

Improving Identification and Management of Admitted Patients at High Risk for Moderate to Severe Alcohol Withdrawal Syndrome (AWS).

Project Leads:

- Amy Dacillo-Curso, DNP, ACNP
- Ashmita Chatterjee, MD

Project Sponsors:

- David Hemsey, MD
- Leo Marucci, MD

Project Team Members:

- Melissa Pabalan, MD
- Taryn Murray, Pharmacist
- Natassa Ebert, Pharmacist



UNC

INSTITUTE FOR HEALTHCARE
QUALITY IMPROVEMENT

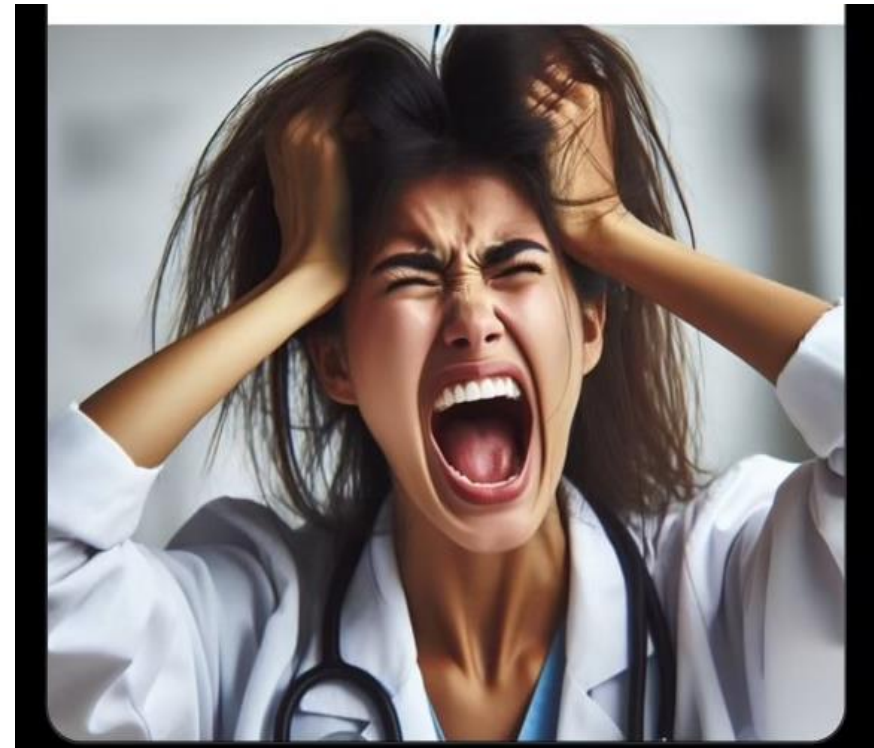
The Inspiration

PATIENT STORY

B.T. 57 y.o male with history of HIV, depression, polysubstance abuse (ETOH, cocaine), admitted with left arm numbness.

- On admission has elevated troponin, concerned for coronary vasospasm after cocaine use
- CIWA protocol not initiated on admission
- No alcohol level ordered
- 1 day post admission- 2 behavioral calls called due to severe agitation
- Patient received multiple doses of Ativan and Haldol + patient placed on restraints
- Patient transferred to the ICU for precedex drip

PROVIDER'S PERSPECTIVE



Importance

Why does this project matter?

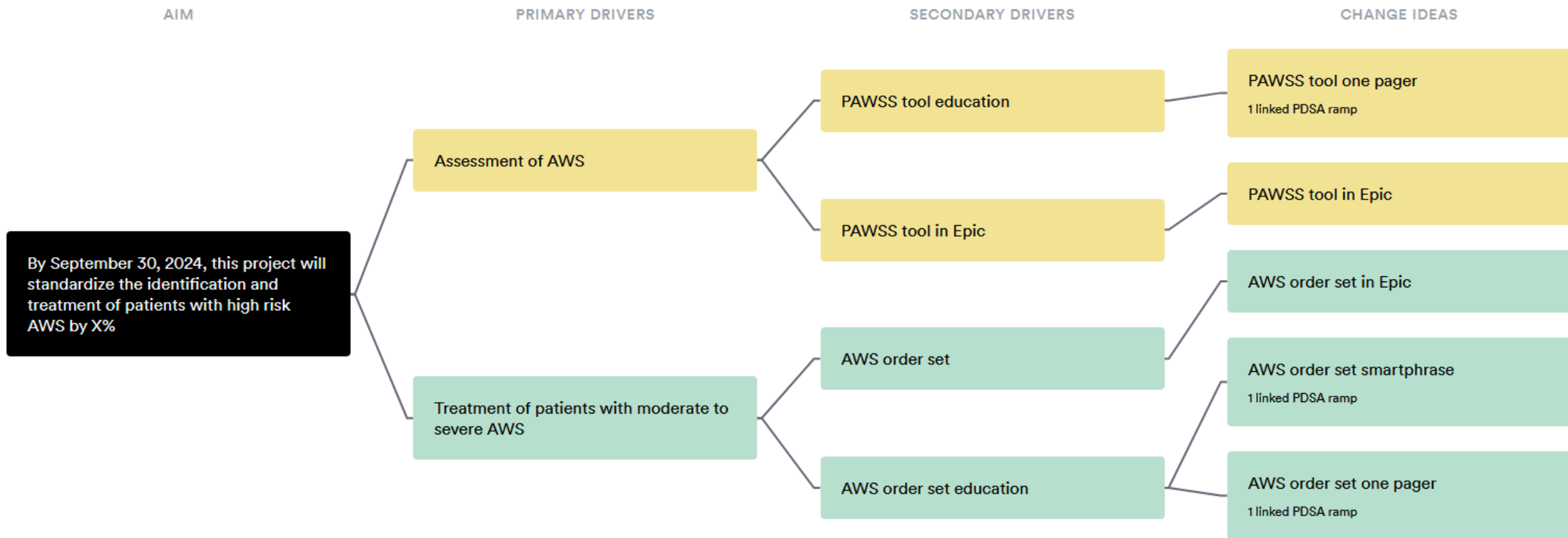
- Alcohol withdrawal syndrome often not recognized until patients displayed severe symptoms that resulted in adverse outcomes and safety concerns.
- Severe AWS more than doubles the length of stay and frequently requires treatment at the ICU.
- Delayed diagnosis and treatment of alcohol withdrawal syndrome will result in several adverse patient and staff outcomes.
- Standardization of care

Aim

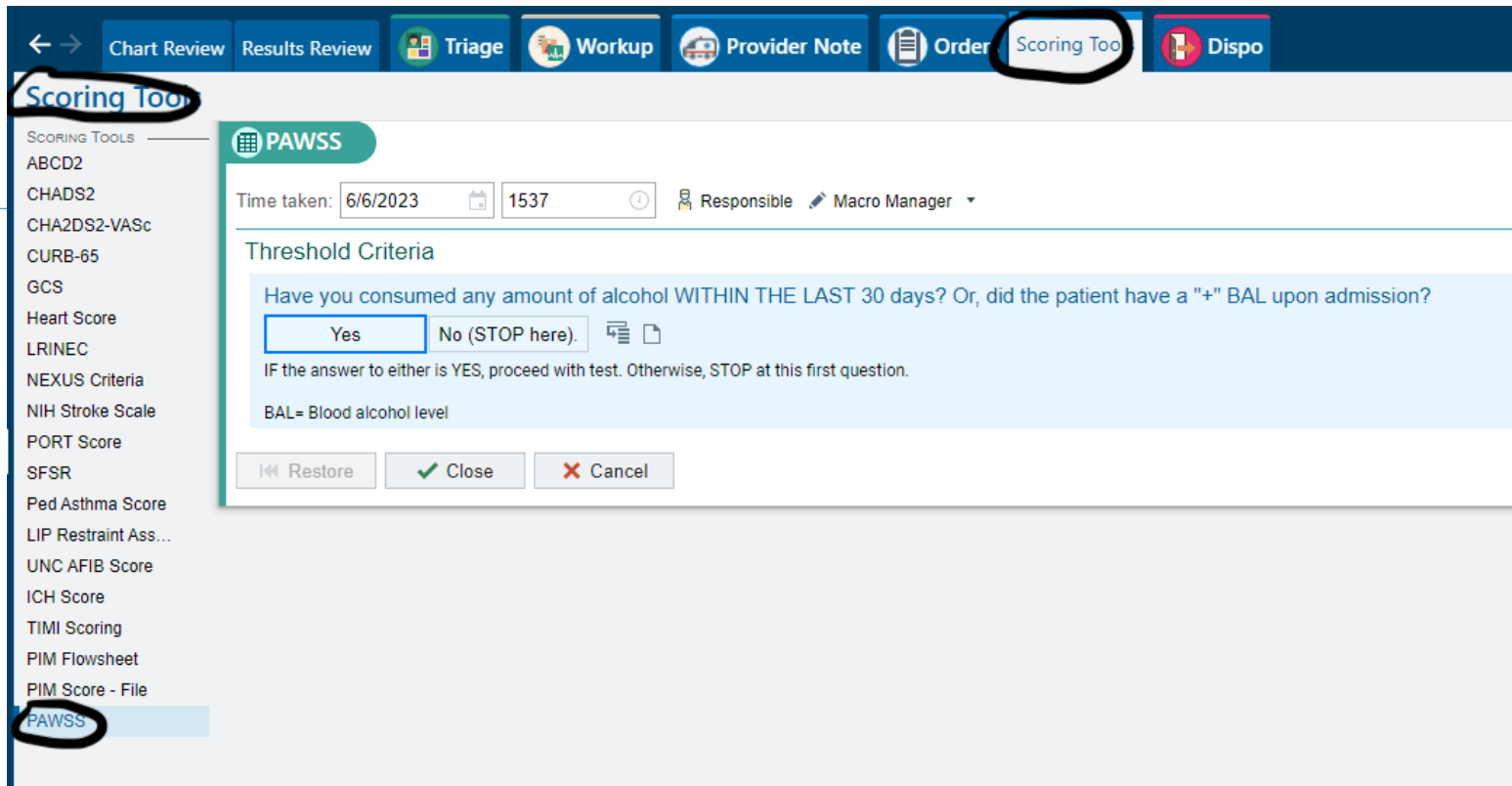
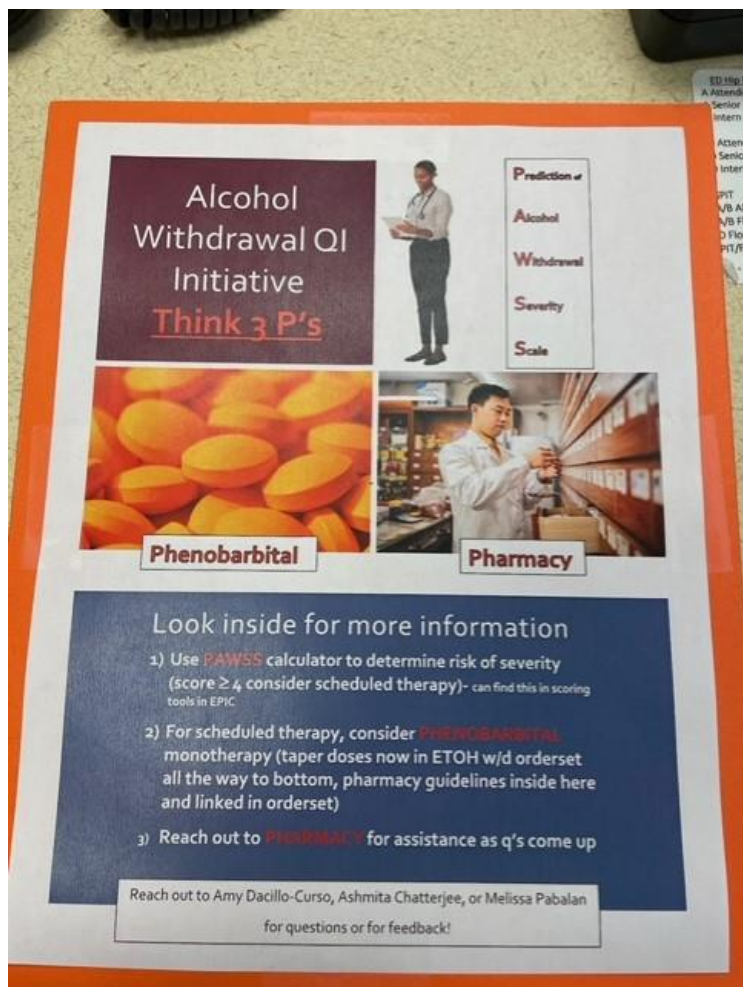
What are we trying to accomplish?

- To improve identification of patients admitted with high risk of AW by using a PAWSS calculator that will be integrated in Epic.
- Standardization of care of our patients with alcohol use disorder (develop a protocol/guideline/addition of Phenobarbital therapy).
- **SMART AIM:** By September 30, 2024, this project will improve the standardization and treatment of patients with high-risk AWS (with the use of Phenobarbital monotherapy protocol) by 70%
- Why phenobarbital?
 - shown to be effective not only for treatment, but for prevention in patients at risk for AWS
 - has a much longer half-life than Benzodiazepine (ideal choice for patients at risk for not completing the taper)

Driver Diagram



Our Interventions



▼ Phenobarbital Monotherapy - Taper

▼ PHENobarbital Tapers Alcohol WD Dosing Panel

Higher dose: typically used for young patients (< 50 yo) or weight > 100 kg.

Lower dose: Consider lower doses if age > 65, any pulmonary disease, at risk for respiratory depression, OSA, head injury, rib fractures, chest tubes, need for collar brace.

Adjust dosing based on history of alcohol WD, patient risk factors and symptoms.

Oral (PO) PHENobarbital (LUMINAL) Taper Panel

Intravenous (IV) PHENobarbital Taper Panel

Note: Starting Doses - There's a 130 mg ONCE (aka x 1 dose) order option and a 130 mg x 6 doses order option.

PHENobarbital IV 130 mg x 1 dose, then 65 mg every 8 hours x 6 doses, then 32.5 mg every 8 hours x 6 doses

PHENobarbital IV 130 mg x 6 doses, then 65 mg every 8 hours x 6 doses, then 32.5 mg every 8 hours x 6 doses

PHENobarbital IV 65 mg every 8 hours x 6 doses, then 32.5 mg every 8 hours x 6 doses

PHENobarbital IV 32.5 mg every 8 hours x 6 doses

Creation of new Smartphrase-.Imnotegeneral

Note Details

Date of Service: 6/4/2024 2027 Type: [Red Alert Icon]

Service: [Search Icon]

Cosign Required?

Summary:

[Star Icon] [B Icon] [Magnifying Glass Icon] [abs Icon] [Undo Icon] [Redo Icon] [Insert SmartText Icon] [Left Arrow Icon] [Right Arrow Icon] [List Icon] [Refresh Icon]

Assessment and Plan

[Redacted] male who is presenting to UNC with Alcohol abuse in the setting of the following pertinent/contributing co-morbidities: [Redacted]

Alcohol abuse with withdrawal (CMS-HCC)
Problem Descriptor ▾

Diagnosis Care Guidance (Optional) ▾

Secondary/Additional Active Problem
Problem List ▾

- [?] Alcohol Misuse - PAWSS
- [?] POEMS Patients
- [?] VIR - TACE / TARE / RFA

Prophylaxis
[Redacted]

SmartLinks [Pend] [Sign] [Cancel]

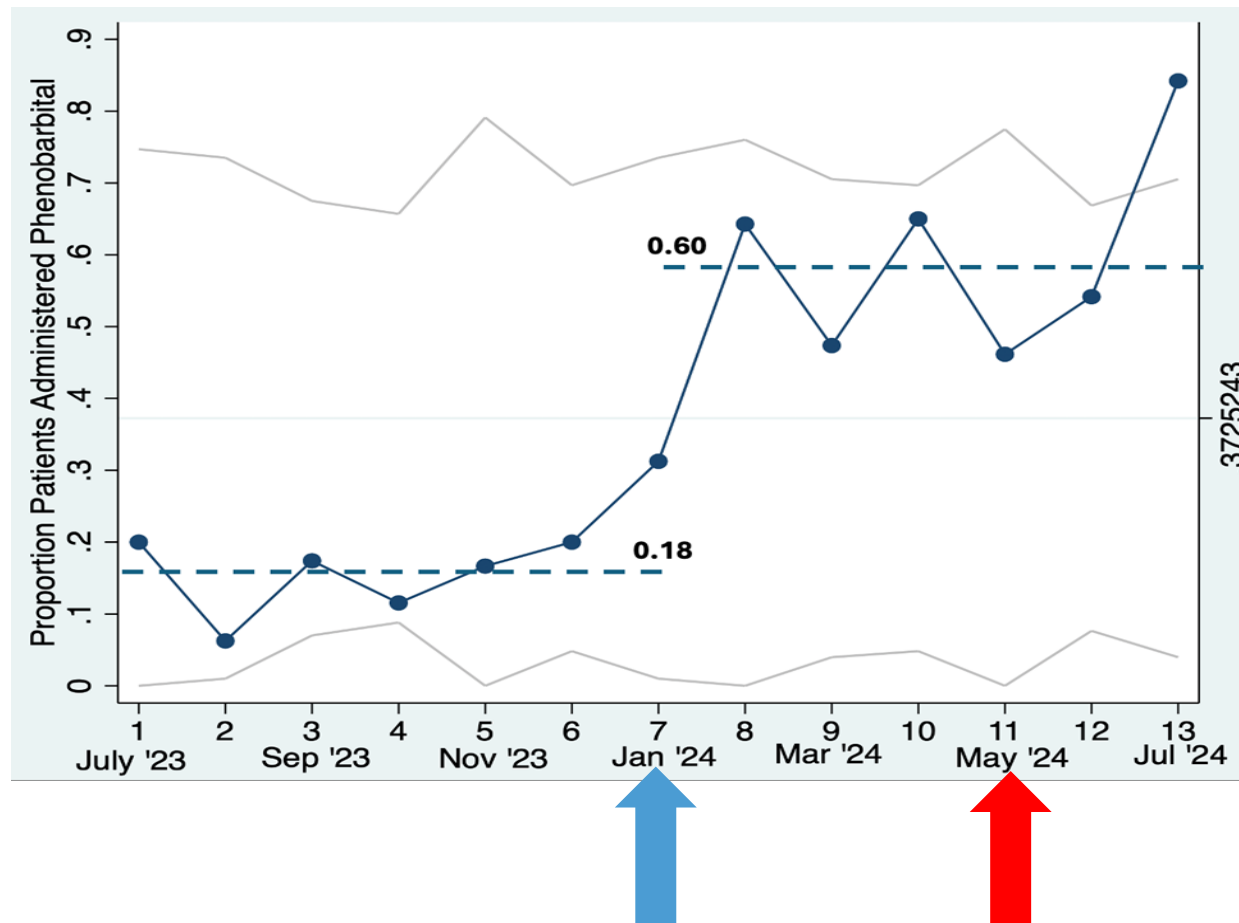
Results

Patient demographics

Characteristic	Value
Median age, years (range)	47 (21 – 78)
Male, %	73.8
Race, %	
• White	78.1
• Black	11.8
• other race	7.2
Self-pay, %	23.6
Median length of stay, days (range)	4 (1 – 228)
Discharge disposition, %	
• Home with self-care	72.6
• Home with home health	6.8
• Left against medical advice	6.3
• Psychiatric hospital	2.1

DATA

Use of Phenobarbital

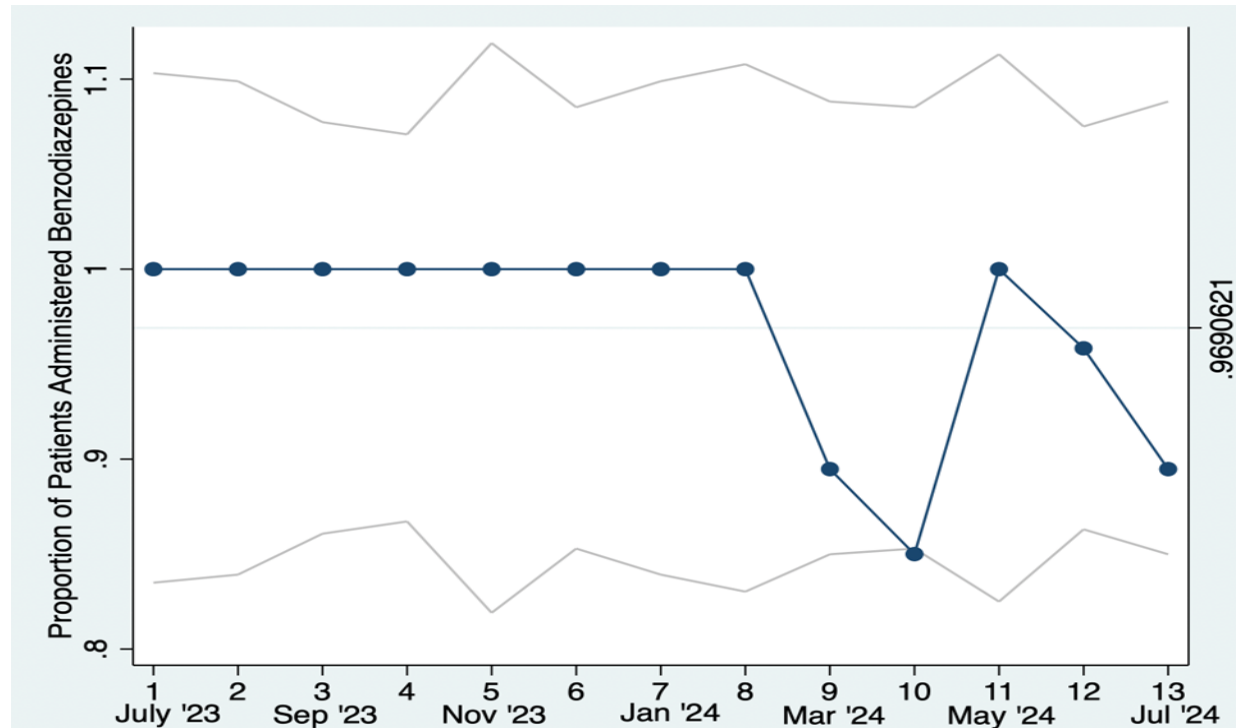


Blue- Education re: orderset and PAWSS score calculator

Red- Epic dotphrase go live

DATA

1. Use of Benzodiazepine

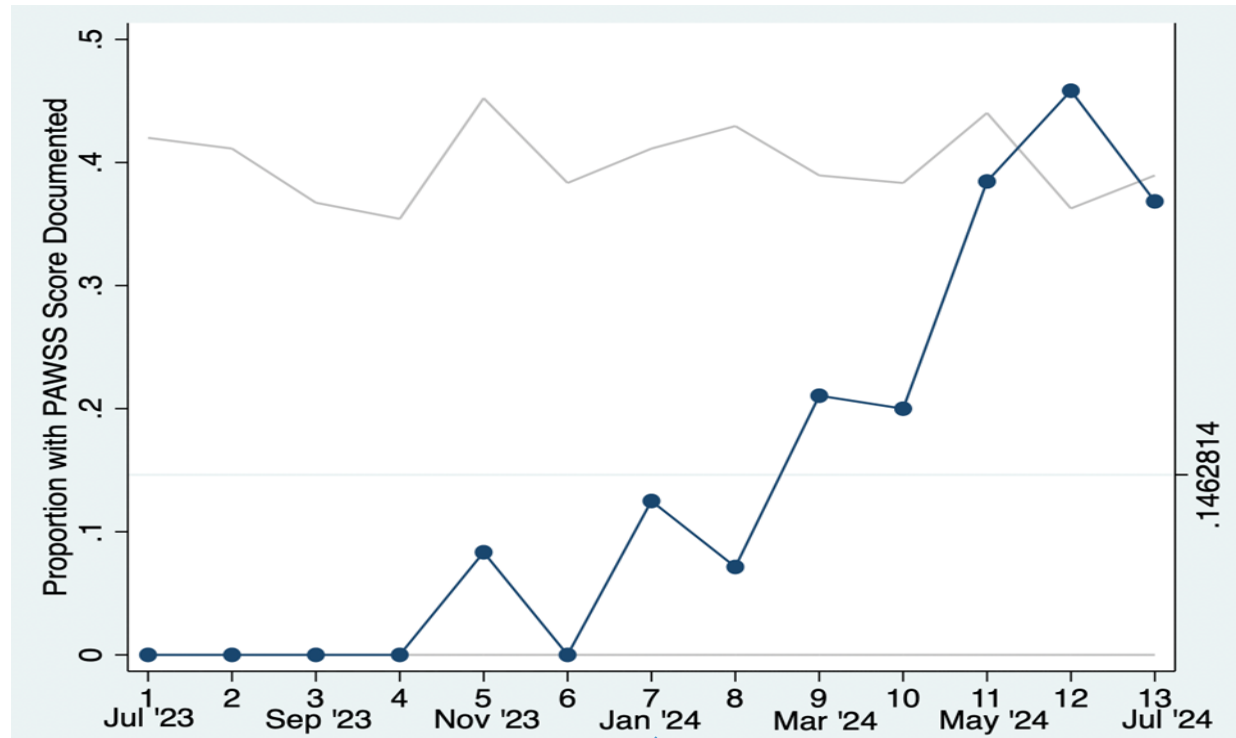


Blue- Education re: orderset and PAWSS score calculator

Red- Epic dotphrase go live

DATA

1. Utilization of PAWSS tool

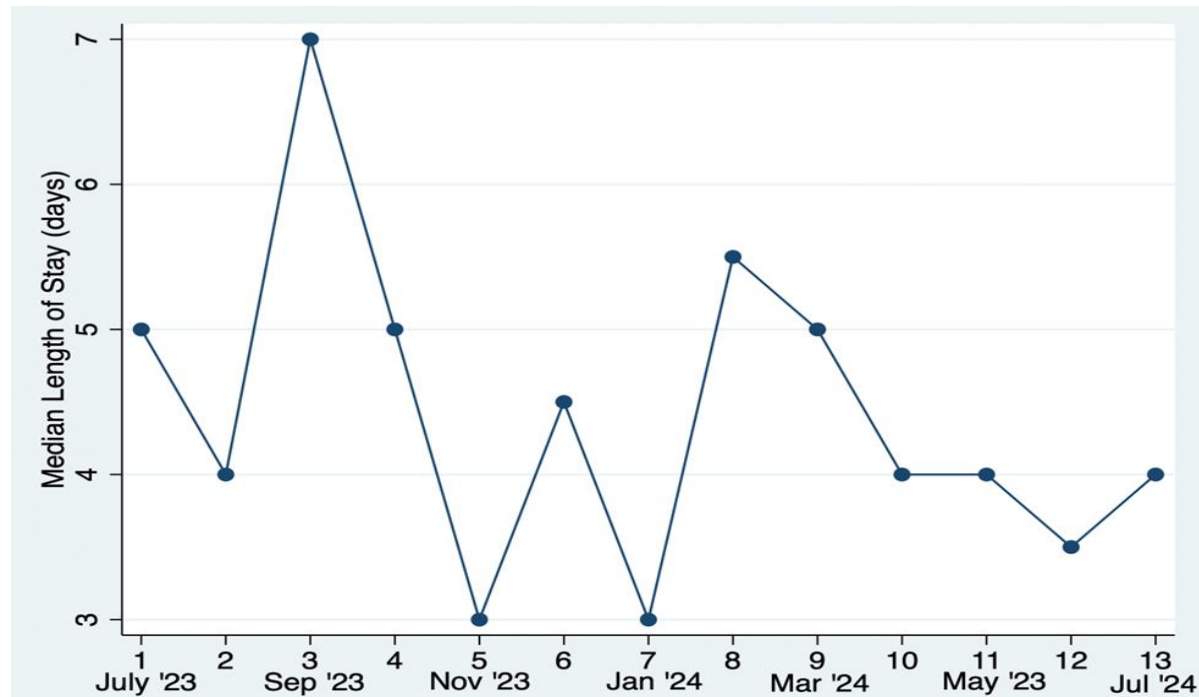


Blue- Education re: orderset and PAWSS score calculator

Red- Epic dotphrase go live

DATA

1. Length of Hospital stay

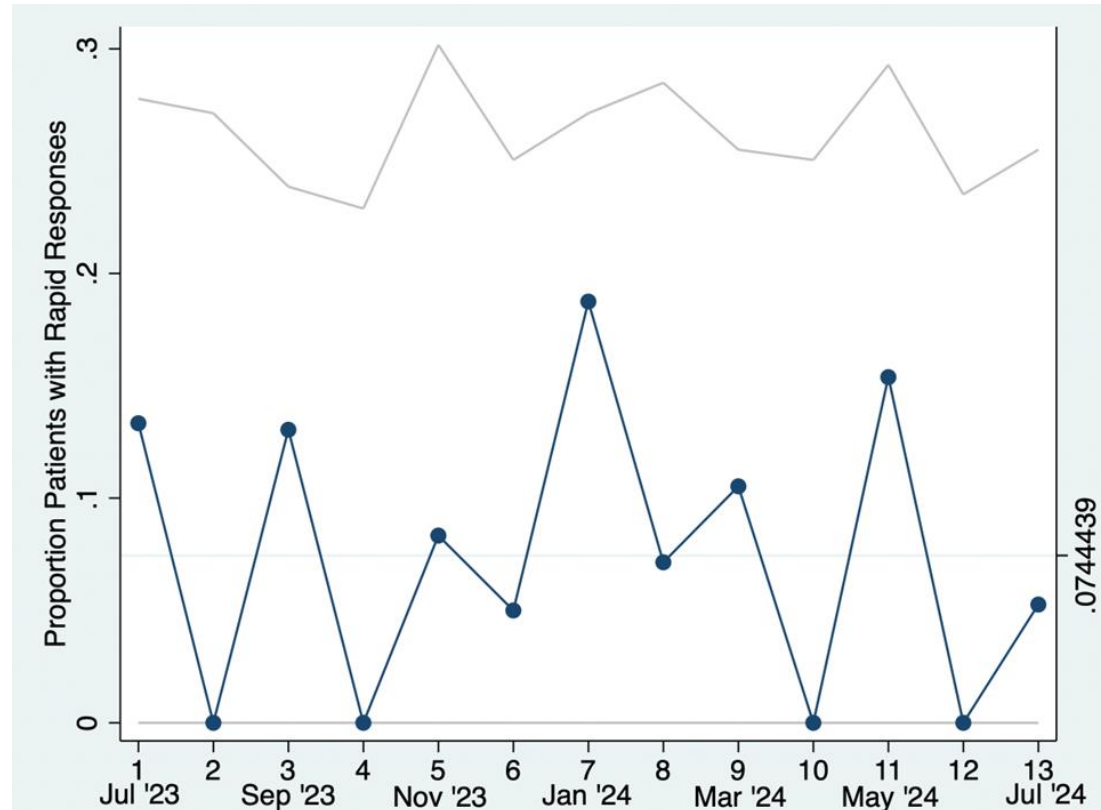


Blue- Education re: orderset and PAWSS score calculator

Red- Epic dotphrase go live

DATA

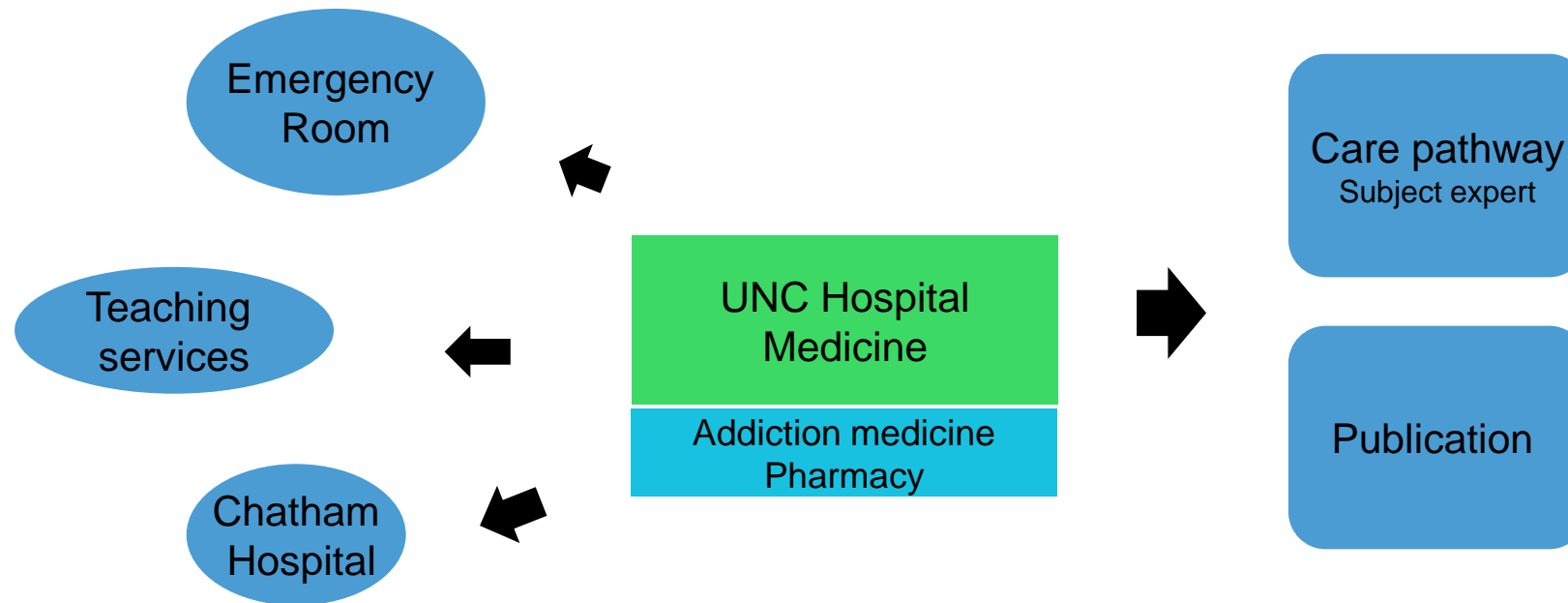
1. Rapid responses



Blue- Education re: orderset and PAWSS score calculator

Red- Epic dotphrase go live

Next Steps Toward Sustainment and Spread



Thank You!

Dr. Carlton Moore

Dr. David Hemsey

Dr. Dr. Leo Marucci

Matt Huemmer

Joy Martin

Tracie Green

Dr. Casey Olm-Shipman

Dr. Escher Howard-Williams