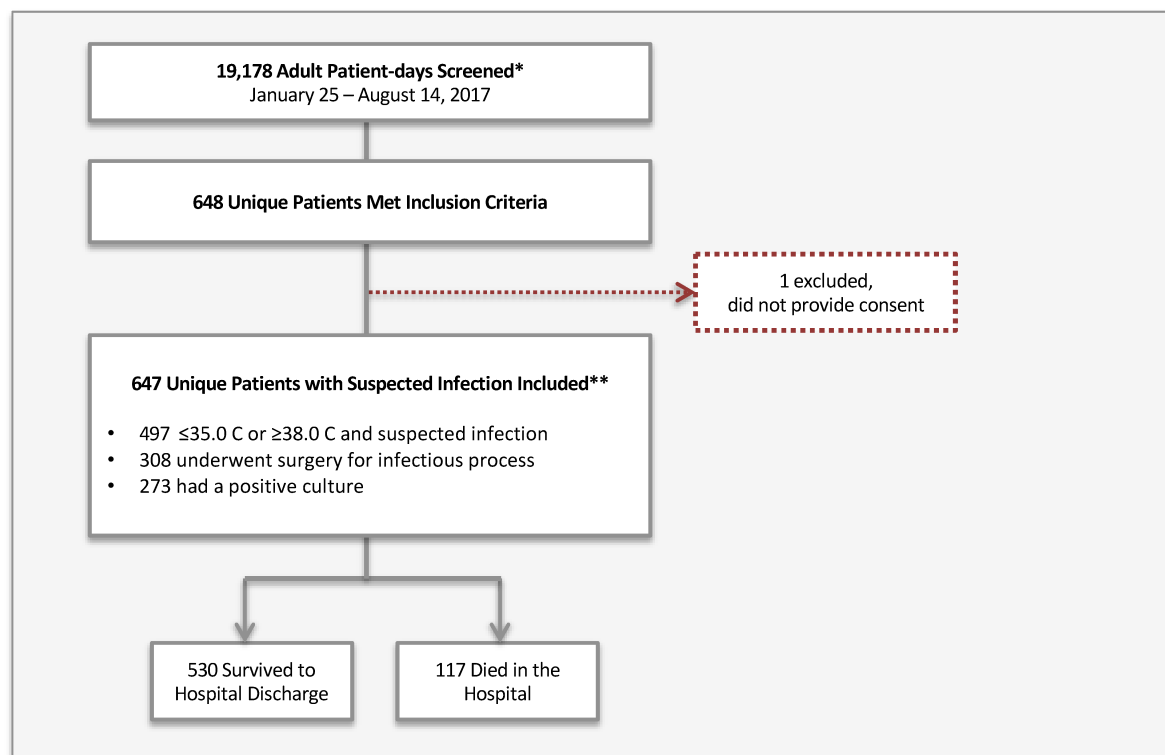


Supplemental Figure 1. The study cohort.

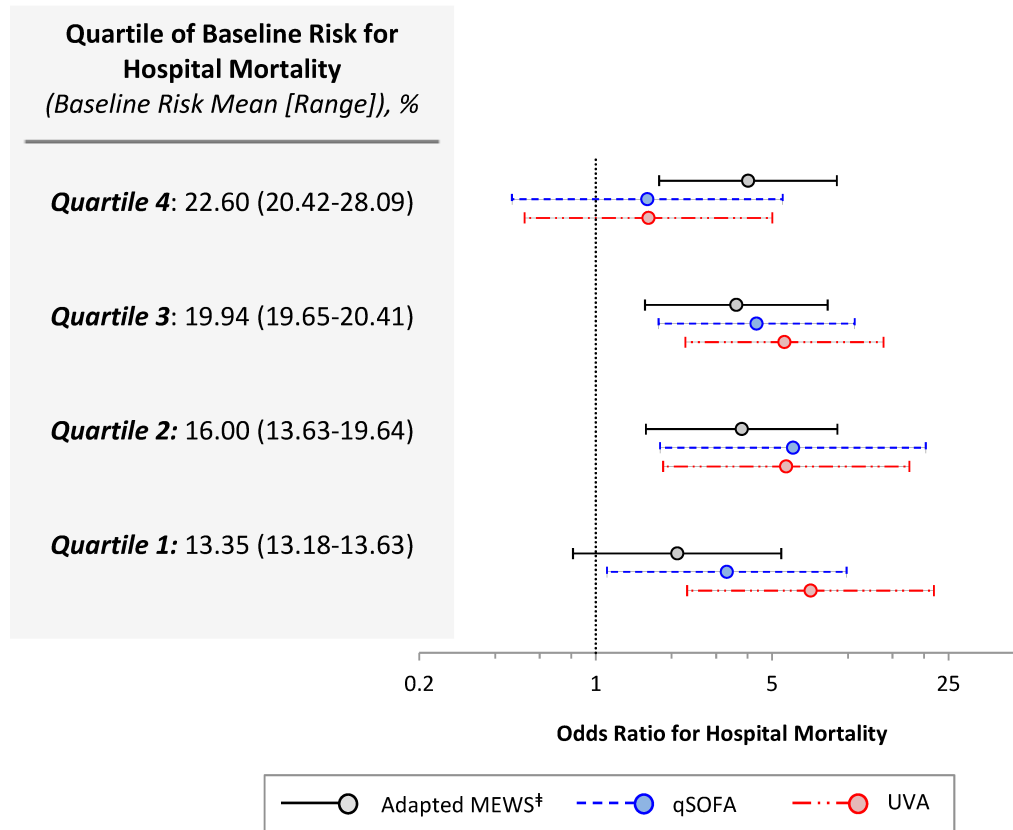
*We screened every adult inpatient each day, and documented the number screened each day. We collected detailed data on patients included in the study with suspected infection. We did not track the number of *unique* patients screened.

**Non-exclusive categories.

For patients who met more than one inclusion criteria, clinical data were recorded based on the first inclusion criteria met: at the time of fever or hypothermia, the time of surgery, or the time of culture sample collection, depending on the inclusion criteria met first for each participant.

Supplemental Table 1. Number and proportion of missing values for each variable	
	Total N = 647
Variable	
Age, years	7 (1.08)
Male Sex	0 (0)
HIV positive	0 (0)
Other known pre-existing co-morbidity*	0 (0)
Any positive bacterial culture	0 (0)
Respiratory Rate, breaths/minute	58 (8.96)
Altered Mental Status	0 (0)
Systolic Blood Pressure, mmHg	15 (2.32)
Temperature, °C	2 (0.31)
Heart Rate, beats/minute	17 (2.63)
Oxygen Saturation, %	76 (11.75)
Transfer Status	10 (1.55)
Data is reported as the frequency and proportion of missing data. * Includes patients who had any of the following documented co-morbidities: diabetes, hypertension, tuberculosis, cancer, and/or severe malnutrition.	

Supplemental Table 2. Predictive capacity of differing cutoffs for adapted MEWS, qSOFA and UVA scores				
	Sensitivity	Specificity	PPV	NPV
Adapted MEWS[†] Cutoff Values				
Adapted MEWS [†] > 0	97.44	1.70	17.95	75.00
Adapted MEWS [†] > 1	94.02	23.96	21.44	94.78
Adapted MEWS [†] > 2	82.91	43.77	24.56	92.06
Adapted MEWS [†] > 3	65.81	58.87	26.10	88.64
Adapted MEWS [†] > 4	50.43	74.91	30.73	87.25
Adapted MEWS [†] > 5	34.19	87.36	37.38	85.74
Adapted MEWS [†] > 6	23.08	94.72	49.09	84.80
Adapted MEWS [†] > 7	9.40	97.92	50.00	83.04
Adapted MEWS [†] > 8	5.13	99.62	75.00	82.63
Adapted MEWS [†] > 9	1.71	100.00	100.00	82.17
qSOFA Cutoff Values				
qSOFA ≥ 1	70.09	54.72	25.47	89.23
qSOFA ≥ 2	24.79	90.38	36.25	84.48
qSOFA ≥ 3	4.27	99.81	83.33	82.53
UVA Cutoff Values				
UVA > 1	77.78	51.89	26.30	91.36
UVA > 2	63.25	70.94	32.46	89.74
UVA > 3	50.43	80.19	35.98	87.99
UVA > 4	28.21	91.13	41.25	85.19
UVA > 5	17.09	95.85	47.62	83.97
UVA > 6	9.40	98.49	57.89	83.12
<p>[†]The adaption to the MEWS score pertains to the altered mental status score. In the original MEWS, 0 points were assigned for alert patients, 1 if they reacted to voice, 2 if they reacted to pain, and 3 if they were unresponsive. In our adapted MEWS, we assign 0 points for an alert patient and 2 points for a patient with any altered mental status.</p> <p>Abbreviations: PPV = positive predictive values; NPV = negative predictive value;</p>				

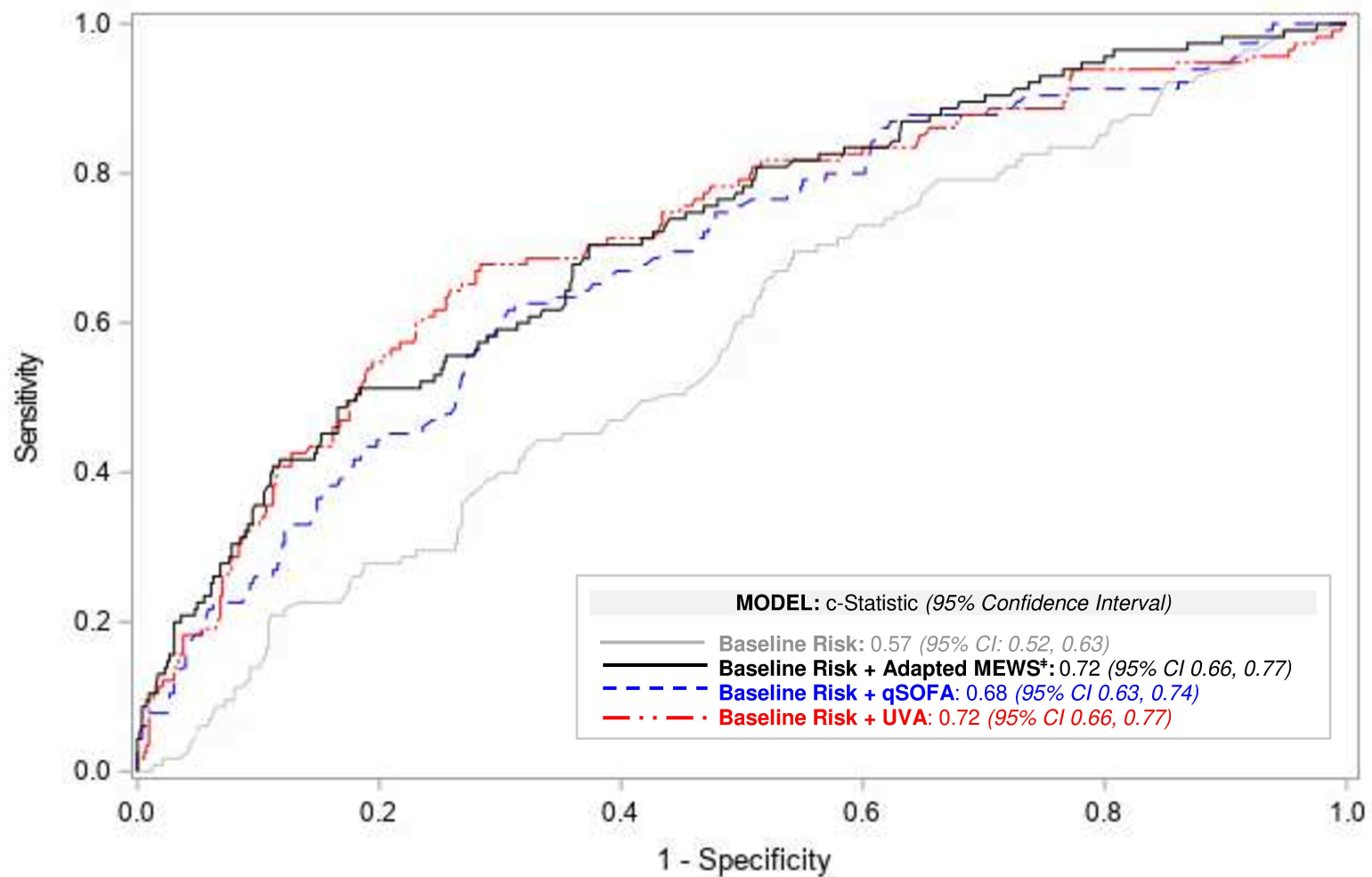
Supplemental Figure 2. Odds Ratios for Hospital Mortality.

Odds ratio for hospital mortality (log-scale) comparing encounters with > 4 vs ≤ 4 adapted MEWS, ≥ 2 vs < 2 qSOFA points, and > 4 vs ≤ 4 UVA, and criteria among patients with suspected infection by quartile of baseline risk for hospital mortality. Baseline risk is calculated using age, gender, HIV status and transfer status. Error bars indicate 95% CIs.

[†]The adaption to the MEWS score pertains to the altered mental status score. In the original MEWS, 0 points were assigned for alert patients, 1 if they reacted to voice, 2 if they reacted to pain, and 3 if they were unresponsive. In our adapted MEWS, we assign 0 points for an alert patient and 2 points for a patient with any altered mental status.

Supplemental Table 3. Model Estimates from Figure 2 (Receiver Operating Characteristic Curves for adapted MEWS, qSOFA, or UVA Criteria as Continuous Variables)					
	Parameter	Standard Error	Odds Ratio (95% CI)	P-Value	
MODEL 1 – adapted MEWS					
	Intercept	-2.8458	0.2443	---	<0.0001
	MEWS (<i>per 1 point increase</i>)	0.3445	0.0515	1.411 (1.276, 1.561)	<0.0001
MODEL 2 - qSOFA					
	Intercept	-2.1088	0.1597	---	<0.0001
	qSOFA (<i>per 1 point increase</i>)	0.7891	0.1372	2.201 (1.682, 2.880)	<0.0001
MODEL 3 - UVA					
	Intercept	-2.4477	0.1832	---	<0.0001
	UVA (<i>per 1 point increase</i>)	0.3769	0.0511	1.458 (1.319, 1.611)	<0.0001

Supplemental Figure 3. Receiver Operating Characteristic Curves for adapted MEWS, qSOFA, or UVA Criteria Added to Baseline Risk Model for Hospital Mortality Among Patients With Suspected Infection. Baseline risk is calculated using age, gender, HIV status and transfer status.



Supplemental Table 4. Model Estimates From Supplemental Figure 2 (Receiver Operating Characteristic Curves for adapted MEWS, qSOFA, or UVA Criteria as continuous variables added to Baseline Risk Model)					
	Parameter	Standard Error	Odds Ratio (95% CI)	P-Value	
MODEL 1 - baseline					
	Intercept	-1.4512	0.2946	---	<0.0001
	Age, per year	0.000945	0.00624	1.001 (0.989, 1.013)	0.88
	Gender (Male vs Female)	0.2349	0.1070	1.600 (1.052, 2.433)	0.03
	HIV (Yes vs No)	0.1595	0.1576	1.376 (0.742, 2.552)	0.31
	Transfer (Yes vs No)	-0.0534	0.1078	0.899 (0.589, 1.371)	0.62
MODEL 2 – adapted MEWS					
	Intercept	-3.1376	0.4087	---	<0.0001
	Age, per year	0.00506	0.00664	1.005 (0.992, 1.018)	0.45
	Gender (Male vs Female)	0.2819	0.1127	1.757 (1.130, 2.734)	0.01
	HIV (Yes vs No)	0.0696	0.1667	1.149 (0.598, 2.210)	0.68
	Transfer (Yes vs No)	-0.1503	0.1147	0.740 (0.472, 1.160)	0.19
	MEWS (per 1 point increase)	0.3797	0.0537	1.462 (1.316, 1.624)	<0.0001
MODEL 3 - qSOFA					
	Intercept	-2.1031	0.3311	---	<.0001
	Age, per year	0.00131	0.00647	1.001 (0.989, 1.014)	0.84
	Gender (Male vs Female)	0.2440	0.1105	1.629 (1.056, 2.513)	0.03
	HIV (Yes vs No)	0.1264	0.1630	1.288 (0.680, 2.439)	0.44
	Transfer (Yes vs No)	-0.1345	0.1127	0.764 (0.491, 1.188)	0.23
	qSOFA (per 1 point increase)	0.8381	0.1412	2.312 (1.753, 3.049)	<0.0001
MODEL 4 - UVA					
	Intercept	-2.4523	0.3442	---	<0.0001
	Age, per year	-0.00074	0.00658	0.999 (0.986, 1.012)	0.91
	Gender (Male vs Female)	0.1395	0.1128	1.322 (0.849, 2.057)	0.22
	HIV (Yes vs No)	-0.0493	0.1655	0.906 (0.474, 1.733)	0.77
	Transfer (Yes vs No)	-0.0988	0.1142	0.821 (0.525, 1.284)	0.39
	UVA (per 1 point increase)	0.3776	0.0524	1.459 (1.316, 1.617)	<0.0001