

## SUPPLEMENTARY FILE 2

The following variables were calculated or modified:

- Triage levels were considered equal between hospitals. Non-urgent triage levels (blue and green) were merged into one triage level, because of the low number of ED patients and events in the triage level blue.
- The Manchester Triage System (MTS) was used in the tertiary care centre, and consisted of 51 possible chief complaints. The Dutch Triage Standard (NTS) consisted of 50 possible triage chief complaints and was used in the two urban hospitals. The MTS and NTS were merged into one chief complaints list. The MTS, NTS and the merged chief complaints list are shown below. If chief complaints did not match, a new chief complaint was made. In total the merged list contained 51 different chief complaints. The top ten chief complaints were used in the present study to adjust the primary associations of interest (feeling unwell; abdominal pain; dyspnea; chest pain; extremity problems; collapse; trauma; palpitations; wounds; headache, and a miscellaneous category containing all the other chief complaints.
- Treating specialty was categorised to minimize the number of categories and use as potential confounder: surgical (i.e. surgery, orthopaedics, ophthalmology, urology, ear-nose-throat), medical (internal medicine, cardiology, neurology, gastroenterologist, psychiatry, and remaining specialties) and emergency medicine if no other specialty had been involved. Specialities were assigned before ED treatment during patient registration. Self-referred patients and critically ill patients are generally assigned to the Emergency Medicine. If a patient is referred by a general practitioner, he/she is often referred to a specific specialty.

<b>Merged chief complaints (N=51)</b>	<b>MTS chief complaints (N=51)</b>	<b>NTS chief complaints (N=50)</b>
Abdominal pain	Abdominal pain in adults Abdominal pain in children	Abdominal pain in adults Abdominal pain in children
Abscesses & local infections Allergy, bites & stings	Abscesses and local infections Allergy Bites and stings	Allergic reaction and stings
Apparently drunk	Apparently drunk	
Assault	Assault	
Asthma	Asthma	
Back pain	Back pain	Back pain
Behaving strangely & suicidal	Behaving strangely	Behaving strangely or suicidal
Breast infection		Breast infection
Burns & scalds	Burns and scalds	Burns and scalds
Chest pain	Chest pain	Chest pain
Collapse	Collapsed adult	Collapse Dizziness

**SUPPLEMENTARY FILE 2**

Constipation		Constipation
Coughing		Coughing
Crying baby	Crying baby	
Dental problems	Dental problems	Dental problems
Diabetes	Diabetes	Diabetes
Diarrhea & vomiting	Diarrhea and vomiting	Diarrhea Vomiting
Dyspnea	Shortness of breath in adults Shortness of breath in children	Shortness of breath
Ear problems	Ear problems	Ear problems
Exposure to chemicals	Exposure to chemicals	
Extremity problems	Limb problems	Arm problems General/limb trauma Leg problems
Eye problems	Eye problems	Eye problems
Facial problems	Facial problems	Facial trauma Nosebleed
Falls	Falls	
Feeling unwell	Unwell adult Unwell child	Fever in adults Fever in children Neurological failure Unwell adult Unwell child
Fits	Fits	Fits
Foreign body	Foreign body	Foreign body
Gastro-intestinal (GI) bleeding	Gastro-intestinal (GI) bleeding	
Genital problems	Testicular pain	Genital problems
Headache	Headache	Headache
Implantable Cardioverter Defibrillator (ICD)		Implantable Cardioverter Defibrillator (ICD)
Irritable child	Irritable child	
Limping child	Limping child	
Major incidents – primary	Major incidents – primary	
Mental illness	Mental illness	
Near-drowning		Near-drowning
Neck pain	Neck pain	Neck problems Neck trauma
Overdose & poisoning	Overdose and poisoning	Poisoning
Palpitations	Palpitations	Palpitations
Per vaginum (VP) bleeding	Per vaginum (VP) bleeding	Per vaginum (VP) bleeding
Pregnancy	Pregnancy	Childbirth
Rashes	Rashes	Rashes
Rectal problems		Rectal problems
Self-harm	Self-harm	
Sexually acquired infection	Sexual acquired infection	
Throat problems	Sore throat	Throat problems
Trauma	Head injury Torso injury Major trauma	Head trauma Thorax trauma Abdominal trauma Back trauma
Urinary problems	Urinary problems	Urinary problems
Worried parent	Worried parent	
Wounds	Wounds	Wounds

Abbreviations: MTS=Manchester Triage System, NTS= Dutch Triage Standard, N= number