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### Antibiotic Durations for Skin and Soft Tissue Infections In Pediatric Urgent Care Clinics

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# Antibiotic Durations for Skin and Soft Tissue Infections in Pediatric Urgent Care Clinics

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## 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%)

## 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%)

## 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

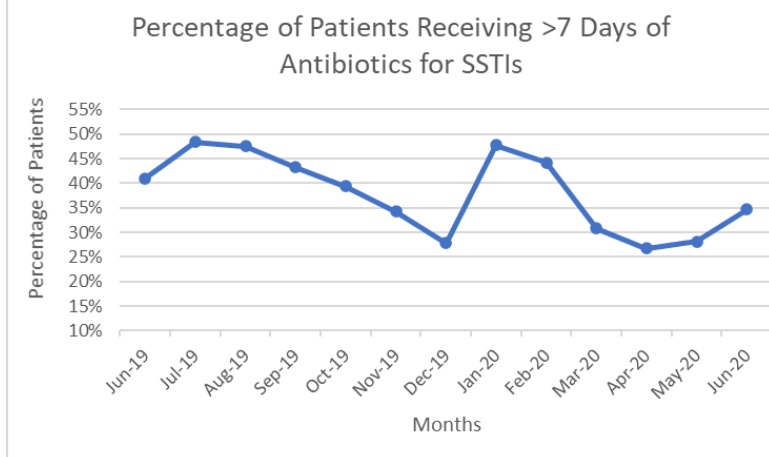
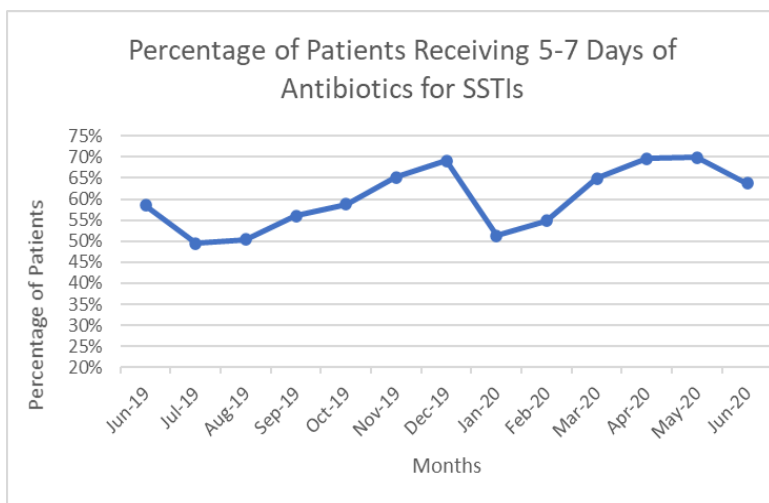


Figure 1: Run Chart of the Percentage of Patients Diagnosed with Skin and Soft Tissue Infections Receiving Over 7 Days of Oral Antibiotic Therapy (above) and 5-7 Days of Oral Antibiotic Therapy (below)



## Conclusion

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