

Single-Institutional Analysis of Post-Splenectomy Vaccine Administration and Infectious Complications in Trauma Patients



CONTACT

Alison Smith MD PhD

Rebekah Fayard, BS; Logan Gold, BS; Lillian Bellfi, PharmD; John Hunt, MD, MPH; Alan Marr, MD; Lance Stuke, MD; Patrick Greiffenstein, MD; Jonathan Schoen, MD; Monique St. Romain, RN; Cynthia Armstrong, RN; Ana Payne, RN; Alison A. Smith, MD, PhD

> Louisiana State University Health Sciences Center, New Orleans, Louisiana University Medical Center New Orleans, LA

BACKGROUND

- Post-splenectomy vaccinations for organisms posing a greater risk to asplenic patients serve an integral role in preventing infection.
- The trauma patient population poses unique challenges with vaccination involving follow-up and continuity of care after discharge.

<u>AIM</u>

- Primary aim: Measure the incidence and timing of post-splenectomy vaccination in trauma patients
- Secondary aim: Investigate if there is an association between infectious complications and the administration of post-splenectomy vaccines in the trauma patient population.

Prior to Protocol Implementation

- An analysis of 206 postsplenectomy trauma patients revealed that 16% of patients did not receive any of the required vaccines
- 12% of patients received all recommended vaccines

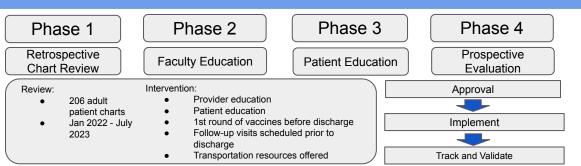
After Protocol Implementation

RESULTS

- Since Jan. 2022, 100% of UMC post-splenectomy trauma patients are at least partially-vaccinated
- 20% of patients received all recommended vaccines

	Vaccination status	
	Full (n=6)	Partial (n=23)
Received education, n (%)	3 (50)	13 (57)
Avg. HLOS ± SD (days)	18 ± 17	22 ± 21
Avg. readmissions post-discharge (p= 0.77)	0.7 <u>+</u> 0.8	0.9 <u>+</u> 1.6
Avg. ED Visits post-discharge (p= 0.95)	1.7 <u>+</u> 3.1	1.7 <u>+</u> 2.6
Any Post-discharge Infectious complications, n (%) (p= 1.00)	2 (33)	6 (26)

<u>METHODS</u>



DISCUSSION + FUTURE DIRECTIONS

- These results demonstrate increased vaccination compliance with implementation of our protocol.
- During follow-up, 56.5% of patients didn't finish vaccine courses having cancelled/no-showed appointments after discharge and 26.1% due to failure to schedule a follow-up appointment before hospital discharge.
 - Future studies should investigate other measures to decrease the number of no-shows/cancellations at follow-up appointments.
- There was no observed difference in # of ED visits or readmissions between partially and fully vaccinated post-splenectomy patients.