

**Table S1.** Full list of papers collected.

N	Authors	Title	Year	Journal	Main location	doi/url	Type
1	Bąkowski, J	Several notes on differences between American and European model of an emergency department. An architect's point of view.	2014	Conference: 1st Annual International Conference Health And Medical Sciences	USA	<a href="https://www.researchgate.net/publication/285863899_Several_notes_on_differences_between_American_and_European_model_of_an_emergency_department_An_architect's_point_of_view">https://www.researchgate.net/publication/285863899_Several_notes_on_differences_between_American_and_European_model_of_an_emergency_department_An_architect's_point_of_view</a>	conference paper
2	Buffoli M, Bellini E, Dell'Ovo M, Gola M, Nachiero D, Rebecchi A, Capolongo S	Humanisation and soft qualities in emergency rooms	2016	Annali di Igine	Italy	10.4415/ANN_16_01_09	Article
3	Lukens, J	Freestanding Emergency Departments: An Alternative Model for Rural Communities.	2016	Rural Health Information Hub	USA	<a href="https://www.ruralhealthinfo.org/rural-monitor/freestanding-emergency-departments/">https://www.ruralhealthinfo.org/rural-monitor/freestanding-emergency-departments/</a>	web article
4	Ayers AA	Understanding the Free Standing Emergency Department Phenominon.	2016	The Journal of Urgent Care Medicine	USA	<a href="https://www.jucm.com/understanding-the-freestanding-emergency-department-phenomenon/">https://www.jucm.com/understanding-the-freestanding-emergency-department-phenomenon/</a>	web article
5	Schuur, JD; Baker, O; Freshman, J; Wilson, M & Cutler, DM	Where Do Freestanding Emergency Departments Choose to Locate? A National Inventory and Geographic Analysis in Three States.	2016	Annals of Emergency Medicine	USA	10.1016/j.annemergmed.2016.05.019	article
6	Rismanchian F, Lee HY	Process Mining-Based Method of Designing and Optimizing the Layouts of Emergency Departments in Hospitals	2016	HERD	South Korea	10.1177/1937586716674471	Article
7	Frascio, M; Mandolino, F; Zomparelli, F & Petrillo, A	A Cognitive Model for Emergency Management in Hospitals: Proposal of a Triage Severity Index.	2017	Theory and Application on Cognitive Factors and Risk Management	Italy	10.5772/intechopen.68144	book chapter
8	Brunelle, A; Henes, M; Hu, A; Kosovrasti, K; Lambert, B; Tavera, A	Freestanding Emergency Departments (FSEDs) – A Stakeholder Study.	2017	Report - Exploring the Feasibility of Freestanding Emergency Departments in Ware, Massachusetts	USA	<a href="https://web.wpi.edu/Pubs/E-project/Available/E-project-050117-123753/unrestricted/Freestanding_Emergency_Department_A_Stakeholder_Study.pdf">https://web.wpi.edu/Pubs/E-project/Available/E-project-050117-123753/unrestricted/Freestanding_Emergency_Department_A_Stakeholder_Study.pdf</a>	Report
9	Langlands B, Coleman D, Savage T	Reimagining the ED: Ideas for Shaping the Emergency Department of the Future	2018	Facility Guidelines Institute (FGI)	USA	<a href="https://www.fgiguideines.org/wp-content/uploads/2019/02/FGI-Reimagining-the-ED_rev.pdf">https://www.fgiguideines.org/wp-content/uploads/2019/02/FGI-Reimagining-the-ED_rev.pdf</a>	Report
10	Hartigan L, Cussen L, Meaney S, O'Donoghue K	Patients' perception of privacy and confidentiality in the emergency department of a busy obstetric unit	2018	BMC Health Services Research volume	Ireland	10.1186/s12913-018-3782-6	Article
11	Burgess L, Kynoch K, Hines S	Implementing best practice into the emergency department triage process	2019	International Journal of Evidence Based Healthcare	Australia	10.1097/XEB.0000000000000144	Article
12	Zamani, Z	Effects of Emergency Department Physical Design Elements on Security, Way-finding, Visibility, Privacy, and Efficiency and Its Implications on Staff Satisfaction and Performance.	2019	HERD: Health Environments Research & Design Journal	USA	10.1177/1937586718800482	article
13	Gharaveis A, Hamilton DK, Shepley M, Pati D, Rodiek S	Design suggestions for greater teamwork, communication and security in hospital emergency departments	2019	Indoor and Built Environment	USA	10.1177/1420326X19836209	Article
14	Sasanfar S, Bagherpour M, Moatari-Kazerouni A	Improving emergency departments: Simulation-based optimization of patients waiting time and staff allocation in an Iranian hospital	2020	International Journal of Healthcare Management	Iran	10.1080/20479700.2020.1765121	Article
15	Ehmann MR, Erin KM., Zakk A, Jordan D, Mustapha S	Emergency Department Ergonomic Redesign Improves Team Satisfaction in Cardiopulmonary Resuscitation Delivery: A Simulation-Based Quality Improvement Approach	2020	Journal for Healthcare Quality	USA	10.1097/JHQ.0000000000000244	Article
16	Gharaveis A, Pati D, Hamilton DK, Shepley M, Rodiek S, Najarian M	The Correlation Between Visibility and Medical Staff Collaborative Communication in Emergency Departments	2020	HERD	USA	10.1177/1937586720921182	Article
17	Tindle K, David A, Carlisle S, Faircloth B, Fields JM, Hayden G, Ku B.	Relationship of the Built Environment on Nursing Communication Patterns in the Emergency Department: A Task Performance and Analysis Time Study	2020	Journal of Emergency Nursing	USA	10.1016/j.jen.2020.04.005	Article
18	Nourazari S, Harding JW, Davis SR, Litvak O, Traub SJ, Sanchez LD	Are Smaller Emergency Departments More Prone to Volume Variability?	2021	Western Journal of Emergency Medicine	USA	10.5811/WESTJEM.2021.2.49749	Article
19	Chao-Wang Z, Jian Y, Jiatong L,	Generation of hospital emergency department layouts based on generative adversarial networks	2021	Journal of Building Engineering	China	10.1016/j.jobe.2021.102539	Article
20	Douillet D, Saloux T, Ravon P	Adaptation of ED design layout during the COVID-19 pandemic: a national cross-sectional survey	2021	BMJ Emerg Med J	France	10.1136/emmermed-2020-211012	Article
21	Jeong C, Jakobsen H C.W.	Influence of architectural layouts on noise levels in Danish emergency departments	2021	Journal of Building Engineering	Denmark	10.1016/j.jobe.2021.102449	Article
22	Alowad A, Samaranyake P, Ahsan K, Alidrisi, Karim A	Enhancing patient flow in emergency department (ED) using lean strategies-an integrated voice of customer and voice of process perspective	2021	Business Process Management Journal	Saudi Arabia - Australia	10.1108/BPMJ-11-2019-0457	Article
23	Mohammadi Gorji S, Bosch S.J., Valipour S, De Portu G	Investigating the Impact of Healthcare Environmental Design on Staff Security: A Systematic Review	2021	HERD	USA	10.1177/1937586720921407	Review