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## Supplementary Material

**Table SM1. Sensitivity and specificity by risk score for *C. difficile* infection within 90 days**

Risk score cut-off	<i>C. difficile</i> infection within 90 days			
	Sensitivity (%)	Specificity (%)	Correctly classified (%)	LR+
≥0	100	0	0.02	1.00
≥1	98.78	32.90	32.91	1.47
≥2	98.16	34.82	34.84	1.51
≥3	97.96	34.94	34.96	1.51
<b>≥4</b>	<b>97.96</b>	<b>34.95</b>	<b>34.96</b>	<b>1.51</b>
≥5	97.96	35.08	35.09	1.51
≥6	95.31	53.06	53.07	2.03
<b>≥7</b>	<b>80.41</b>	<b>86.56</b>	<b>86.55</b>	<b>5.98</b>
≥8	42.24	97.90	97.89	20.11
≥9	31.84	99.00	98.99	31.87
≥10	29.80	99.19	99.18	36.75
≥11	29.39	99.39	99.38	48.17
≥12	27.14	99.56	99.55	61.79
≥13	24.29	99.68	99.66	75.11
≥14	18.98	99.81	99.79	98.99
≥15	6.94	99.94	99.92	120.49
≥16	1.43	99.99	99.97	141.85
≥17	0.41	100.00	99.98	328.21
≥18	0.00	100.00	99.98	–
≥19	0.00	100.00	99.98	–
>19	0.00	100.00	99.98	–

#: percentage; LR+: positive likelihood ratio; correctly classified: % of cases correctly classified with this risk score cut-off value.

**Table SM2. *C. difficile* infection risk index**

<b>Characteristic</b>	<b>Points</b>
Age 40–49	5
Age 50–64	6
Age 65–74	6
Age 75+	7
1 Past inpatient hospital stay	4
2 or more past inpatient hospital stays	5
Length of Stay (LOS) 1–3 days	0
LOS 4–9 days	2
LOS 10+ days	3
1 Antibiotic Class	1
2 Antibiotic Classes	2
3 Antibiotic Classes	3
4 Antibiotic Classes	4
5+ Antibiotic Classes	5

The *C. difficile* infection risk index developed by the CDC is based on a cohort of hospitalized inpatients in the US. A multivariate Cox proportional hazard regression model identified the most important characteristics associated with *C. difficile* infection. Points for each characteristic identified were assigned by dividing each model parameter estimate by the absolute value of the smallest parameter estimate in the model.

Note: This index was provided by CDC in a previous project report and differs from the 2 indices described in the paper by Baggs et al. (Vaccine. 2015;33(46):6241–9. doi: 10.1016/j.vaccine.2015.09.078 ), not only in the absolute scores but also in the relative weights given to the categories.