Supplementary file 1: missing data per patient category

DETERMINANTS	FEVER n=1136 (100%)	VOMITING/DIARRHOEA n=372 (100%)	DYSPNOEA n=257 (100%)
Patient characteristics			
Age	0	0	0
Gender (male)	0	0	0
Disease characteristics			
Parental concern	18 (1.6)	34 (9.1)	8 (3.1)
Duration of fever/ illness	175 (15.4)	40 (10.8)	22 (8.6)
Ill appaerance	48 (4.2)	28 (7.5)	25 (9.7)
Temperature (°C)	7 (0.6)	6 (1.6)	19 (7.4)
Tachypnoea	140 (12.3)	79 (21.2)	19 (7.4)
Tachycardia	106 (9.3)	34 (9.1)	18 (7.0)
Decreased oxygen saturation	286 (25.2)	237 (63.7)	8 (3.1)
Prolonged cap. refill time (peripheral)	41 (3.6)	48 (12.9)	37 (14.4)
Chestwall retractions	217 (19.1)		20 (7.8)
Diagnostics			
CRP bedside (ln)	419 (36.9)	277 (74.5)	210 (81.7)
Less eating	-	49 (13.2)	-
Decreased urine output	-	90 (24.2)	-
Dry mucous membranes	-	40 (10.8)	-
Sunken fontanel	-	86 (23.1)	-
Decreased turgor	-	66 (17.7)	-
Decreased tears	-	115 (30.9)	-
Thirsty	-	200 (53.8)	-
Sunken eyes	-	78 (21.0)	-
Vomiting	-	52 (14.0)	-
Coughing	-	-	33 (12.8)
Stridor	-	-	20 (7.8)
Nasal flairing	-	-	49 (19.1)
Groaning	-	-	62 (24.1)
Auscultation	-	-	16 (6.2)

0   no missing data
-      no relevant determinant regarding the presenting problem

Supplementary file 2: variable selection

Table 2.1: multivariable regression analysis in children with fever

DETERMINANTS	REVISITS *n=346*	
Patient characteristics *n=1136*	*OR* *(95% CI)*	*n/total (%)*
Age		
0-3m	1.23 (0.56-2.69)	12 (3.5)
3-6m	1.02 (0.57-1.84)	23 (6.6)
6-12m	1.35 (0.88-2.07)*	74 (21.3)
1-5y	0.96 (0.67-1.36)	175 (50.6)
>5y (REF)	*ref*	62 (17.9)
Age <1y	1.31 (0.96-1.77)*	109 (31.5)
Age <3y		
Age <5y	1.05 (0.74-1.49)	284 (82.1)
Gender (male)	1.24 (0.95-1.62)*	208 (60.1)
Disease characteristics		
Parental concern	1.73 (1.15-2.60)*	310 (89.6)
Duration of fever	1.00 (0.92-1.09)	*continuous*
Ill appearance	1.05 (0.74-1.48)	79 (22.8)
Temperature (°C)	1.07 (0.93-1.24)	*continuous*
Tachypnoea	1.19 (0.86-1.64)	105 (30.3)
Tachycardia	1.17 (0.85-1.61)	114 (32.9)
Decreased oxygen saturation	0.57 (0.08-4.28)	6 (1.7)
Prolonged cap. refill time (peripheral)	1.30 (0.77-2.19)	28 (8.1)
Chestwall retractions	1.82 (0.94-3.54)*	32 (9.2)
Diagnostics		
CRP bedside (ln)	1.00 (1.00-1.00)	*continuous*

*significant determinants (p<0.20)

Table 2.2: multivariable regression analysis in children with vomiting and diarrhoea

DETERMINANTS	REVISITS n=108	
Patient characteristics *n=372*	*OR* *(95% CI)*	*n/total (%)*
Age		
0-3m	2.54 (0.72-9.00)[*]	6 (5.6)
3-6m	2.10 (0.70-6.31)[*]	13 (12.0)
6-12m	3.03 (1.15-7.99)[*]	33 (30.6)
1-5y	1.61 (0.68-3.84)	44 (40.7)
>5y (REF)	*Ref*	12 (11.1)
Age <1y	1.59 (0.89-2.83)[*]	52 (48.1)
Age <3y	1.29 (0.47-3.51)	88 (81.5)
Age <5y	1.32 (0.43-4.12)	96 (88.9)
Gender (male)	1.08 (0.63-1.87)	60 (55.5)
Disease characteristics		
Parental concern	1.46 (0.65-3.30)	97 (89.8)
Duration of fever	1.06 (0.92-1.23)	*continuous*
Ill appaerance	1.89 (0.96-3.72)[*]	32 (29.6)
Temperature (°C)	1.28 (0.91-1.78)[*]	*continuous*
Tachypnoea	4.85 (2.19-10.72)[*]	35 (32.4)
Tachycardia	0.52 (0.20-1.38)[*]	12 (11.1)
Prolonged cap. refill time (peripheral)	0.83 (0.36-1.94)	17 (15.7)
Signs of dehydration	2.21 (1.08-4.52)[*]	
Diagnostics		
CRP bedside (ln)	1.01 (0.99-1.02)	*continuous*

[*]*significant determinants (p<0.20)*

Table 2.3: multivariable regression analysis in children with dyspnea

DETERMINANTS	REVISITS n=73	
Patient characteristics *n=257*	*OR* *(95% CI)*	*n/total (%)*
Age		
0-3m	2.59 (0.64-10.53)*	7 (9.6)
3-6m	1.40 (0.40-4.88)	9 (12.3)
6-12m	1.85 (0.56-6.07)	13 (17.8)
1-5y	1.64 (0.61-4.40)	36 (49.3)
>5y (ref)	*ref*	8 (11.0)
Gender (male)	1.55 (0.80-3.00)*	54 (74.0)
Disease characteristics		
Parental concern	1.08 (0.54-2.17)	52 (71.2)
Ill appaerance	0.79 (0.28-2.19)	10 (13.7)
Tachypnoea	1.52 (0.78-2.96)	42 (57.5)
Tachycardia	1.19 (0.55-2.55)	18 (24.7)
Decreased oxygen saturation	0.81 (0.11-5.79)	3 (4.1)
Chestwall retractions	0.81 (0.37-1.76)	34 (46.6)
Coughing	1.06 (0.44-2.52)	60 (82.2)
Stridor	1.18 (0.48-2.90)	20 (27.4)
Nasal flairing	0.85 (0.26-2.82)	10 (13.7)
Groaning	0.80 (0.22-2.88)	10 (13.7)
Auscultation	0.67 (0.34-1.32)	38 (52.1)
Diagnostics		
CRP bedside (ln)	1.16 (0.66-2.03)	*continuous*

*significant determinants (p<0.20)