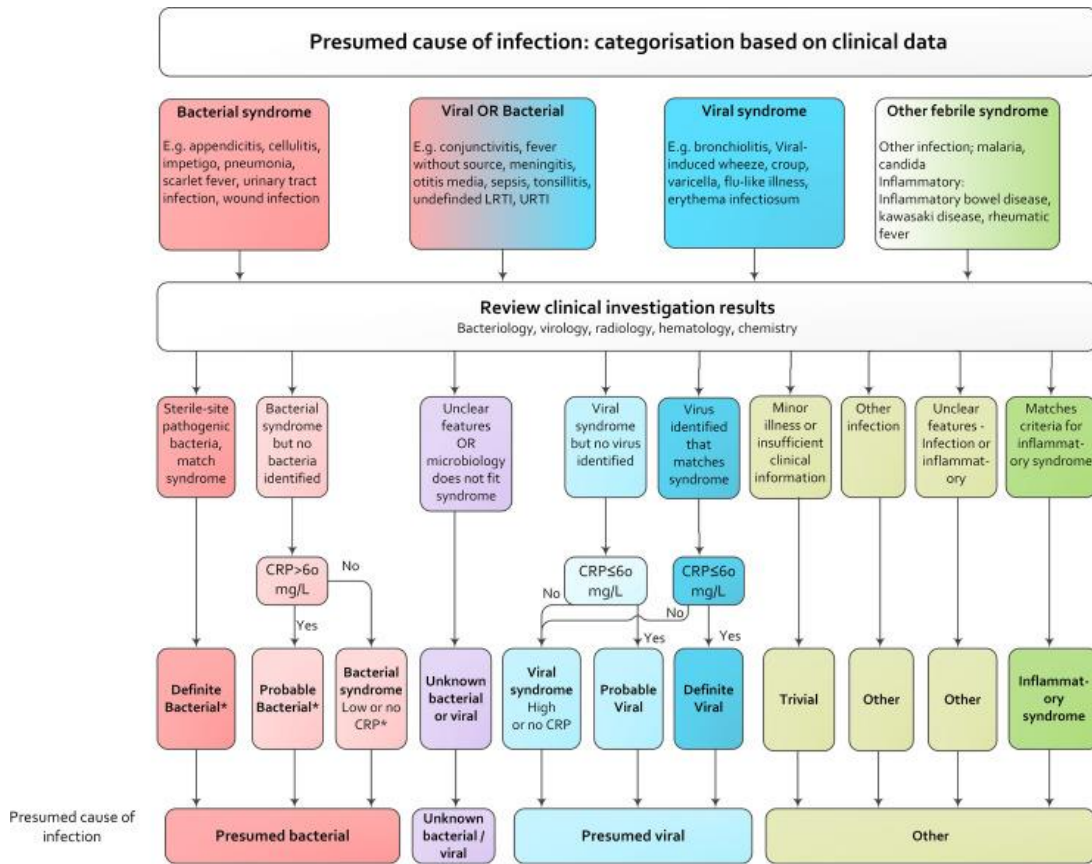


Appendices

Appendix A – Hospital characteristics

Hospital	City, country	Type of hospital	Annual paediatric ED visits	Period of active data collection
Erasmus MC – Sophia Children’s Hospital (N=1683)	Rotterdam, the Netherlands	University	<10,000	Whole month
Canisius Wilhelmina Ziekenhuis (N=423)	Nijmegen, the Netherlands	Teaching	<10,000	Whole month
Medizinische Universität Graz (N=2241)	Graz, Austria	University	10,000-30,000	10 days/month
St. Mary’s Hospital (N=5714)	London, UK	University	>30,000	Whole month
Hospital Clínico Universitario (N=3877)	Santiago de Compostela, Spain	University	>30,000	14 days/month
Children’s Clinical University Hospital (N=9000)	Riga, Latvia	University	>30,000	Whole month
Alder Hey Children’s Hospital (N=1623)	Liverpool, UK	University	>30,000	7 days/month
Dr. von Hauner Children’s Hospital (N=1173)	Munich, Germany	University	10,000-30,000	7 days/month
Great North Children’s Hospital (N=3854)	Newcastle, UK	University	>30,000	14 days/month

Appendix B – Phenotyping Algorithm



*In case of viral co-infection, bacterial infection got priority

Appendix C – Triage urgency categories per ED setting

	Low* (N=16,683, 56%)	Intermediate (N=8130, 28%)	High* (N=3613, 12%)	Missing (N=1162, 4%)
London (n=5714)	1523 (27)	2182 (38)	1978 (35)	31 (0.5)
Liverpool (n=1623)	1053 (65)	288 (18)	262 (16)	20 (1)
Newcastle (n=3854)	2663 (69)	620 (16)	38 (1)	533 (14)
Rotterdam (n=1683)	377 (22)	949 (56)	297 (18)	60 (4)
Santiago de Compostela (n=3877)	3444 (89)	419 (11)	14 (0.4)	/
Graz (n=2241)	1522 (68)	433 (19)	125 (6)	161 (7)
Riga (n=9000)	5133 (57)	2996 (33)	868 (10)	3
Munich (n=1173)	660 (56)	158 (14)	13 (1)	342 (29)
Nijmegen (n=423)	308 (73)	85 (20)	18 (4)	12 (3)

Absolute numbers and percentages (%) are given

*Low urgency consists of the MTS categories standard (55%) and non-urgent (0.4%)

*High urgency consists of the MTS categories very urgent (12%) and immediate (0.7%)

Appendix D – Patient characteristics stratified by presenting symptom groups

	Neurological (N=237)	Respiratory (N=8476)	Gastrointestinal (N=1953)	Other (N=3473)
Age* (years)	2.0 (1.4-3.3)	2.7 (1.3-4.9)	3.0 (1.3-6.3)	2.6 (1.1-5.4)
Gender (boys)	128 (54)	4621 (55)	1021 (52)	1843 (53)
Visit hours (out of office)	168 (71)	5975 (71)	1311 (67)	2398 (69)
Referral (self-referred)	102 (43)	6029 (71)	1198 (61)	2301 (66)
Previous medical care	50 (21)	2083 (25)	471 (24)	777 (22)
Previous antibiotic treatment	19 (8)	917 (11)	120 (6)	430 (12)

Absolute numbers and percentages (%) are given

* Median and (IQR 25-75)

Appendix E – Association between presenting symptoms and management, unadjusted and adjusted odds ratio's

	Unadjusted OR	aOR
Neurological		
Laboratory blood test	0.5 (0.4-0.7)	1.3 (0.9-1.8)
Imaging	0.9 (0.6-1.4)	1.8 (1.1-2.9)
Admission	1.9 (1.4-2.6)	1.9 (1.4-2.7)
Respiratory		
Laboratory blood test	0.6 (0.5-0.6)	0.6 (0.5-0.7)
Imaging	1.5 (1.3-1.6)	1.8 (1.6-2.0)
Admission	0.5 (0.5-0.6)	0.6 (0.5-0.7)
Gastrointestinal		
Laboratory blood test	1.0 (0.8-1.1)	1.2 (1.1-1.4)
Imaging	0.9 (0.8-1.1)	1.1 (0.9-1.3)
Admission	1.3 (1.1-1.4)	1.4 (1.2-1.6)

Other presenting symptoms group as reference group.

Adjusted for age, gender, referral status, previous medical care, previous antibiotic use, visiting hours, ED setting.

Appendix F – Association between presenting symptoms and management stratified for ED settings with low and high prevalence of low urgent triaged children

4 ED settings with low prevalence of low urgent triaged children (N=6667)		
	Unadjusted OR	aOR
Neurological		
Laboratory blood test	0.7 (0.4-1.1)	2.1 (1.1-3.8)
Imaging	1.9 (1.0-3.4)	4.0 (2.0-7.8)
Admission	1.7 (1.0-3.0)	2.5 (1.3-4.5)
Respiratory		
Laboratory blood test	0.6 (0.6-0.7)	0.7 (0.6-0.8)
Imaging	1.7 (1.4-1.9)	1.9 (1.6-2.2)
Admission	0.6 (0.5-0.7)	0.7 (0.6-0.8)
Gastrointestinal		
Laboratory blood test	1.1 (1.0-1.3)	1.6 (1.3-1.9)
Imaging	0.9 (0.7-1.2)	1.1 (0.9-1.4)
Admission	1.3 (1.0-1.5)	1.5 (1.2-1.8)

Other presenting symptoms group as reference group.

Adjusted for age, gender, referral status, previous medical care, previous antibiotic use, visiting hours, ED setting.

5 ED settings with high prevalence of low urgent triaged children (N=7472)		
	Unadjusted OR	aOR
Neurological		
Laboratory blood test	0.7 (0.5-1.0)	0.9 (0.6-1.5)
Imaging	0.8 (0.4-1.5)	1.0 (0.5-2.0)
Admission	2.2 (1.6-3.2)	1.7 (1.1-2.5)
Respiratory		
Laboratory blood test	0.6 (0.5-0.7)	0.4 (0.4-0.5)
Imaging	1.4 (1.2-1.8)	1.6 (1.3-2.0)
Admission	0.5 (0.4-0.6)	0.6 (0.5-0.7)
Gastrointestinal		
Laboratory blood test	0.9 (0.8-1.1)	0.8 (0.6-1.0)
Imaging	1.0 (0.8-1.4)	1.0 (0.7-1.4)
Admission	1.3 (1.1-1.6)	1.2 (1.0-1.6)

Other presenting symptoms group as reference group.

Adjusted for age, gender, referral status, previous medical care, previous antibiotic use, visiting hours, ED setting.

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