

## Appendix 1: Definition of low-acuity PED visits

Number of PED visits according to the criteria used to define low-acuity: Urgency (ATS), complexity (resources used) and discharge disposition.

Grey cells are low-acuity visits according to our definition:

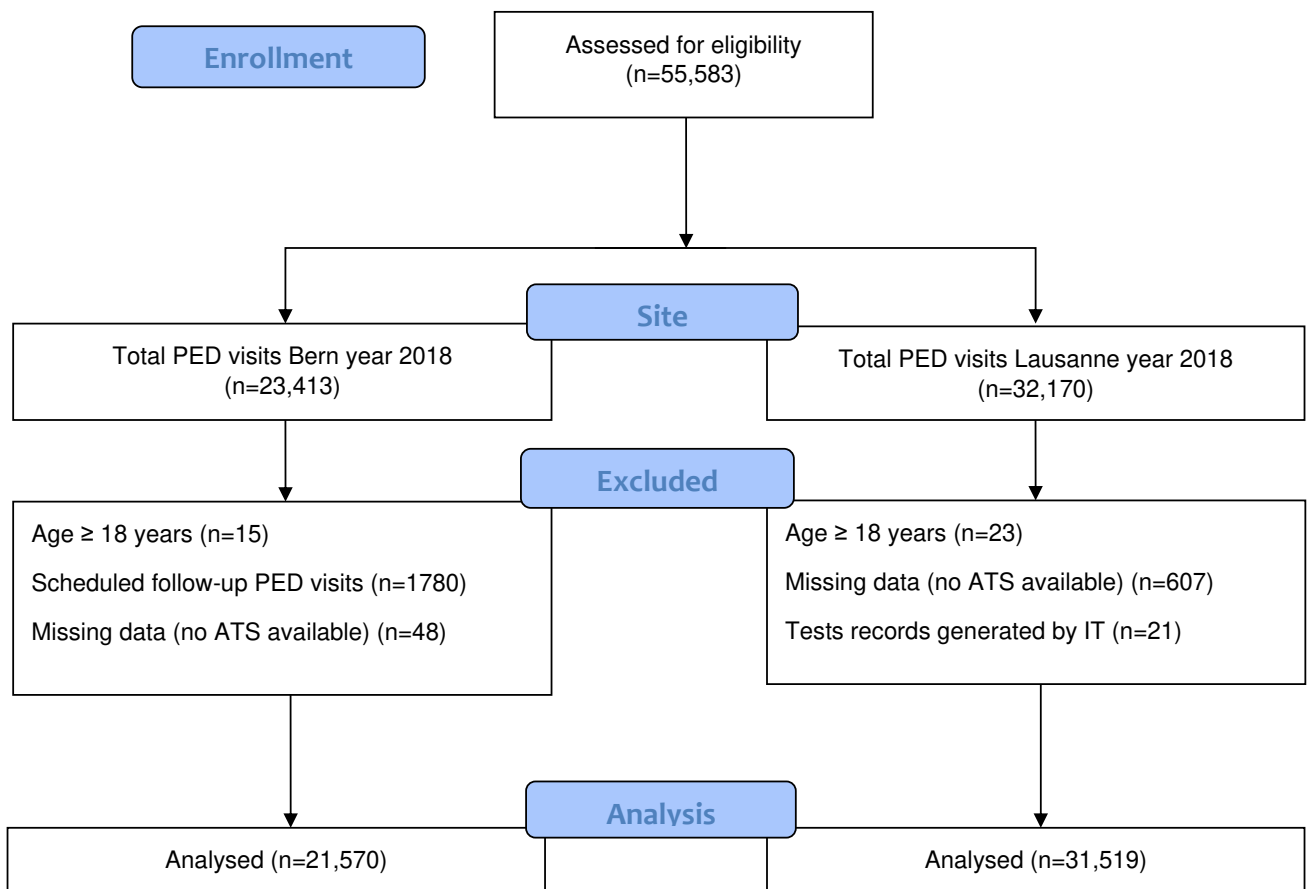
- i) triage level 4 or 5 on Australasian Triage Scale (ATS) and
- ii) neither imaging nor laboratory testing performed and
- iii) home discharge home

ATS: Australasian Triage Scale

PED: Paediatric Emergency Department.

Triage level and maximum waiting time		Paraclinical tests performed: None		Paraclinical tests performed: Imaging only		Paraclinical tests performed: Laboratory only		Paraclinical tests performed: Laboratory and imaging	
		Discharge home		Discharge home		Discharge home		Discharge home	
		Yes	No	Yes	No	Yes	No	Yes	No
<b>ATS 1</b>	Immediate	10	30	5	3	18	59	10	45
<b>ATS 2</b>	10 minutes	748	490	235	199	283	602	218	406
<b>ATS 3</b>	30 minutes	4 206	747	791	263	1 187	612	494	476
<b>ATS 4</b>	1 hour	10 210	419	1 846	118	1 773	265	475	250
<b>ATS 5</b>	2 hours	18 346	427	4 088	78	2 126	224	178	129

## Appendix 2: Flow diagram of PED visits analysed



### Appendix 3: Comparison of complex<sup>1</sup> and simple<sup>2</sup> low-acuity definition for PED visits

1 Complex definition of low-acuity: Triage ATS 4 or 5, no laboratory nor imaging tests and no hospital admission

2 Simple definition of low-acuity: Triage ATS 4 or 5

ATS: Australasian Triage Scale

PED: Paediatric Emergency Department.

#### Characteristics of low-acuity PED visits depending on the definition of low-acuity

Characteristics	All PED visits, n = 53 089		Low-acuity PED visits using complex definition <sup>1</sup> , n = 28 556 (54%)		Low-acuity PED visits using simple definition <sup>2</sup> , n = 40 952 (77%)	
<b>Median age (years, IQR)</b>	4	(0.5 - 7.5)	3.2	(0.42-6)	4.2	(0.74 - 7.7)
<b>Age ≤ 5 years</b>	31 777	(60%)	18 857	(66%)	23 778	(58%)
<b>Gender: female</b>	24 201	(46%)	12 988	(45%)	18 982	(46%)
<b>Week-end visits</b>	16 656	(31%)	9 412	(33%)	12 950	(32%)
<b>Evening visits (6pm - 9pm)</b>	14 379	(27%)	7 892	(28%)	10 898	(27%)
<b>Night visits (10pm - 8am)</b>	9 195	(17%)	5 319	(19%)	6 687	(16%)
<b>Residency ≤ 5km from PED</b>	30 112	(57%)	17 871	(63%)	25 065	(61%)
<b>Site: Lausanne</b>	31 519	(59%)	19 490	(68%)	27 598	(67%)

Values are median (IQR: interquartile range) or number (%). PED: Paediatric Emergency Department.

1 Complex definition of low-acuity visits: Triage ATS 4 or 5, no laboratory nor imaging tests and no hospital admission

2 Simple definition of low-acuity visits: Triage ATS 4 or 5

## Appendix 4: Analysis excluding neonates (< 1 month old)

Characteristics of low- and high-acuity PED visits excluding neonates (< 1 month old) from logistic regression model adjusted for all covariables

Characteristics	Low-acuity PED visits n = 28 550		High acuity PED visits n = 23 690		p-value§	Adjusted Odds Ratio (95% CI)	
<b>Age ≤ 5 years</b>	18 861	(66%)	12 087	(51%)	< 0.001†	2.00	(1.93 – 2.08)
<b>Gender: female</b>	12 985	(45%)	10 817	(46%)	0.683†	1.00	(0.96 – 1.03)
<b>Week-end visits</b>	9 410	(33%)	6 962	(29%)	< 0.001†	1.14	(1.10 – 1.18)
<b>Evening visits (6pm - 9pm)</b>	7 891	(28%)	6 264	(26%)	0.002†	1.18	(1.14 – 1.24)
<b>Night visits (10pm - 8am)</b>	5 318	(19%)	3 651	(15%)	< 0.001†	1.33	(1.27 – 1.40)
<b>Residency ≤ 5km from PED</b>	17 867	(63%)	11 779	(50%)	< 0.001†	1.29	(1.24 – 1.34)
<b>Site: Lausanne</b>	19 487	(68%)	11 676	(49%)	< 0.001†	2.20	(2.11 – 2.29)

NA: not applicable. PED: Paediatric Emergency Department. Values are median (IQR: interquartile range) or number (%).

§p-value for comparison of acuity

†Pearson's chi-square test

Definition of low-acuity visits: Triage ATS 4 or 5, no laboratory nor imaging tests and no hospital admission