Supplementary Tables

Table A.

Table accessible from Department of Health document Gateway number: 12368 at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuida nce/DH_106495

The community assessment tools are part of a clinical package of care, which includes pathways that provide extra safety measures for people who are moderately unwell, but cannot be admitted to hospital at the time of triage.

These tools and pathways are for use only when high healthcare demand leads to the need for strict hospital admission triage in affected areas. They should not be used when emergency departments and acute admission units are working with their usual establishment of trained staff, and can operate their usual decision pathways, including providing hospital beds for those requiring admission.

Table B: Comparison of clinical features on hospital admission in children (<16 years) with asthma and non-asthma (n=480) $\,$

Outcome variable	Asthma cases	Non-asthmatics	Unadjusted OR	P value
	n=71 (14.8%)	n=409(85.2%)	(95% CI)	
Triage criteria A:				
severe respiratory				
distress	38 (53.5%)	309 (75.6%)	1.00	
No	33 (46.5%)	100 (24.5%)	2.68 (1.60-4.50)	<0.001
Yes				
Triage criteria B:				
increased respiratory				
rate	41 (57.8%)	256 (62.6%)	1.00	
No	30 (42.3%)	153 (37.4%)	1.22 (0.73-2.04)	0.438
Yes				
Triage criteria C:				
oxygen saturation				
≤92%	42 (59.2%)	299 (73.1%)	1.00	
No	29 (40.9%)	110 (26.9%)	1.88 (1.11-3.16)	0.018
Yes				
Triage criteria D:				
respiratory exhaustion				
No	71 (100.0%)	408 (99.8%)	1.00	
Yes	0 (0.0%)	1 (0.2%)	_*	-
Triage criteria E:				
Severe clinical				
dehydration				-
No	71 (100.0%)	403 (98.5%)	1.00	
Yes	0 (0.0%)	6 (1.5%)	_*	

Outcome variable	Asthma cases	Non-asthmatics	Unadjusted OR	P value
	n=71 (14.8%)	n=409(85.2%)	(95% CI)	
Triage criteria F:				
altered consciousness				
No	63 (88.7%)	364 (89.0%)	1.00	
Yes	8 (11.3%)	45 (11.0%)	1.03 (0.46-2.28)	0.948
Triage criteria G: other				
clinical concern				
No	65 (91.6%)	374 (91.4%)	1.00	
Yes	6 (8.5%)	35 (8.6%)	0.99 (0.40-2.44)	0.976
Dyspnoea				
No	43 (60.6%)	326 (79.7%)	1.00	
Yes	28 (39.4%)	83 (20.3%)	2.56 (1.50-4.36)	0.001
Required supplemental				
oxygen on admission				
No	44 (62.0%)	327 (80.0%)	1.00	
Yes	27 (38.0%)	82 (20.0%)	2.45 (1.43-4.19)	0.001

Table C: Comparison of clinical features on hospital admission in adults (>16 years) with asthma and non-asthma (n=1040)

Outcome variable	Asthma cases	Non-	Unadjusted	P value
	n=314	asthmatics	OR	
	(30.2%)	n=726	(95% CI)	
		(69.8%)		
Triage criteria A: severe				
respiratory distress				
No	84 (26.8%)	427 (58.5%)	1.00	
Yes	230 (73.3%)	299 (41.2%)	3.91 (2.93-	<0.001
			5.23)	

Outcome variable	Asthma cases	Non-	Unadjusted	P value
	n=314	asthmatics	OR	
	(30.2%)	n=726	(95% CI)	
		(69.8%)		
Triage criteria B: increased				
respiratory rate				
No	253 (80.6%)	538 (74.1%)	1.00	
Yes	61 (19.4%)	188 (25.9%)	0.69 (0.50-	0.025
			0.96)	
Triage criteria C: oxygen				
saturation ≤92%				
No	170 (54.1%)	458 (63.1%)	1.00	
Yes	144 (45.9%)	268 (36.9%)	1.45 (1.11-	0.007
			1.89)	
Triage criteria D:				
respiratory exhaustion				
No	302 (96.2%)	715 (98.5%)	1.00	
Yes	12 (3.8%)	11 (1.5%)	2.58 (1.13-	0.025
			5.92)	
Triage criteria E:				
Severe clinical dehydration				
No	255 (81.2%)	609 (83.9%)	1.00	
Yes	59 (18.8%)	117 (16.1%)	1.20 (0.85-	0.291
			1.70)	
Triage criteria F: altered				
consciousness				
No	305 (97.1%)	683 (94.1%)	1.00	
Yes	9 (2.9%)	43 (5.9%)	0.47 (0.23-	0.042
			0.97)	
Triage criteria G: other				
clinical concern				
No	282 (89.8%)	658 (90.6%)	1.00	
Yes	32 (10.2%)	68 (9.4%)	1.10 (0.71-	0.679

Outcome variable	Asthma cases	Non-	Unadjusted	P value
	n=314	asthmatics	OR	
	(30.2%)	n=726	(95% CI)	
		(69.8%)		
			1.71)	
Dyspnoea				
No	117 (37.3%)	459 (63.2%)	1.00	
Yes	197 (62.7%)	267 (36.8%)	2.89 (2.20-	<0.001
			3.81)	
Required supplemental				
oxygen on admission				
No	201 (64.0%)	513 (70.7%)	1.00	
Yes	113 (36.0%)	213 (29.3%)	1.35 (1.02-	0.034
			1.79)	

Table D: Effect on the observed association between asthma and severe outcomes on adjustment for the covariates that were independently associated with both exposure (asthma) and severe outcomes

Covariate adjusted for	Adjusted OR	p value
	(95% CI)	
Unadjusted OR	0.51 (0.36-0.72)	<0.001
Triage criteria A: severe respiratory distress	0.34 (0.24-0.49)	< 0.001
Triage criteria B: increased respiratory rate	0.53 (0.37-0.75)	< 0.001
Triage criteria C: oxygen saturation ≤92%	0.37 (0.26-0.54)	< 0.001
Triage criteria D: respiratory exhaustion	0.46 (0.32-0.66)	< 0.001
Triage criteria E: severe clinical dehydration	0.46 (0.32-0.66)	< 0.001
or clinical shock		
Triage criteria F: altered consciousness	0.54 (0.38-0.77)	0.001
Dyspnoea	0.38 (0.27-0.55)	< 0.001
Admission ≤4 days symptom onset	0.64 (0.43-0.95)†	0.029
Pre-admission inhaled corticosteroids	0.63 (0.42-0.94)†	0.024
Required supplemental oxygen on admission	0.37 (0.26-0.54)	< 0.001
In-hospital antibiotics	0.49 (0.35-0.70)	< 0.001
In-hospital oral/IV corticosteroids	0.32 (0.22-0.48)	< 0.001

† Crude OR changed by ≥10% towards 1