## Additional file 4. Team triage and similar interventions

<table>
<thead>
<tr>
<th>Author</th>
<th>Year, reference Country</th>
<th>Study design</th>
<th>Size of emergency dept</th>
<th>Intervention (I) Control (C)</th>
<th>Outcome</th>
<th>Results Intervention (I) Control (C) Difference (D)</th>
<th>Study quality and relevance Comments</th>
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</table>
| Holroyd BR et al  | 2007 [40] Canada        | RCT          | 55 000/year             | I: Triage physician (initiate, assist triage, consult per telephone, discharge) N=2 831  
C: No triage physician N=2 887 | LOS                  | I: 4 hours 21 minutes C: 4 hours 57 minutes D: 36 minutes p<0.001  
I: 5.4% C: 6.6% D: 1.2% p<0.02 | Moderate  
Shorter LOS and fewer LWBS with triage physician  
High staff satisfaction |
| Subash F et al    | 2004 [41] Northern Ireland | RCT          | 50 000/year             | I: Team triage 9 am–12 am (physician + nurse in triage) N=530  
C: No team triage N=498 | LOS (during 9 am–12 am)                  | I: 37 minutes C: 82 minutes D: 45 minutes p<0.057  
Time to x-ray I: 11.5 minutes C: 44 minutes p<0.029  
Time to analgesia I: 13 minutes C: 37.5 minutes p<0.04 | Low  
Shorter LOS and time to x-ray with team triage |
| Travers JP et al  | 2006 [42] Singapore     | Observational study Prospective w retrospective control. 10 days with team triage and 10 days without team triage Only triage category 3 | Size not described | I: Senior emergency physician in triage with nurse (10 am–4 pm) N=290  
C: No emergency physician in triage N=286 | WT to see doctor in treatment area (triage category 3) | I: 19 minutes C: 35.5 minutes D: 16.5 minutes p<0.05 | Low  
Shorter WT with physician in triage  
Low numbers |
| Richardson JR et  | 2004 [43]               | Observational study Prospective retrospective control. | 39 000/year             | I: Senior emergency physician in triage (to initiate treatment, order  
Triage category 3) | WT to see doctor within thresholds  
Triage category 3 | I: 78% C: 67% p>0.0001 | Low  
Shorter WT with physician in |
<table>
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</table>
| Australia        | Three months before and 3 months after intervention | x-ray and lab and sometimes discharge)  
N=2 193  
C: No emergency physician in triage  
N=1 991  
Triage category 4  
LWBS  
Staff satisfaction  
N=2 193  
C: No emergency physician in triage  
N=1 991  
Triage category 4  
LWBS  
Staff satisfaction  | I: 73%  
C: 53%  
p<0.001  
I: 5.1%  
C: 6.3%  
D: 1.2%  
p<0.024  
86% positive | triage |
| Partovi SN et al 2001 [44] US | Prospective Observational study  
Eight Mondays 9 am to 9 pm with and 8 Mondays without team triage | 52 000/year Admission rate 16%  
I: With additional senior physician in triage (to order diagnostic studies, fluid, discharge direct from triage)  
N=920  
C: Without senior physician in triage  
N=841  
LOS  
LWBS  
Staff satisfaction  | I: 363 minutes  
C: 445 minutes  
D: 82 minutes  
Medel: -82 minutes  
(95% CI = -111 to -54 minutes)  
I: 7.9%  
C: 14.7%  
D: 6.8%  
p=0.068 | Moderate  
Shorter LOS with team triage  
Fewer LWBS with team triage |
| Grant S et al 1999 [45] Australia | Observational study. Prospective vs retrospective control  
3 months before and 3 months after intervention | 40 000/year  
N=10 691  
C: Regular triage  
N=10 476  
WT to see doctor (median)  
LWBS  
(Los numbers (%))  
LOS (median)  | I: 32 minutes  
C: 50 minutes  
D: 20 minutes  
p<0.001  
I: 59%  
C: 39%  
p=0.001  
I: 518 (4.9%)  
C: 685 (6.4%)  
D: 1.5%  
NS  
I: 3.2 hours  
C: 3.2 hours  
D: 0  
NS | Moderate  
Shorter WT with rapid assessment team  
Fewer LWBS  
Same LOS |
LOS = length of stay; WT = waiting time; LWBS = left without being seen;