Table S1: Characteristics of CDI cases among patients readmitted with a PCR test

	Index Cases N (%)	**Readmitted for CDI N (%)**	**Not Readmitted for CDI N (%)**	***p*-value**
Overall	1,227	114	1,113	
Age				0.472
18 – 44	180 (15)	18 (16)	162 (15)	
45 – 64	365 (30)	38 (33)	327 (29)	
65 – 79	381 (31)	28 (25)	353 (32)	
Over 80	301 (24)	30 (26)	271 (24)	
Sex				0.174
Female	698 (57)	58 (51)	640 (58)	
Male	529 (43)	56 (49)	473 (42)	
Race/Ethnicity				0.358
Non-Hispanic White	999 (81)	86 (75)	913 (82)	
Hispanic or Latino	115 (9)	15 (13)	100 (9)	
Non-Hispanic Black	82 (7)	9 (8)	73 (6)	
Other	31 (3)	4 (4)	27 (3)	
CDI Index Case Classification				0.373
Community Associated	489 (40)	41 (36)	448 (40)	
Healthcare Associated	738 (60)	73 (64)	665 (60)	
CDI Treatment Regimen				0.190
Vancomycin	499 (41)	53 (46)	446 (40)	
Metronidazole	308 (25)	22 (19)	286 (26)	
Sequential	316 (26)	33 (26)	283 (25)	
Concurrent	104 (8)	6 (5)	98 (9)	
Discharge Disposition				0.054
Healthcare Facilities	502 (41)	37 (32)	465 (42)	
Home	725 (59)	77 (68)	648 (58)	
High-Risk Antibiotic°				0.530
No	442 (36)	38 (33)	404 (36)	
Yes	785 (64)	76 (67)	709 (64)	
Elixhauser Score				0.001
Median [IQR]	5 [0 – 11]	6 [0 – 13]	5 [0 – 10]	
Length of Index Stay (days)				0.223
Median [IQR]	7 [4 – 13]	6 [4 – 11]	7 [4 – 13]	

Table S2: Adjusted associations of factors with CDI-related readmission among patients readmitted with a PCR test

	Adjusted Odds Ratio	95% CI	95% BCa-CI
Age			
18 – 44	Reference		
45 – 64	0.96	0.51 – 1.78	0.51 – 1.88
65 – 79	0.63	0.32 – 1.23	0.29 – 1.26
Over 80	1.00	0.50 – 2.00	0.46 – 2.19
Sex			
Female	Reference		
Male	1.21	0.81 – 1.81	0.78 – 1.90
Race/Ethnicity			
Non-Hispanic White	Reference		
Hispanic or Latino	1.31	0.70 – 2.43	0.64 – 2.42
Non-Hispanic Black	1.23	0.57 – 2.65	0.55 – 2.54
Other	1.70	0.56 – 5.13	0.47– 4.81
CDI Index Case Classification			
Community Associated	Reference		
Healthcare Associated	1.41	0.88 – 2.25	0.87 – 2.25
CDI Treatment Regimen			
Vancomycin	Reference		
Metronidazole	0.62	0.36 – 1.05	0.35 – 1.03
Sequential	1.06	0.66 – 1.73	0.62 – 1.73
Concurrent	0.47	0.19 – 1.17	0.17 – 1.35
Discharge Disposition			
Healthcare Facilities	Reference		
Home	1.70	1.06 – 2.74	1.04 – 2.88
Fluoroquinolones			
No	Reference		
Yes	1.59	1.02 – 2.48	1.01 – 2.41
1st/2nd Cephalosporins			
No	Reference		
Yes	0.83	0.47 – 1.46	0.46 – 1.46
3rd/4th/5th Cephalosporins			
No	Reference		
Yes	0.98	0.63 – 1.54	0.62 – 1.60
Clindamycin			
No	Reference		
Yes	0.99	0.40 – 1.98	0.36 – 2.40
Penicillin			
No	Reference		
Yes	0.94	0.45 – 1.98	0.45 – 1.87

Penicillin with Beta Lactamase Inhibitors			
No	Reference		
Yes	1.15	0.74 – 1.78	0.73 – 1.82
Elixhauser Score			
Unit Increase	1.05	1.02 – 1.07	1.01 – 1.08
Length of Index Stay (Day)			
Unit Increase	0.98	0.96 – 1.00	0.96 – 1.00