eAppendix

eAppendix 1. Search strategy and keywords

AND ((((("Simulation Training"[Mesh]) OR "Manikins"[Mesh])) OR ((Patient Simulation*[Title/Abstract] OR Simulation Training[Title/Abstract] OR Manikin*[Title/Abstract] OR Mannequin*[Title/Abstract] OR Interactive Learning[Title/Abstract])))
and topic emergency medicine ((((("Emergency Service, Hospital"[Mesh]) OR "Emergency Medicine"[Mesh]) OR "Emergency Medical Services"[Mesh]) OR ((Hospital Emergency Service*[Title/Abstract] OR Emergency Department*[Title/Abstract] OR Emergency Unit*[Title/Abstract] OR Emergency Ward*[Title/Abstract] OR Emergency Room*[Title/Abstract] OR Trauma Center*[Title/Abstract] OR Trauma Centre*[Title/Abstract] OR Emergency Medicine[Title/Abstract] OR Emergency Medical Service*[Title/Abstract] OR Prehospital Emergency Care[Title/Abstract]))))
for the intervention.

Concept 1:		
Free text	**PubMed and Embase thesaurus**	
Patient Simulation* Simulation Training Manikin* Mannequin* Interactive Learning Crash test dumm*	**MeSH**	**EmTree**
	Patient Simulation Simulation Training Manikins	Patient Simulation Simulation training Manikin

Concept 2:		
Free text	**PubMed and Embase thesaurus**	
Hospital Emergency Service* Emergency Department* Emergency Unit* Emergency Ward* Emergency Room* Trauma Center* Trauma Centre* Emergency Medicine Emergency Medical Service* Prehospital Emergency Care	**MeSH**	**EmTree**
	Emergency Service, Hospital Emergency medicine Trauma Centers Emergency medical services	Hospital emergency service Emergency health service

eAppendix 2. PRISMA Flow diagram

Identification of studies via databases and registers

Identification

Records identified through MEDLINE via PubMed, Embase, Cochrane, WOS (n = 4,077)

Records removed *before screening*:
    Duplicate records (n = 1,601)

Screening

Records screened (n = 2,476)

Records excluded (n = 2,366)
    Not In Situ Simulation (n = 2,161)
    Not EM (n = 205)

Records assessed for eligibility (n = 110)

Records excluded (n = 39)
    Not EM (n = 4)
    Duplicates (n = 2)
    Review, editorials or abstracts (n = 33)

Update - March 2021
Records screened (n = 79)

Reports excluded (n = 69)
    Not In Situ simulation (n = 57)
    Not EM (n = 12)

Included

Studies included in review – original search (n = 71)

Studies included in review – search update (n = 10)