

MEASURING EMERGENCY DEPARTMENTS CONGESTION USING INDICATORS AND TOOLS: A SCOPING REVIEW

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Introduction: Emergency Department (ED) overcrowding happens when patient numbers are too high for the available staff, leading to long waits and dissatisfied patients. This study aims to identify and review the most common indicators and tools used across the globe to measure this specific problem.

Methodology: Scoping review follows the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) checklist to identify the indicators and tools used to tackle overcrowding in ED.

Screening Process for Articles

Records before screening
(n=1347)

Title and abstract screening
(n=1199)

Full text retrieval
(n=182)

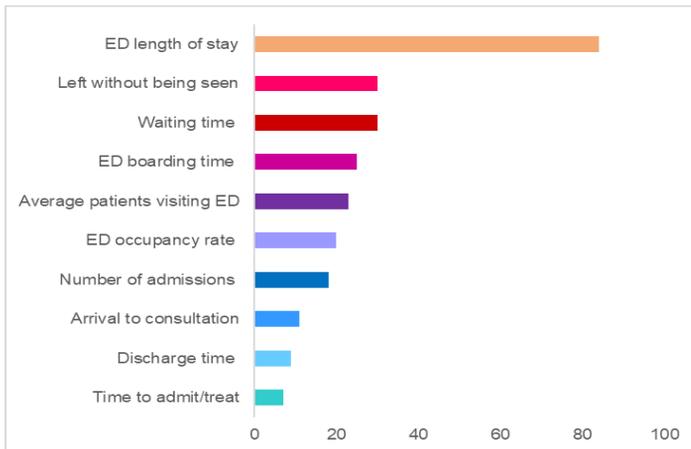
Assess for eligibility
(n=167)

Articles included
(n=117)

Results:

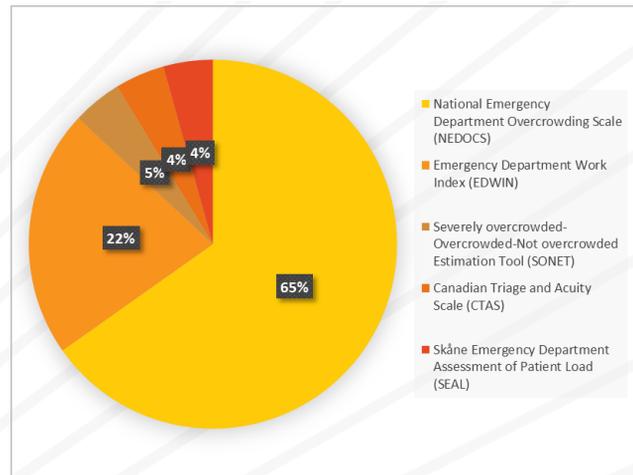
Global Indicators for Emergency Department Overcrowding

Indicators



Frequency

Widely Utilized Tool for Evaluating Overcrowding in Literatures



Discussion: Global measurement of overcrowding relies on a combination of indicators and tools. Indicators such as ED length of stay (ED LOS) turns out to be the most frequent indicators for ED performance. Additionally, tools such as National Emergency Department Overcrowding Scale (NEDOCS) appear to be the most commonly used for forecasting future crowding compared to other approaches.

Conclusion: As recommendations, it may be beneficial to explore a national strategy that integrates both ED LOS and NEDOCS to address the challenges within ED.

- References:** 1. Di Somma S, Paladino L, Vaughan L, Lalle I, Magrini L, Magnanti M. Overcrowding in emergency department: an international issue. Vol. 10, Internal and emergency medicine. Italy; 2015. p. 171–5
2. Safinaz Alshikh, Fatema Abdulwahab, Albatool Baz, Bandar Ghonaim, Suad Alanizi, Saleh Altowygry, Sultan Abu Tayli, Albashiq Albalwi, Ali Alhamidah, Ali Al Ismail, Fahad Alanazi. Factors And Solutions Addressing Overcrowding In Emergency Department., Volume 3, Issue 1, 2023-02-05, Pages 1-6
3. Affleck A, Parks P, Drummond A, Rowe BH, Ovens HJ. Emergency department overcrowding and access block. CJEM. 2013 Nov;15(6):359–84.

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