The Impact Of Interventions To Reduce Length Of Stay In The Emergency Department: A Systematic Review
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BACKGROUND
• Emergency department crowding is an increasing public health crisis in the U.S. and associated with negative outcomes, such as poor quality care, medical errors, inpatient complications, and higher mortality
• Over the past decade median ED lengths of stay have increased resulting in reductions in patient satisfaction and quality of care

OBJECTIVES
• We conducted a systematic review of the literature to compare the effectiveness of ED-based interventions reporting comparative data on length of stay

METHODS
• A systematic review using five databases from 1982 to 2013
• Search terms including “Emergency Department”, “Crowding”, “length of stay”, and “Intervention”
• Study inclusion was reviewed by two reviewers - disagreement was resolved by consensus
• Data were extracted using a standardized data extraction form

RESULTS
• 43 unique studies included
• 41 studies were single-center studies
• Annual visit volume ranged from 19-87K
• 20 studies were time series
• 10 studies were quasi-experimental before & after
• 7 studies were randomized controlled trials
• 3 studies were case control studies
• 3 studies used both mixed methods

CONCLUSIONS
• Interventions to improve crowding in the ED have mostly been tested in single sites
• The most common intervention is implementing operational process changes
• Adding extra providers, implementing operational process changes and using point of care testing have the greatest observed impact on length of stay.
• Additional research is necessary to compare the effectiveness of interventions across settings

DISCLOSURES
• Pines – Funded by RWJF / Urgent Matters