



Implementation of a Hydrocortisone Discontinuation Protocol for Septic Shock in ICU Patients

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BACKGROUND

- 2021 Surviving Sepsis Campaign guidelines **recommend the use of IV corticosteroids** in adults with septic shock
- **No agreed-upon protocol** for discontinuing steroids: each study informing these guidelines followed a different protocol for discontinuation
- Thus, the CICU at ECUHMC had **no standardized discontinuation protocol** prior to this initiative

PROJECT AIM

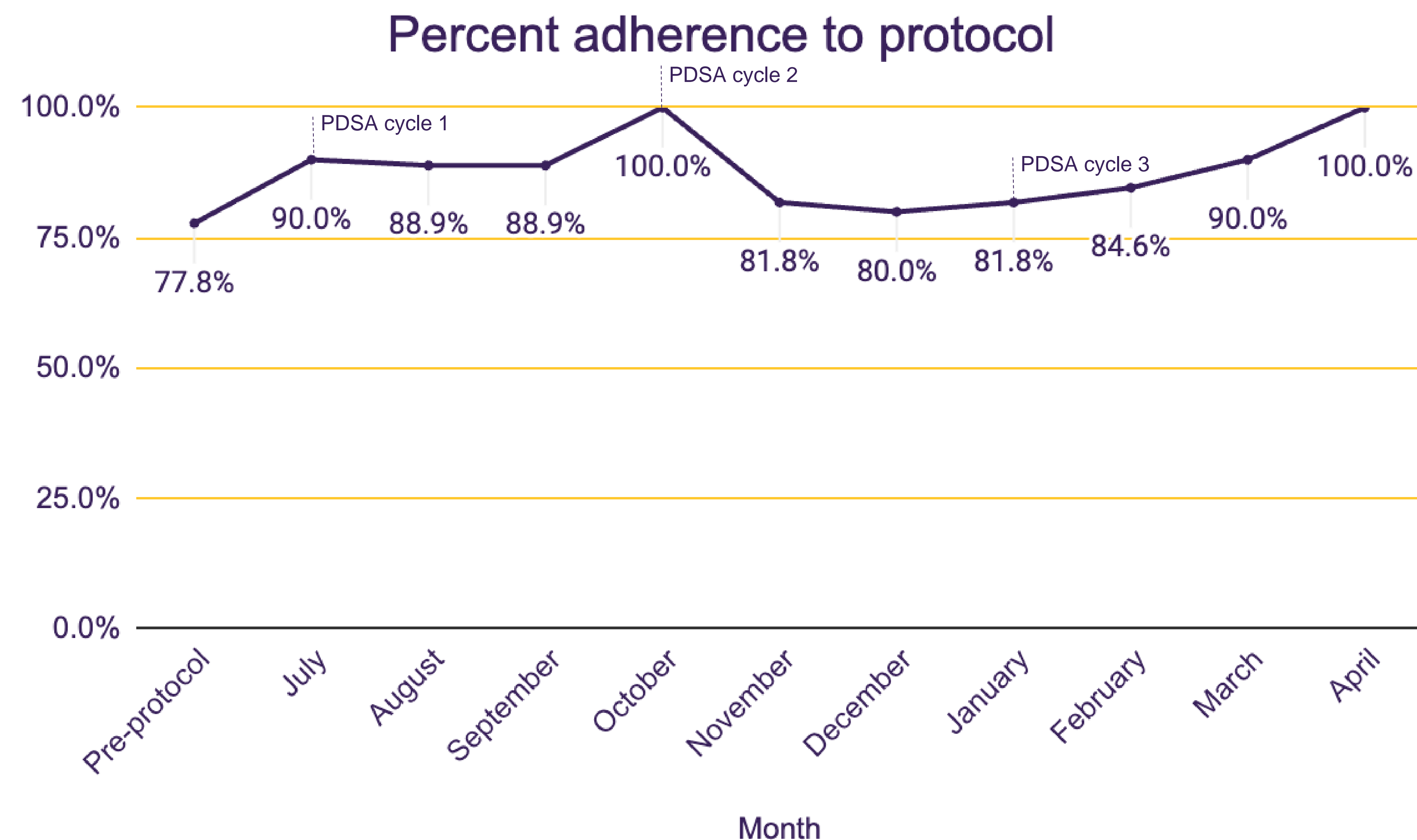
By May 30th, 2024, we will implement a standardized protocol for discontinuing hydrocortisone use in patients with septic shock in the CICU at ECUHMC. **Within our population of patients meeting inclusion criteria, 80% will undergo our proposed discontinuation protocol.**

PROJECT DESIGN/STRATEGY

- Communicated the protocol shown below in-person and via email to providers in the CICU
- Provided reminders from pharmacists when orders were placed
- Collected data in RedCap via chart review
- Intermittently adjusted or recommunicated protocol between PDSA cycles

Days 1-2	50mg hydrocortisone IV q8h
Days 3-4	50mg hydrocortisone IV q12h
Day 5	50mg hydrocortisone IV q1d
After day 5	Discontinue after day 5

CHANGES MADE (PDSA CYCLES)



- Key changes:
 - Between PDSA cycles 1 and 2, we began considering additional exclusion criteria based on results at that time
 - Provided additional in-person and email reminder of protocol after PDSA cycle 2

RESULTS/OUTCOMES

- Met our goal of 80% adherence from the first PDSA cycle and increased adherence overall to the end of the last PDSA cycle
- Identified the most common reasons for nonadherence shown in the table below
- Found the most common pattern of nonadherence was an unnecessary taper rather than no taper at all

Reason for nonadherence to protocol	Number of patients
Prior dx requiring chronic steroid use	7
Transitioned to comfort measures	2
No explanation given	4
Total	13

LESSONS LEARNED

- **Appropriate collection and interpretation of baseline data** is necessary to drive appropriate intervention: we found we were providing nearly standard care from the beginning and focused on increasing adherence
- Found that **chronic steroid use and transition to comfort measures only** were the most common reasons for “nonadherence” to the protocol: making these explicit as part of the protocol will improve clarity moving forward

NEXT STEPS

- Consider **sustainability** of the intervention without key champions present
- **Translate** the protocol to the medical ICU at ECUHMC
- Further consider the **patient safety** perspective by examining outcome data
- Extend project to examine and potentially standardize use and discontinuation of **hydrocortisone with fludrocortisone**

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