Appendix F: GRADE tables

Table 7: Clinical evidence profile: Presence of a case manager versus usual care

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Presence of a case manager versus usual care	Control	Relative (95% CI)	Absolute		
Mortality (follow-up in-hospital)												
1	observational studies	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	3/152 (2%)	1.9%	RR 1.07 (0.28 to 4.08)	1 more per 1000 (from 14 fewer to 59 more)	⊕OOO VERY LOW	CRITICAL

[1] All non-randomised studies automatically downgraded due to selection bias. Studies may be further downgraded by 1 increment if other factors suggest additional high risk of bias, or 2 increments if other factors suggest additional very high risk of bias

[2] Downgraded by 1 increment if the confidence interval crossed 1 MID or by 2 increments if the confidence interval crossed both MIDs.

Table 8: Clinical evidence profile: Creation of surge capacity versus usual care

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Creation of surge capacity versus usual care	Control	Relative (95% CI)	Absolute		
Mortality (follow-up in-hospital)												
1	observational studies	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	10/345 (2.9%)	3%	RR 0.97 (0.45 to 2.12)	1 fewer per 1000 (from 16 fewer to 34 more)	⊕OOO VERY LOW	CRITICAL
Length of stay (follow-up in-hospital; Better indicated by lower values)												

1	observational studies	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	345	537	-	MD 1 higher (0.7 lower to 2.7 higher)	⊕OOO VERY LOW	IMPORTANT

[1] All non-randomised studies automatically downgraded due to selection bias. Studies may be further downgraded by 1 increment if other factors suggest additional high risk of bias, or 2 increments if other factors suggest additional very high risk of bias
[2] Downgraded by 1 increment if the confidence interval crossed 1 MID or by 2 increments if the confidence interval crossed both MIDs.

Appendix G: Excluded clinical studies

Table 9: Studies excluded from the clinical review

Study	Exclusion reason
Anon2015J[1]	News article
Achour 2015[2]	Editorial
Ashcraft 2001[3]	Study design (descriptive)
Asplin 2006[4]	Modelling paper containing no relevant clinical data. Methodological study
Association of women's health 2012[5]	Study design (descriptive)
Atack 2012[6]	Incorrect interventions. Staff training outcomes
Aylwin 2006[7]	Study design (cross-sectional)
Bachman 2014[8]	Unable to locate a copy
Back 2010[9]	Focus on evacuation. Systematic review: literature search not sufficiently rigorous
Baker 2009[10]	Study design (descriptive)
Bar-el 2013[11]	Study design (descriptive)
Barishansky 2009[12]	Study design (descriptive)
Belmont 2004[13]	Study design (descriptive)
Bissell 2004[14]	Incorrect interventions. No escalation measures - only comparison of mortality from several disasters
Bland 2007[15]	Incorrect interventions. Training document
Brady 2006[16]	News article
Branson 2008[17]	Literature review
Brazle 2001[18]	Study design (descriptive)
Brice 2007[19]	Study design (descriptive)
Buono 2007[20]	Pre-hospital triage with no hospital outcomes
Burrington-brown 2002[21]	Study design (descriptive)
Challen 2006[22]	Incorrect interventions. Theoretical escalation measure
Charney 2012[23]	Not review population. Paediatrics
Chase 2012[24]	Modelling paper containing no relevant clinical data. Forecasting surge events
Chenoweth 2006[25]	News article
Cheung 2012[26]	Modelling paper containing no relevant clinical data. Comparison of 2 influenza specific triage tools
Cheung 2012[27]	Modelling paper containing no relevant clinical data. Comparison of 2 influenza specific triage tools
Christian 2012[28]	Study design (case study)
Collins2016[29]	Incorrect population - surgical
Cryer 2010[30]	Incorrect interventions. Mass casualty Incident - all interventions and outcomes were pre-hospital
Culley 2014[31]	Systematic review: no papers of interest
Curcio 2010[32]	No escalation measure
Davis 2005[33]	Cross-sectional

Study	Exclusion reason
Dayton 2008[34]	Study design (cross-sectional)
Disaster response 2007[35]	Study design (descriptive)
Downey 2010[36]	No protocol outcomes reported
Doyle 2006[37]	Modelling paper containing no relevant clinical data. Vaccination strategies
Ecri institute 2008[39]	Library service unable to obtain a copy
Epley 2006[41]	Evacuation co-ordination
Erich 2007[42]	News article
Fagbuyi 2011[43]	Not review population. Paediatric hospital (treats some adults but not stated how many, unlikely to be 75%)
Farrar 2010[44]	Study design (descriptive)
Fawcett 2000[45]	Modelling paper containing no relevant clinical data. Methodological study
Fineberg 2014[46]	Study design (descriptive)
Franc 2015[47]	Modelling paper containing no relevant clinical data. Methodological study
Gabler 2013[48]	No escalation measure
Gebbie 2007[49]	Study design (descriptive)
Glick 2007[50]	Study design (descriptive)
Goddard 2006[51]	Study design (descriptive)
Gold 2005[52]	Study design (descriptive). Incorrect interventions. Evacuation following disaster
Golob 2005[53]	Study design (descriptive)
Goodacre 2013[55]	Non-comparative pilot study
Goodacre 2015[54]	Protocol and non-comparative pilot study
Gray 2007[56]	Study design (descriptive)
Hall 2013[57]	Study design (case study)
Hammad 2012[58]	Literature review
Hammond 2005[59]	Study design (descriptive)
Hampton 2007[60]	News article
Hanley 2008[61]	Incorrect interventions. Staff training outcomes
Hick 2004[62]	Literature review
Hirshberg 2005[64]	Modelling paper containing no relevant clinical data. Incorrect population: assessing trauma workload
Hirshberg 2010[63]	Modelling paper containing no relevant clinical data. Incorrect population: assessing trauma workload
Hoard 2005[65]	Modelling paper containing no relevant clinical data. Methodological study
Hsu 2004[66]	Systematic review: no papers of interest
Hsu 2004[67]	Systematic review: no papers of interest
Hupert 2007[68]	Modelling paper containing no relevant clinical data. Incorrect population: exclusively trauma care
Jenkins 2008[70]	Literature review
Jha 2016[71]	Brief report; no protocol outcomes reported
Kako 2012[72]	Systematic review: no papers of interest

Study	Exclusion reason
Kallman 2011[73]	Study design (descriptive)
Kanno 2006[74]	Modelling paper containing no relevant clinical data. No escalation measure
Kanter 2015[75]	Modelling paper containing no relevant clinical data. Assessing the effect of triage predictor performance on mortality.
Kelen 2009[76]	Modelling paper containing no relevant clinical data. No relevant outcome
Kleber 2013[78]	Staff training outcomes
Koh 2006[79]	Literature review
Kwok 2015[81]	No outcomes of interest
Lam 2006[82]	Literature review
Lee 2000[83]	No protocol outcomes
Lindsey 2005[84]	Study design (descriptive)
Lynch 2009[85]	Study design (descriptive)
Maloney 2007[86]	Not review population. Paediatric
Mathias 2009[87]	News article
Matteson 2006[88]	Incorrect interventions. Vaccination clinic
Maunder 2010[89]	Staff training outcomes
Mechem 2007[90]	Library services unable to obtain a copy
Menon 2005[91]	Non-comparative study
Michaels 2013[92]	Case series
Morton 2015a[93]	Systematic review: No eligible papers
Moseley 2010[94]	Modelling paper containing no relevant clinical data. No relevant outcomes
Myles 2012[95]	Study design (diagnostic accuracy)
Nager 2009[96]	Modelling paper containing no relevant clinical data. No relevant outcomes
Nap 2007[98]	Statistical model - antiviral intervention
Nap 2008[97]	Modelling paper containing no relevant clinical data. No relevant outcomes
Nishizawa 2016[99]	Incorrect intervention
O'connor 2004[100]	Study design (descriptive)
O'connor 2006[101]	Study design (news article)
O'keefe 2004[102]	Study design (descriptive)
Olafson 2015[103]	Non-comparative study
Patrick 2008[104]	Incorrect intervention (scheduling of appointments)
Paul 2006[105]	Incorrect population (surgical)
Peleg 2009[106]	Study design (descriptive)
Perrin 2006[107]	Study design (descriptive)
Perry 2006[108]	Study design (descriptive)
Pershad 2012[109]	Not review population. Paediatric
Peters 2013[110]	Incorrect interventions. No escalation measure
Posner 2003[111]	No escalation measure
Powell 2012[112]	Study design (descriptive)
Powers 2007[113]	Library service unable to locate a copy

Study	Exclusion reason
Roccaforte 2007[114]	Literature review
Romano 2005[115]	Study design (escalation)
Roth 2009[116]	Study design (descriptive)
Rozovsky 2002[118]	Study design (descriptive)
Rubin 2010[119]	Literature review
Rutter 2014[120]	Not review population. Measures surge at primary care facilities
Sanchez 2007[121]	Study design (descriptive)
Sanchez 2007[122]	Study design (descriptive)
Satterthwaite 2012[123]	No extractable data
Savoia 2009[125]	Systematic review: no papers of interest
Savoia 2013[124]	Systematic review: no papers of interest
Scarfone 2011[126]	Not review population. Paediatric
Schull 2006[127]	Study design (case study)
Scott 2011[128]	No escalation measure
Shahpori 2011[129]	Modelling paper containing no relevant clinical data. Incorrect comparison: influenza triage tool in regional population and influenza population
Sheeley 2007[130]	Conference abstract
Shih 2012[131]	Non-comparative study
Sloan 2011[132]	Study design (descriptive)
Smith 2010[133]	Study design (descriptive)
Smith 2014[134]	Study design (descriptive)
Sobieraj 2007[135]	Modelling paper containing no relevant clinical data. Incorrect population: does not account for non-influenza patients competing for resources
Soremekun 2011[136]	Modelling paper containing no relevant clinical data. No relevant outcomes
Spaulding 2012[137]	Non-comparative study
Stein 2008[138]	Incorrect interventions. Training document
Stein 2012[139]	Modelling paper containing no relevant clinical data. Methodological study
Steinhauer 2002[140]	Study design (descriptive)
Stukel 2008[141]	No escalation measure
Tawfik 2014[142]	No escalation measure
Taylor 2003[144]	Study design (descriptive)
Taylor 2006[143]	Case series
Tham 2004[145]	Study design (cross-sectional)
Timbie 2012[146]	Systematic review: all relevant papers ordered for assessment
Timbie 2012[146]	Systematic review: no papers of interest
Tsai 2004[147]	Study design (cross-sectional)
Upshur 2005[148]	Study design (descriptive)
Utley 2011[149]	Modelling paper containing no relevant clinical data. Model inputs no clearly defined
Van genugten 2003[150]	Statistical model - antiviral and vaccination intervention
Verni 2012[151]	Study design (descriptive)

Study	Exclusion reason
Vidondo 2009[152]	Modelling paper containing no relevant clinical data. Incorrect intervention: Influenza specific
Voelker 2006[153]	News article
Watson 2013[154]	Systematic review: methods are not adequate/unclear
Wilgis 2008[155]	Study design (descriptive)
Williams 2008[157]	Systematic review: no papers of interest
Williams 2015[156]	Modelling paper containing no relevant clinical data. Non-comparative study
Wingate 2007[158]	Study design (descriptive)
Wu 2013[159]	Systematic review: no papers of interest
Wyatt 2003[160]	Study design (descriptive)
Wynn 2012[161]	Study design (descriptive)
Zane 2004[162]	Study design (descriptive)
Zhou 2011[163]	Modelling paper containing no relevant clinical data. No escalation measure

Appendix H: Excluded health economic studies

No relevant studies identified.