

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

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Background/Introduction

Background

- 2021 Surviving Sepsis Campaign guidelines **recommend use of IV corticosteroids** in adults with septic shock requiring ongoing vasopressor therapy
- However, **no agreed-upon protocol for discontinuing** steroids

Aim Statement

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.**

Discontinuation protocol if hydrocortisone used at least 5 days and shock has resolved:

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

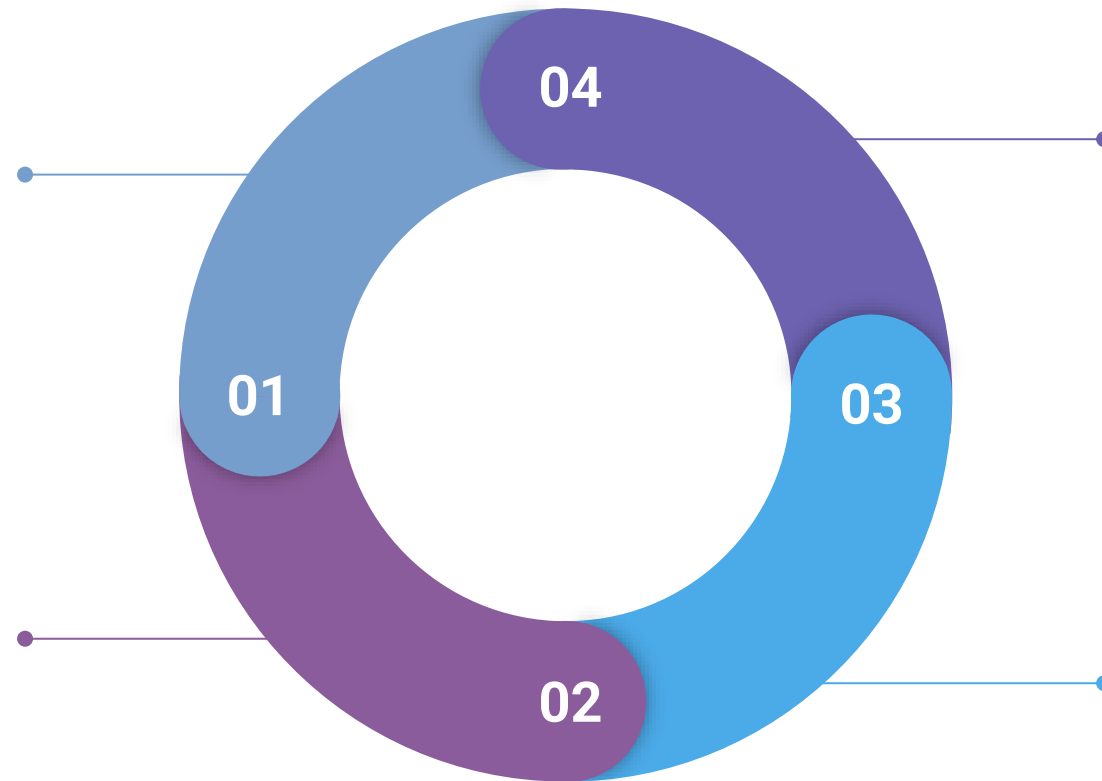
Methods

Identified appropriate patients

Adult patients diagnosed with septic shock and treated in CICU at ECUHMC with a least one vasopressor and hydrocortisone

Developed and communicated protocol

Communicated 1) via email and 2) as reminder from pharmacists when order placed for hydrocortisone



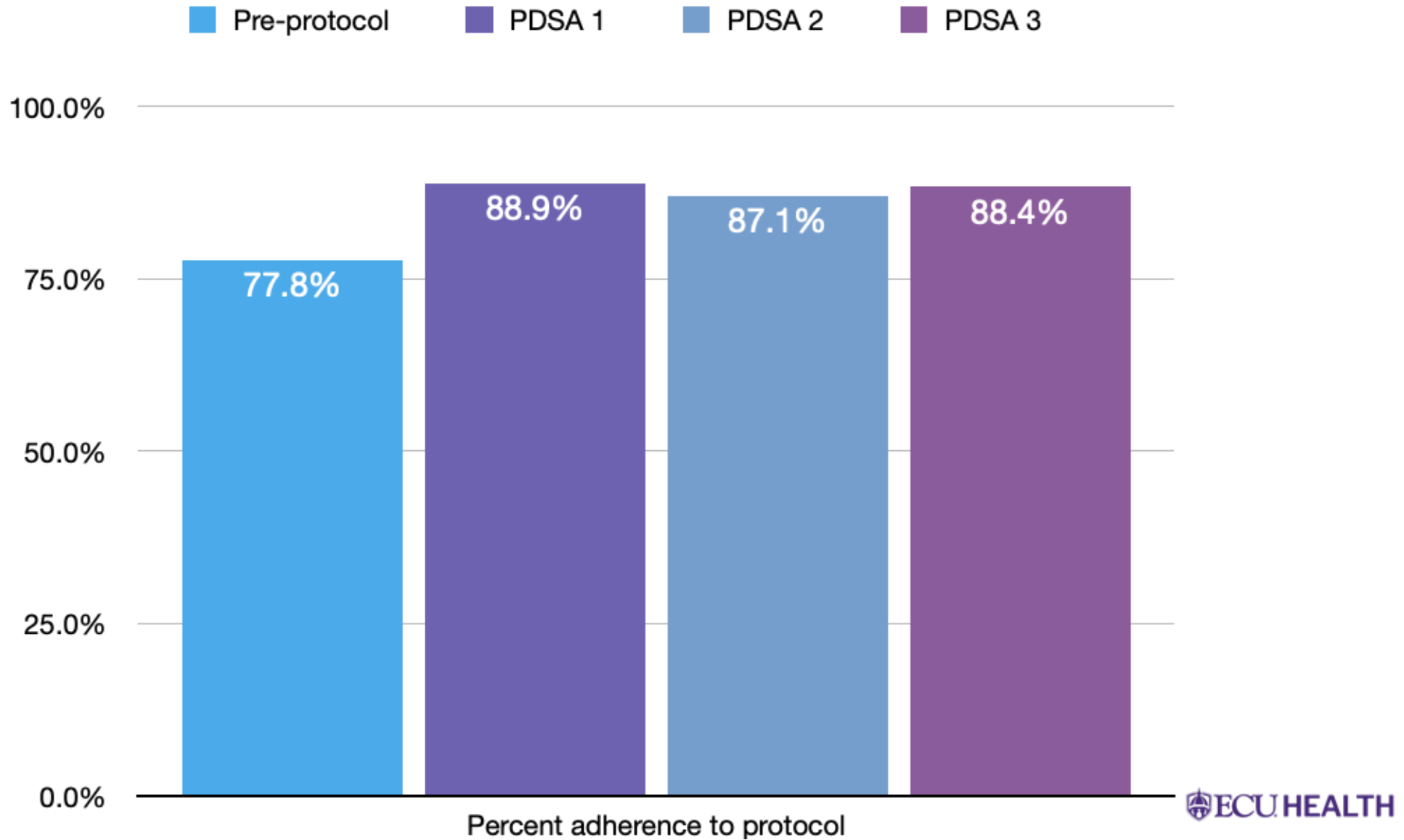
Analyzed data and made adjustments

3 PDSA cycles completed between July 2023 and May 2024 with data collection via chart review informing any adjustments needed to protocol or need for re-communication

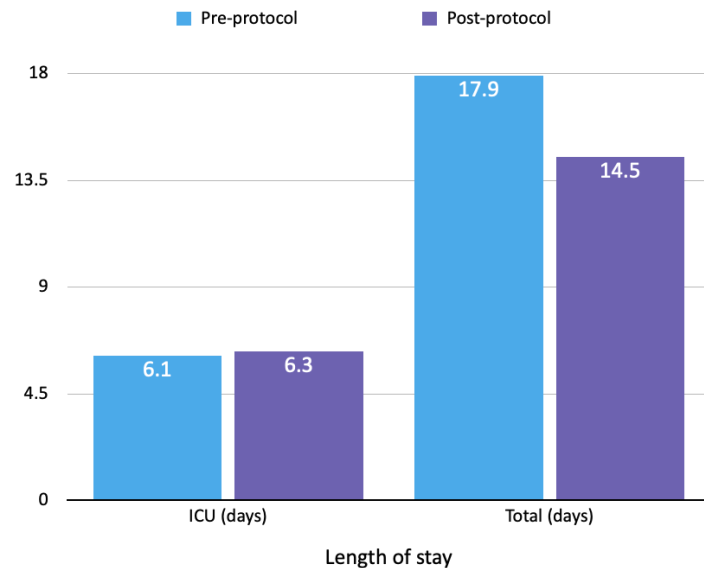
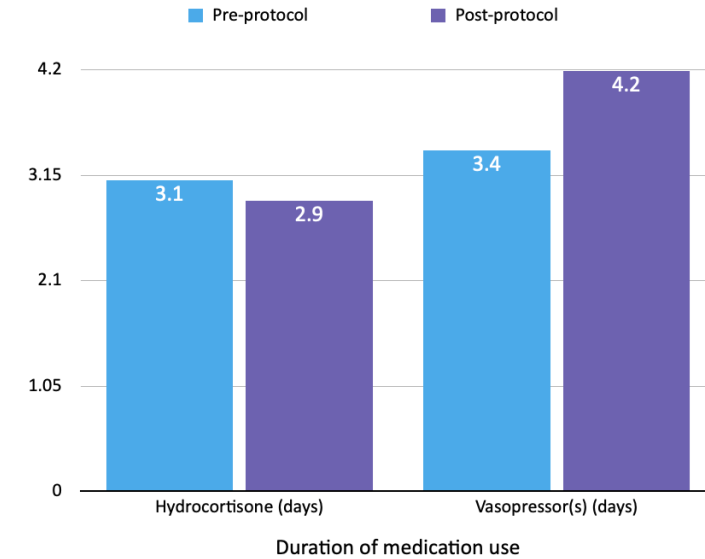
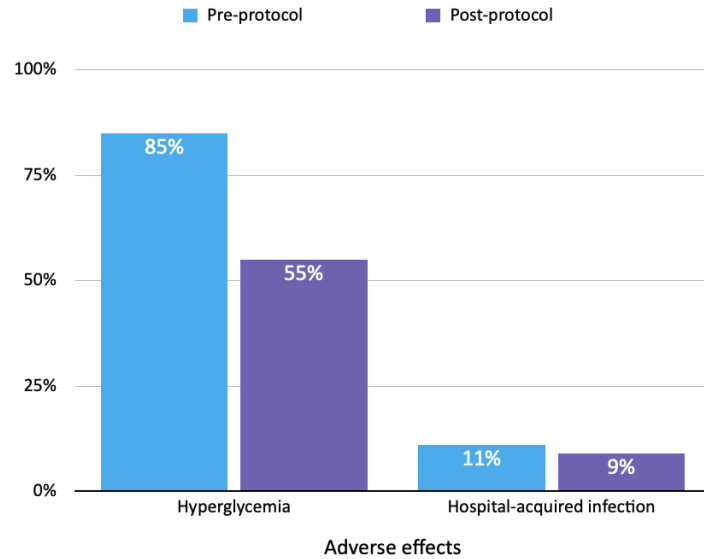
Identified appropriate measures

Created form in RedCap examining outcome measure (adherence to protocol) as well as length of stay, hydrocortisone and vasopressor use, and potential adverse effects of steroids

Results



Results



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

Conclusion

Met our goal of >80% adherence from the first PDSA cycle

Found we were providing standard care from the beginning and continued to increase adherence.

Identified most common medical reasons for nonadherence

Chronic steroid use or transition to comfort measures only may need to be made explicit as exclusion criteria.

Found most common pattern of nonadherence was an unnecessary taper

This finding drove the re-communication of our protocol in January 2024.

Future directions

- Consider **sustainability**
- **Translate** to the MICU at ECUHMC
- Further consider **patient safety** perspective by examining **outcomes**
- Examine use and discontinuation of **fludrocortisone + hydrocortisone**