Results have exceeded expectations, despite a slow start in usage.
- ✓ To make this approach more widely applicable to hospitals using Cerner PowerChart®, further longitudinal analyses involving multiple sites are recommended. Collaboration with various hospitals can help validate the approach's success and provide insights for adapting it to different healthcare settings.

Figure 1. ED Analgesia PowerPlan

	Component	Status	Details
	ED Discharge Analgesia Adult (Initiated Pending)		
	Medications		
	Simple Analgesia		
	All patients presented to ED with pain should be charted simple analgesia and this should be continued on discharge if required.		
☑	paracetamol (paracetamol 500 mg oral tablet)		2 tab(s), Oral, Tablet, QID, For mild to moderate pain management. Max dose per 24 hours: 4 grams. To be taken regularly until pain resolves and then as required only. Can be purchased over the counter at your local pharmacy., Qty: 100 tab(s)
☐	celecoxib (celecoxib 200 mg oral capsule)		1 cap(s), Oral, Capsule, BD, 72 hr(s), For mild to moderate pain management, Qty: 30 cap(s)
☐	ibuprofen (ibuprofen 200 mg oral tablet)		2 tab(s), Oral, Tablet, QID (with or after food), 72 hr(s), For mild to moderate pain management. Can be purchased over the counter at your local pharmacy., Qty: 50 tab(s)
☐	ibuprofen (ibuprofen 200 mg oral tablet)		2 tab(s), Oral, Tablet, TDS (with or after food), PRN pain, For mild to moderate pain management. Short term use only. Can be purchased over the counter at your local pharmacy., Qty: 50 tab(s)
☐	pantoprazole (pantoprazole 20 mg oral enteric tablet)		1 tab(s), Oral, Tablet, Enteric-Coated, daily, 72 hr(s), GI protection while on anti-inflammatory medication. Swallow whole. Can be purchased over the counter at your local pharmacy., Qty: 3 tab(s)
	Opioid Analgesia		
	<< For patients discharging with opioid analgesia, please ensure you have checked SafeScript		
	<< For patients discharging with opioid analgesia, please provide a written pain management plan.		
	Short term immediate release opioids may be appropriate for acute pain presentations to ED where simple analgesia has been insufficient in the first instance.		
	If opioids are required on discharge, the prescription quantity should reflect the requirement for up to 3 days duration and not exceed 10 tablets/capsules.		
☐	tRAMadol (tRAMadol 50 mg oral capsule)		1 cap(s), Oral, Capsule, 4 hourly, PRN pain, For severe or breakthrough pain management. For up to 3 day(s), Qty: 10 cap(s)
☐	oxycodone (Endone 5 mg oral tablet)		1 tab(s), Oral, Tablet, 4 hourly, PRN pain, For severe or breakthrough pain management. For up to 3 day(s), Qty: 10 tab(s)
	All patients prescribed opioid analgesia should also be prescribed as required laxatives.		
☐	docusate-senna (docusate-senna 50 mg-8 mg oral tablet)		1 - 2 tab(s), Oral, Tablet, BD, PRN constipation, Prevention of constipation while on opioid analgesia. Can be purchased over the counter at your local pharmacy., Qty: 30 tab(s)
☐	lactulose (lactulose 3.34 g/5 mL oral liquid)		20 mL, Oral, Syrup, BD, PRN constipation, Prevention of constipation while on opioid analgesia. Can be purchased over the counter at your local pharmacy., Qty: 1 bottle(s)
☐	macrogol 3350 with electrolytes (Movicol oral powder for reconstitution)		1 sachet(s), Oral, Powder, BD, PRN constipation, Prevention of constipation while on opioid analgesia. Can be purchased over the counter at your local pharmacy., Qty: 1 pack(s)

Figure 2. Primary Results

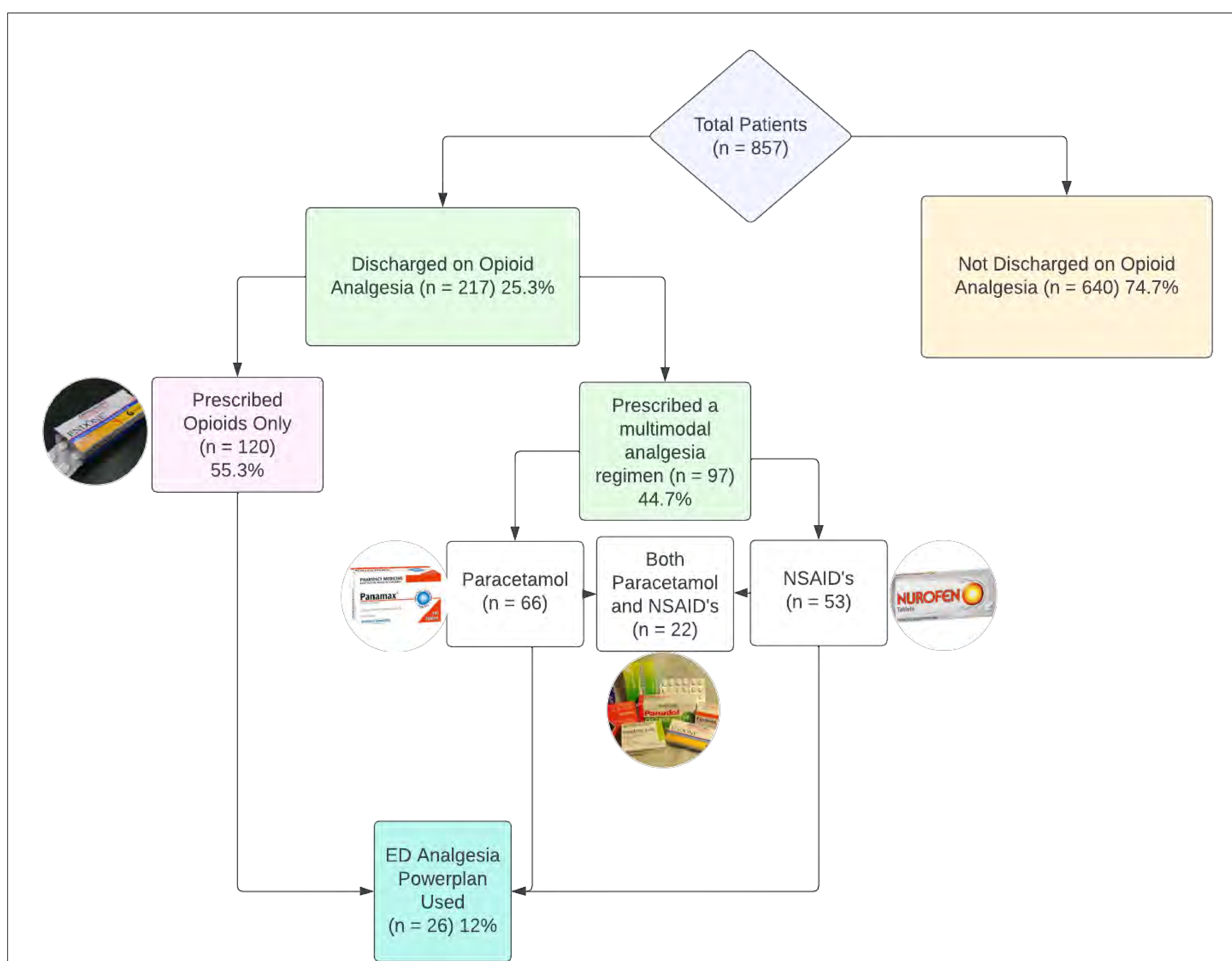
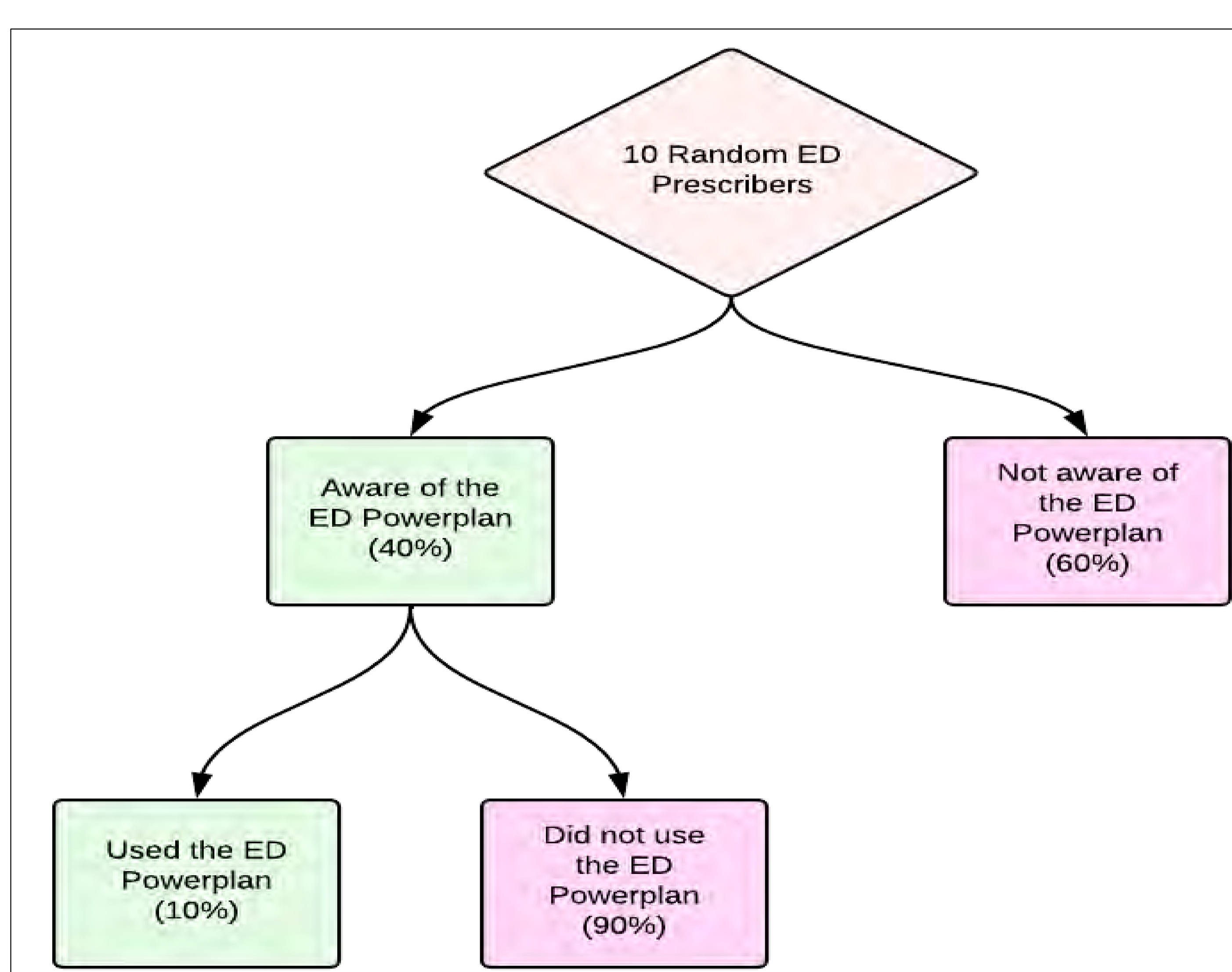


Figure 3. Audit of users of the ED Analgesia PowerPlan



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