

# Acute Behavioural Disturbance Management in an electronic medication record; is it safer?

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## Aim

Acute Behavioural Disturbance Management (ABDM) guidelines facilitate the safe and effective use of medication and de-escalation techniques to manage acutely disturbed patients on inpatient mental health units.

Our aim was to assess whether prescribing and administration practices of ABDM reflects the principles outlined in the ABDM guideline, and determine any changes in practice after the implementation of a statewide electronic medication record (iEMR).

## Method

A retrospective chart audit was conducted of patients admitted under a treatment authority, on a mixed gender ward. Three-time points were assessed, March 2017, prior to implementation of iEMR, and July and Oct 2017, after implementation. Prescribing and administration of “as required” medications during the first 48 hours of admission were examined in accordance to the ABDM guideline. It was also noted if the ABDM power plan (a preformulated set of orders that are grouped together) was ordered in post iEMR implementation time points.

<b>LORazepam</b> PRN 2 mg, Tablet, Oral, 2 hourly, start: 05/10/18 09:23:00 AEST, PRN for other: see order comments, Max PRN dose/24hrs: 8 mg including IM/regular, First Line. Lorazepam 1mg - 2mg Q2H PRN, Indication: Behavioural disturbance - moderate to severe Peak effect of this medication occurs at 1-3 hours, for medication naïve /elderly / frail patients consider 0... lorazepam
<b>LORazepam</b> PRN 2 mg, Injection, Intramuscular, 1 hourly, start: 03/10/18 20:55:00 AEST, PRN for other: see order comments, Max PRN dose/24hrs: 8mg including PO/regular, Third Line. Lorazepam 1mg - 2mg Q1 - 2H PRN, Indication: Behavioural disturbance Peak effect of this medication occurs at 60-90 minutes, Max dose may be increased to 12mg/24hours with ... lorazepam
<b>olanzapine (olanzapine 10 mg oral wafer)</b> PRN 10 mg = 1 wafer(s), Wafer, Oral, 2 hourly, start: 05/10/18 09:23:00 AEST, PRN for other: see order comments, Max PRN dose/24hrs: 30mg including IM/regular, Second Line. Olanzapine 5mg - 10mg Q2H PRN, Indication: Behavioural disturbance Peak effect of this medication occurs at 5-8 hours. Only administer if lorazepam dose has failed or if clinic... olanzapine
<b>olanzapine (olanzapine 10 mg SHORT-ACTING intramuscular injection)</b> PRN 10 mg, Injection, Intramuscular, 2 hourly, start: 03/10/18 20:55:00 AEST, PRN for other: see order comments, Max PRN dose/24hrs: 30mg including PO/regular, Fourth Line. Olanzapine 5mg - 10mg Q2H PRN. 3rd injection to be at least 6 hours after 1st Olan... Peak effect of this medication occurs at 15 - 45 minutes. Only administer if lorazepam dose has failed, do ... olanzapine

Figure 1: ABDM orders in iEMR using ABDM power plan

## Results

Prescribing in accordance to the guideline increased from 6.9% (March 2017) to 38.5%, and 25% respectively, post iEMR introduction. If the ABDM power plan in iEMR was used, adherence increased to 46% (July 2017) and 50% (October 2017).

Adherence to administration guidelines occurred in 14%, 42% and 33% of patients respectively. When deviation did occur, there was limited documentation to indicate rationale for changes.

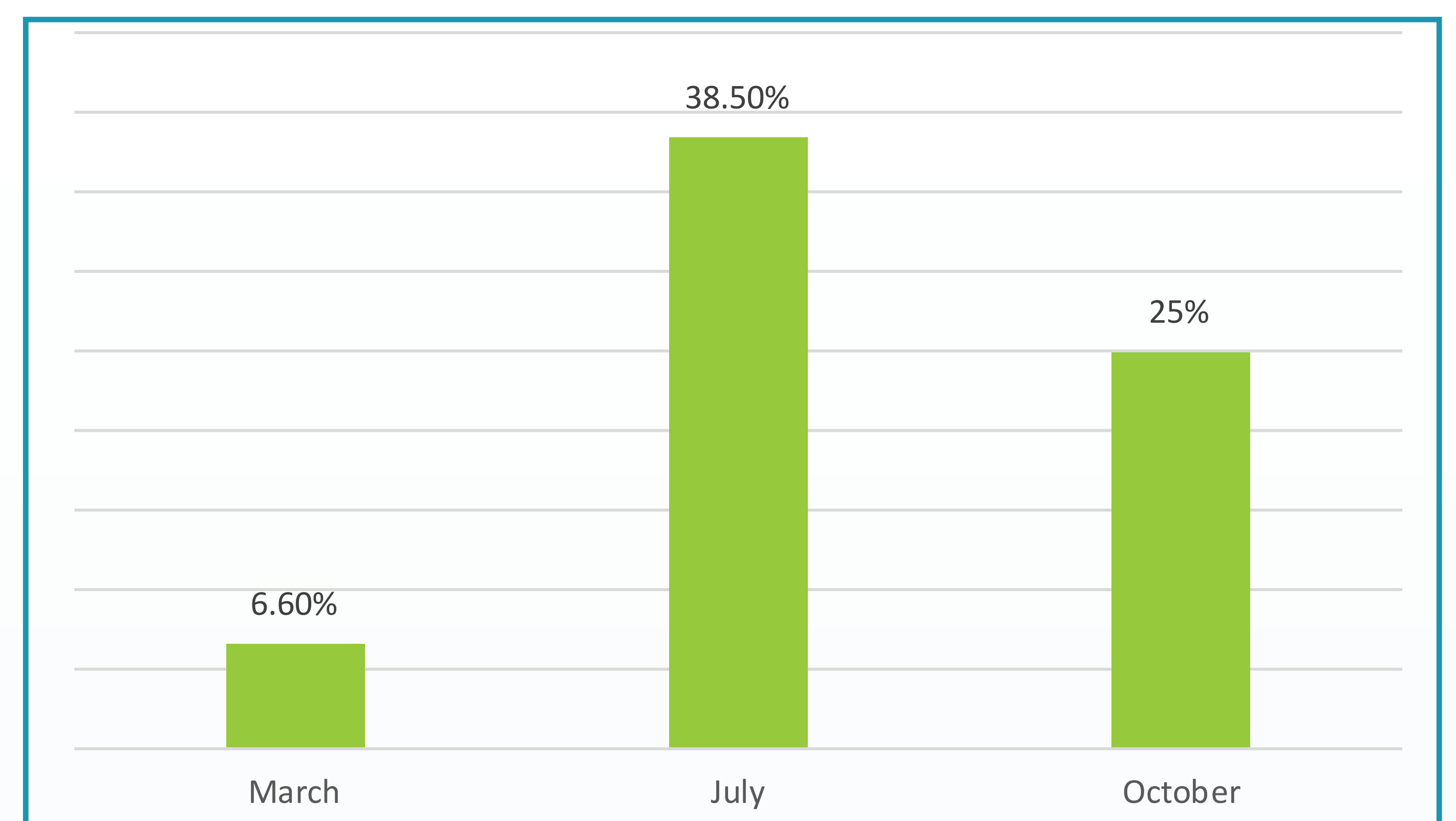


Figure 2: Prescribing adherence to ABDM guideline

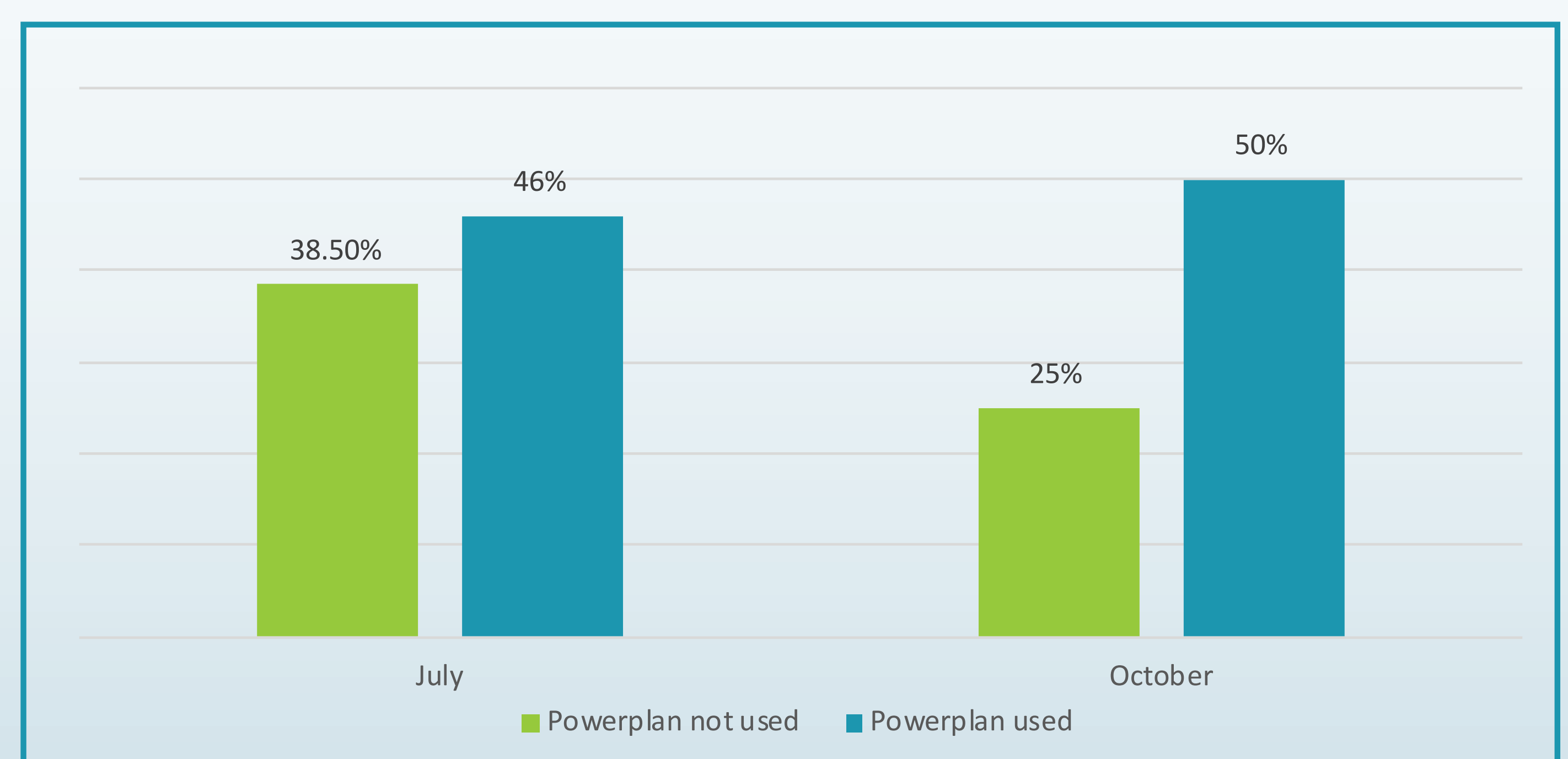


Figure 3: Prescribing adherence to ABDM guideline if power plan utilised

## Conclusion

Introduction of iEMR improved both prescribing and administration practices. Utilisation of the ABDM power plan by prescribers further increases adherence. Variations from administration guidelines could be rationalised with the introduction and documentation of a rating scale for acute behavioural disturbance.