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5-2021

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Megan Hamner

Amanda Nedved

Holly Austin

Donna Wyly

Alaina N. Burns

See next page for additional authors

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Authors

Megan Hamner, Amanda Nedved, Holly Austin, Donna Wyly, Alaina N. Burns, Diana King, Brian R. Lee, and Rana El Feghaly

Antibiotic Durations for Skin and Soft Tissue Infections in Pediatric Urgent Cares

Megan Hamner¹ MD; Amanda Nedved¹ MD; Holly Austin¹ MD; Donna Wyly¹ RN, MSN, CPNP-AC, PPCNP-BC; Alaina Burns¹ PharmD, BCPPS; Diana King¹ RN, MSN, CPNP-PC; Brian Lee² PhD, MPH, and Rana E. El Feghaly¹ MD, MSCI

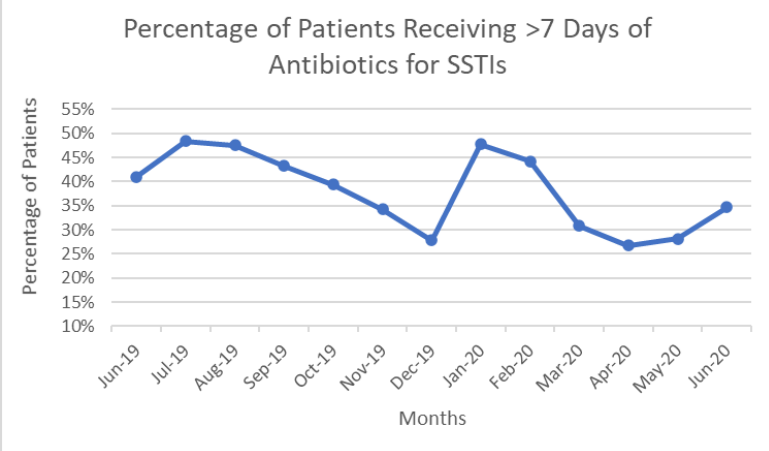
¹ Pediatrics, Children's Mercy Hospitals and Clinics, Kansas City, MO; ² Health Services and Outcomes Research, Children's Mercy Hospitals and Clinics, Kansas City, MO

Background

- Skin and soft tissue infections (SSTIs) are the second most common diagnoses leading to antibiotic prescriptions
- Children seen in the ambulatory setting for SSTIs often receive >7 days of antibiotics for treatment
- Current society guidelines recommend treatment for 5-7 days for most SSTI diagnoses

Table 1: Provider Reported Duration of Antibiotic Therapy for Common Skin and Soft Tissue Infections

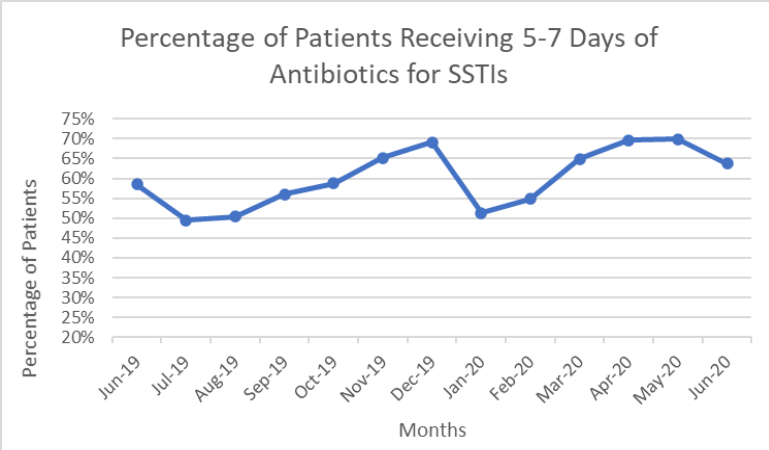
Duration of oral antibiotics for:	Provider Responses n=27					
	<5 days	5 days	7 days	10 days	Varies	No antibiotics
Impetigo	0 (0%)	5 (19%)	16 (59%)	3 (11%)	2 (7%)	1 (4%)
Folliculitis	0 (0%)	1 (4%)	16 (59%)	3 (11%)	1 (4%)	6 (22%)
Cellulitis	0 (0%)	1 (4%)	17 (63%)	8 (30%)	1 (4%)	0 (0%)
Erysipelas	0 (0%)	0 (0%)	12 (44%)	14 (52%)	1 (4%)	0 (0%)
Abscesses	0 (0%)	1 (4%)	9 (33%)	12 (44%)	5 (19%)	0 (0%)
Paronychia	0 (0%)	8 (30%)	8 (30%)	4 (15%)	4 (15%)	3 (11%)
Animal bite prophylaxis	11 (41%)	14 (52%)	1 (4%)	1 (4%)	0 (0%)	0 (0%)



Results

- Reviewed 2,575 patient encounters from June 2019-June 2020 with 208 (8%) excluded
- Antibiotic durations for SSTIs:
 - 823 (35%) patients received >7 days
 - 1181 (50%) received 5-7 days
 - 35 (1%) received <5 days
 - 328 (14%) received topical therapy only
- A mild improvement in the 5-7-day duration was seen
- ~ 30% of providers are uncomfortable with a 5-day antibiotic course
- Barriers to shorter treatment included: concerns for acute rheumatic fever, parental pressure, treatment failure, and accustomed duration

Figure 1: Run Chart of the Percentage of Patients Diagnosed with Skin and Soft Tissue Infections Receiving Over 7 Days of Oral Antibiotic Therapy (above) and 5-7 Days of Oral Antibiotic Therapy (below)



Methods

- Patient encounters from three urgent care clinics (UCCs) were pulled with ICD-10 codes for common SSTIs
- Patients were excluded if they were transferred to the ED or admitted, if <3 months of age, if no antibiotics were prescribed, or if a concurrent diagnosis affected antibiotic duration
- A 22-question survey was sent to UCC providers to evaluate prescribing practices

Table 2: Provider Comfort Level with Shorter Antibiotic Courses for Common Skin and Soft Tissue Infections

Comfort with:	Provider Responses n=27				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5 days of antibiotics for cellulitis	6 (22%)	8 (30%)	8 (30%)	4 (15%)	1 (4%)
5 days of antibiotics for erysipelas	3 (11%)	7 (26%)	10 (37%)	5 (19%)	2 (7%)
5 days of antibiotics for abscesses	5 (19%)	7 (26%)	7 (26%)	7 (26%)	1 (4%)
7 days of antibiotics for impetigo	12 (44%)	11 (41%)	3 (11%)	1 (4%)	0 (0%)
No antibiotics for folliculitis	7 (26%)	9 (33%)	10 (37%)	0 (0%)	1 (4%)
No antibiotics for paronychia	4 (15%)	8 (30%)	11 (41%)	4 (15%)	0 (0%)
3-5 days of antibiotics for animal bite prophylaxis	21 (78%)	5 (19%)	1 (4%)	0 (0%)	0 (0%)

Conclusion

- A third of children with SSTIs seen at our UCCs receive long courses of antibiotics
- Quality improvement projects are necessary