

5-2019

# A NSQIP Analysis of Post-Operative Antibiotic Utilization in Uncomplicated Appendicitis

Charlene Dekonenko

*Children's Mercy Hospital, cdekonenko@cmh.edu*

Robert M. Dorman

*Children's Mercy Hospital, rmdorman@cmh.edu*

Janelle R. Noel-Macdonnell

*Children's Mercy Hospital, jrnoelmacdonnell@cmh.edu*

Tolulope A. Oyetunji

*Children's Mercy Hospital, taoyetunji@cmh.edu*

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>

Part of the [Digestive System Diseases Commons](#), [Pediatrics Commons](#), [Pharmaceutical Preparations Commons](#), and the [Surgery Commons](#)

---

## Recommended Citation

Dekonenko, Charlene; Dorman, Robert M.; Noel-Macdonnell, Janelle R.; and Oyetunji, Tolulope A., "A NSQIP Analysis of Post-Operative Antibiotic Utilization in Uncomplicated Appendicitis" (2019). *Posters*. 118.

<https://scholarlyexchange.childrensmercy.org/posters/118>

# A NSQIP Analysis of Post-Operative Antibiotic Utilization in Uncomplicated Appendicitis

Charlene Dekonenko MD, Robert M. Dorman MD, Janelle Noel-MacDonnell PhD, Tolulope A. Oyetunji MD MPH

Children's Mercy Kansas City, Kansas City, MO

## Background

- 70,000 cases of pediatric appendicitis annually in the US (65-85% uncomplicated)
- APSA 2010 recommendations do not support antibiotic use post-operatively following appendectomy for uncomplicated appendicitis
- Compliance with the recommendation varies by institution.

**Aim: Determine the rate of post-operative antibiotic use in uncomplicated appendicitis.**

## Methods

- NSQIP Targeted appendectomy procedure files (2015-2016) merged w/base NSQIP files
- Queried for children with uncomplicated appendicitis.
- Analysis with STATA v15 for those discharged on antibiotics

## Results

Characteristics	Frequency or Median [IQR] N = 4,637
Male Gender	62%
Age (years)	11.5 [9,14]
Ethnicity	
Caucasian	57%
African American	8%
Asian	3%
Other	1%
Unknown	9%
Length of Stay (days)	
Total Stay	1 [1,2]
Preop LOS	0 [0,1]
Postop LOS	1 [1,1]
Antibiotics on DC	9.8%
Post-op ED Visit	5.7%
Drain/Aspiration of fluid collection <30d	2.5%

	Abx on DC (n=426)	No Abx on DC (n=4,184)	p-value
Total LOS (d)	2 [1,3]	1 [1,2]	<0.01*
Preop LOS (d)	0 [0,1]	0 [0,1]	0.53
Postop LOS (d)	2 [1,3]	1 [1,1]	<0.01*

## Conclusion

- 10% discharged on antibiotics following appendectomy for uncomplicated appendicitis
- Two additional days of antibiotics
- Continued efforts to standardize practice

## References

- Shawyer AC, et al. Compliance with published recommendations for postoperative antibiotic management of children with appendicitis: A chart audit. J Pediatr Surg. 2015;50(5):783-5.
- Sadraei-Moosavi SM, et al. Postoperative antibiotic therapy after appendectomy in patients with non-perforated appendicitis. Caspian J Intern Med. 2017;8(2):104-107.
- Rafiq MS, et al. Evaluation of postoperative antibiotics after non-perforated appendectomy. J Pak Med Assoc. 2015;65(8):815-7.