

## Supplemental Information

**SUPPLEMENTAL TABLE 4** ICD-9 and CPT Codes Used in the Study

Diagnosis or Procedure	ICD-9 and CPT Code(s)
Carbuncle or furuncle	680.xx
Cellulitis or abscess of finger/toe	681.00-01, 681.9
Other cellulitis or abscess	682.xx
Impetigo	684
Unspecified local infection of skin or subcutaneous tissue	686.8-9
Superficial injury with mention of infection	910.1, 910.3, 910.9, 911.1, 911.3, 911.9, 912.1, 912.3, 912.9, 913.1, 913.3, 913.9, 914.1, 914.3, 914.9, 915.1, 915.3, 915.9, 916.1, 916.3, 916.9, 917.1, 917.3, 917.9, 919.1, 919.3, 919.9
Dermatitis infectiosa eczematoides	690.8
Folliculitis	704.8
Erysipelas	035
Incision and drainage	(ICD-9 procedure) 86.01, 86.04, 49.01 (CPT) 10060, 10061, 10160
Exclusions	
Open wounds, postoperative wounds, wound infections, burns	674.3x, 940.xx-947.xx, 949.0-949.5, 958.3, 998.3x, 998.5x, 998.83, 998.9
Incision and drainage (post-operative wound, foreign body removal, dental procedure, pilonidal cyst)	(ICD-9 procedure) 27.0, 27.92, 54.0, 54.19, 54.91, 86.03, 86.05 (CPT) 10120, 10121, 10180

**SUPPLEMENTAL TABLE 5** Children Experiencing at Least 1 Recurrence by 1, 3, 6, 9, and 12 Months of Follow-up, Stratified According to Drainage

	Antibiotic Treatment Group		
	Clindamycin, No. (%)	Trimethoprim-Sulfamethoxazole, No. (%)	$\beta$ -Lactam, No. (%)
No drainage			
1 mo	67 (1.4)	178 (2.4)	638 (2.6)
3 mo	257 (5.3)	638 (8.2)	1,854 (7.2)
6 mo	403 (8.1)	950 (11.7)	2,604 (9.8)
9 mo	527 (10.3)	1134 (13.7)	3,099 (11.5)
12 mo	610 (11.8)	1272 (15.1)	3,554 (12.9)
Drainage			
1 mo	22 (1.1)	52 (2.7)	54 (3.3)
3 mo	102 (4.9)	191 (9.4)	177 (10.1)
6 mo	180 (8.3)	279 (13.1)	260 (14.2)
9 mo	233 (10.5)	324 (14.9)	312 (16.5)
12 mo	280 (12.3)	359 (16.3)	355 (18.4)

Values displayed in the table represent the number (percentage) of incident SSTIs that resulted in at least 1 recurrence event by the end of the specified follow-up period. SSTIs were based on a visit with a specific ICD-9 code and a prescription fill for an antibiotic within 2 days. Recurrence was defined by fulfilling the same criteria (including a new antibiotic) between 15 and 365 days following the incident event. Drainage was based on CPT and ICD-9 procedure codes representing incision and drainage.

**SUPPLEMENTAL TABLE 6** Adjusted HRs (95% CI) for First Recurrence, Stratified According to Drainage, Overall and Excluding Children With a Treatment Failure

	Antibiotic Treatment Group		
	Clindamycin	Trimethoprim-Sulfamethoxazole	$\beta$ -Lactam
Drainage			
Overall	1.00 (Ref)	1.26 (1.06–1.49)	1.42 (1.19–1.69)
Failures excluded	1.00 (Ref)	1.23 (1.03–1.47)	1.39 (1.16–1.67)
No drainage			
Overall	1.00 (Ref)	1.24 (0.87–1.79)	0.99 (0.70–1.40)
Failures excluded	1.00 (Ref)	1.30 (1.18–1.44)	1.08 (0.99–1.18)

SSTIs were based on a visit with a specific ICD-9 code and a prescription fill for an antibiotic within 2 days. Treatment failure and recurrence were defined by fulfilling the same criteria (including a new antibiotic) within 14 days and between 15 and 365 days, respectively, of the incident event. Drainage was based on CPT and ICD-9 procedure codes representing incision and drainage. HRs were estimated from Cox proportional hazards regression. Models adjusted for year, age, gender, race/ethnicity, and diagnosis.

**SUPPLEMENTAL TABLE 7** Adjusted ORs (95% CI) for Treatment Failure, Stratified According to Drainage and Gender

	Antibiotic Treatment Group		
	Clindamycin	Trimethoprim-Sulfamethoxazole	$\beta$ -Lactam
Drainage			
Male	1.00 (Ref)	2.12 (1.46–3.06)	2.38 (1.62–3.49)
Female	1.00 (Ref)	1.76 (1.25–2.48)	2.11 (1.46–3.04)
No drainage			
Male	1.00 (Ref)	1.68 (1.34–2.09)	1.29 (1.04–1.58)
Female	1.00 (Ref)	1.66 (1.35–2.05)	1.16 (0.95–1.42)

**SUPPLEMENTAL TABLE 8** Adjusted HRs (95% CI) for First Recurrence, Stratified According to Drainage and Gender

	Antibiotic Treatment Group		
	Clindamycin	Trimethoprim-Sulfamethoxazole	$\beta$ -Lactam
Drainage			
Male	1.00 (Ref)	1.39 (1.09–1.78)	1.32 (1.03–1.71)
Female	1.00 (Ref)	1.14 (0.90–1.43)	1.52 (1.20–1.93)
No drainage			
Male	1.00 (Ref)	1.27 (1.10–1.48)	1.09 (0.95–1.25)
Female	1.00 (Ref)	1.32 (1.16–1.51)	1.07 (0.95–1.21)

SSTIs were based on a visit with a specific ICD-9 code and a prescription fill for an antibiotic within 2 days. Treatment failure and recurrence were defined by fulfilling the same criteria (including a new antibiotic) within 14 days and between 15 and 365 days, respectively, of the incident event. Drainage was based on CPT and ICD-9 procedure codes representing incision and drainage. ORs were estimated from logistic regression. HRs were estimated from Cox proportional hazards regression. Models adjusted for year, age, gender, race/ethnicity, and diagnosis.

**SUPPLEMENTAL TABLE 9** Treatment Failure and Recurrence Risk Among Children Receiving a Drainage Procedure According to Antibiotic Treatment Group

	Antibiotic Treatment Group			
	Clindamycin	Trimethoprim-Sulfamethoxazole	$\beta$ -Lactam	No Antibiotics
Treatment Failure				
No. of incident SSTIs	2,270	2,206	1,931	2,611
No. of treatment failures (%)	107 (4.7)	246 (11.2)	215 (11.1)	387 (14.8)
Unadjusted OR (95% CI)	1.00 (Ref)	2.54 (2.01–3.21)	2.53 (1.99–3.22)	3.52 (2.82–4.40)
Adjusted OR (95% CI)	1.00 (Ref)	1.91 (1.50–2.45)	2.30 (1.78–2.95)	3.25 (2.59–4.08)
Recurrence				
No. of first recurrences (%) <sup>a</sup>	280 (12.3)	359 (16.3)	355 (18.4)	360 (13.8)
Person-years	1619	1329	1415	1859
Events per 1000 person-years	173.0	270.1	250.9	193.7
Unadjusted HR (95% CI)	1.00 (Ref)	1.51 (1.29–1.77)	1.47 (1.26–1.72)	1.12 (0.96–1.32)
Adjusted HR (95% CI)	1.00 (Ref)	1.23 (1.04–1.45)	1.36 (1.15–1.61)	1.05 (0.89–1.23)

SSTIs were based on a visit with a specific ICD-9 code (Supplemental Table 4) and a prescription fill for an antibiotic within 2 days. Treatment failure and recurrence were defined by fulfilling the same criteria (including a new antibiotic) within 14 days and between 14 and 365 days, respectively. Drainage was based on CPT and ICD-9 procedure codes (Supplemental Table 4) representing incision and drainage. ORs estimated from logistic regression. HRs estimated from Cox proportional hazards regression. Models adjusted for year, age, gender, race/ethnicity, and diagnosis.

<sup>a</sup> Percentages reflect the proportion of incident SSTIs in each antibiotic category that resulted in at least 1 recurrence event.