

Triage Process and the Effect on Patients Leaving Against Medical Advice and Wait Times

Angie Lopez, BS, EMT Andy Maldonado, BS, LP, Gaby Tran, BS
University of Houston Second Degree BSN Program 2019

P
I
C
O
T

In ER waiting rooms, how does early intervention in the waiting room compared with the standard linear triage process affect the number of patients leaving against medical advice and the emergency department length of stay.

Synthesis of Findings

- ED crowding has been described as both a patient safety issue and a worldwide public health problem and has become a major barrier in patients receiving timely emergency department care ^{2, 4, 8}
- Utilizing the bypass rapid assessment triage (BRAT), arrival-to-triage time improved by 36%, arrival-to-room time improved by 32%, and arrival-to-physician time improved by 26% ^{1, 4, 5, 7}.
- Using BRAT process, patient satisfaction was increased and those leaving against medical advice was reduced. ^{1,7}
- The Emergency Department Length of Stay (EDLOS) is reduced by assessment and initiation of interventions in the waiting room ^{1, 2, 5, 6}
- Generally, most studies acknowledge a reduction in ED wait times with a change in triage process or with early intervention in the ED waiting room. However, one study by Innes states that there is no statistical significance in reduction in wait times with early intervention. ^{1, 2, 3, 4, 5, 6, 7, 8, 9}

Decision to Change

- Measure time from door to treatment and create a protocol to reduce timeframes based on patient acuity
- Add a triage nurse with registration clerk to perform initial assessments on incoming patients.
- Training ED staff on a bypass rapid triage system.
- Implement a wing where low acuity patients can be seen by primary care providers.
- Collaborate with ED staff to discuss improvements with triage process

References

1. Begaz, T., Elashoff, D., Grogan, T. R., Talan, D., & Taira, B. R. (2017). Initiating diagnostic studies on patients with abdominal pain in the waiting room decreases time spent in an emergency department bed: A randomized controlled trial. *Annals of Emergency Medicine*, 69(3), 298-307. doi:10.1016/j.annemergmed.2016.06.040
2. Burke, J. A., Greenslade, J., Chabrowska, J., Greenslade, K., Jones, S., Montana, J., . . . Oconnor, A. (2017). Two Hour Evaluation and Referral Model for Shorter Turnaround Times in the emergency department. *Emergency Medicine Australasia*, 29(3), 315-323. doi:10.1111/1742-6723.12781
3. Innes, K., Jackson, D., Plummer, V., & Elliott, D. (2015). Care of patients in emergency department waiting rooms - an integrative review. *Journal of Advanced Nursing*, 71(12), 2702-2714. doi:10.1111/jan.12719
4. Jarvis, P. R. (2016). Improving emergency department patient flow. *Clinical and Experimental Emergency Medicine*, 3(2), 63-68. doi:10.15441/ceem.16.127
5. Jarvis, P., Davies, T., Mitchell, K., Taylor, I., & Baker, M. (2014). Does rapid assessment shorten the amount of time patients spend in the emergency department? *British Journal Of Hospital Medicine (London, England: 2005)*, 75(11), 648-651. https://doi-org.ezproxy.lib.uh.edu/10.12968/hmed.2014.75.11.648
6. Lauks, J., Mramor, B., Baumgartl, K., Maier, H., Nickel, C. H., & Bingisser, R. (2016). Medical team evaluation: Effect on emergency department waiting time and length of stay. *PLoS One*, 11(4). doi:10.1371/journal.pone.0154372
7. Marino, P. A., Mays, A. C., & Thompson, E. J. (2015). Bypass rapid assessment triage: How culture change improved one emergency department's safety, throughput and patient satisfaction. *Journal of Emergency Nursing*, 41(3), 213-220. doi:10.1016/j.jen.2014.07.010
8. Morley, C., Unwin, M., Peterson, G. M., Stankovich, J., & Kinsman, L. (2018). Emergency department crowding: A systematic review of causes, consequences and solutions. *PLoS one*, 13(8), e0203316. doi:10.1371/journal.pone.0203316
9. Zhang, X., Kim, J., Patzer, R. E., Pitts, S. R., Chokshi, F. H., & Schragar, J. D. (2019). Advanced diagnostic imaging utilization during emergency department visits in the United States: A predictive modeling study for emergency department triage. *PLoS ONE*, 14(4), e0214905. Retrieved from http://link.galegroup.com.ezproxy.lib.uh.edu/apps/doc/A581813794/HRCA?u=txshracd2588&sid=HRCA&xid=ef72c3ac

Acknowledgement

Members received academic scholarships either from The George Foundation or the Rubin Sztajer Holocaust Survivor Scholarship. We would like to thank Dr. Lenora McWilliams, PhD, MS, RN and Dr. Cheryl Brohard, PhD, RN, CNS-ONC, AOCN®, CHPCA® for their mentorship on this poster.



Queensland Health. (2018, January 31). How emergency departments work: The triage system. Retrieved from Queensland Government : <https://www.health.qld.gov.au/news-alerts/news/emergency-departments-triage>

Literature Review

Databases:

- EBSCO
- CINAHL
- PubMed
- Google Scholar

Keywords:

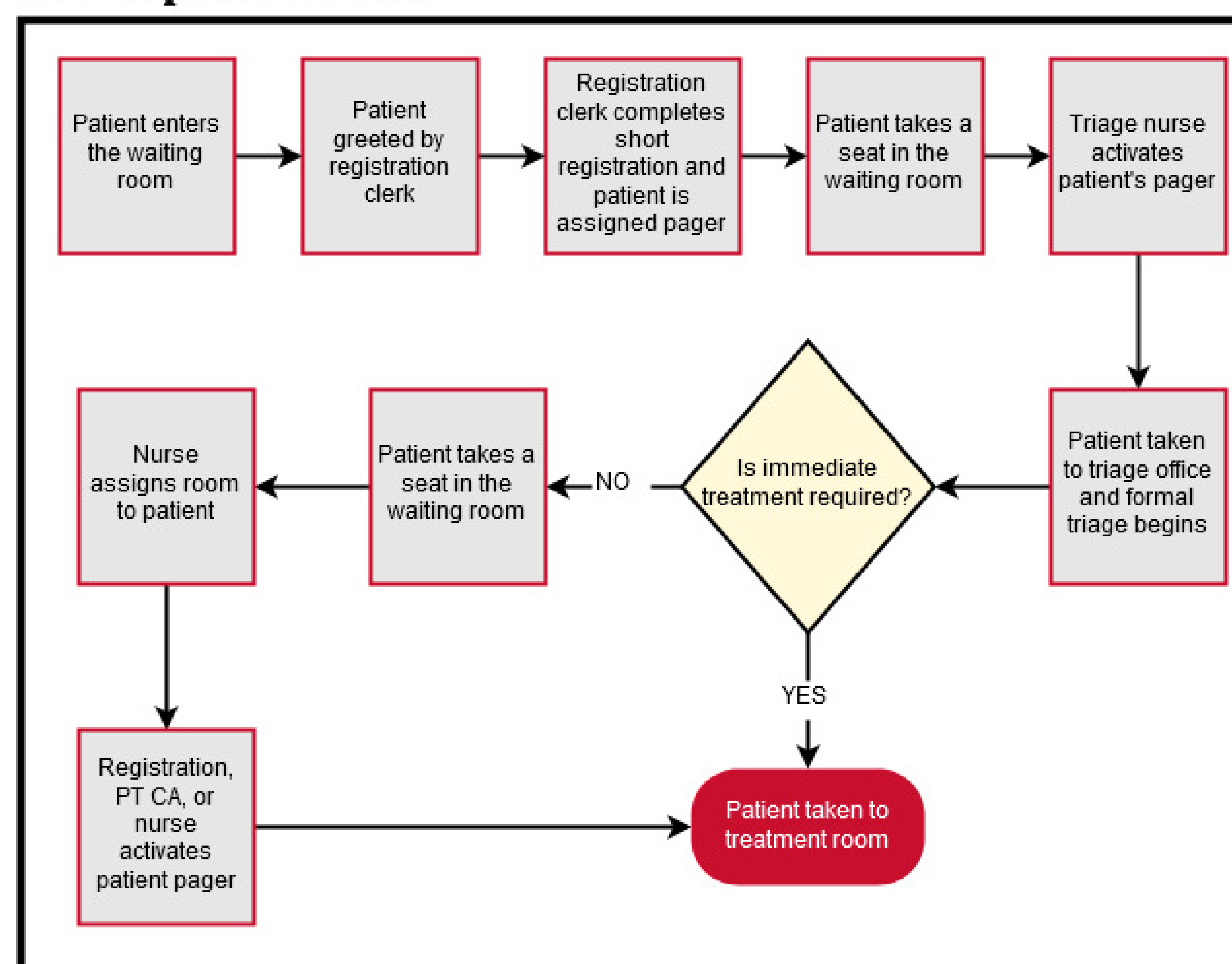
- Emergency Room
- Triage
- Overcrowding
- Against Medical Advice
- Intervention
- Wait time

Article criteria:

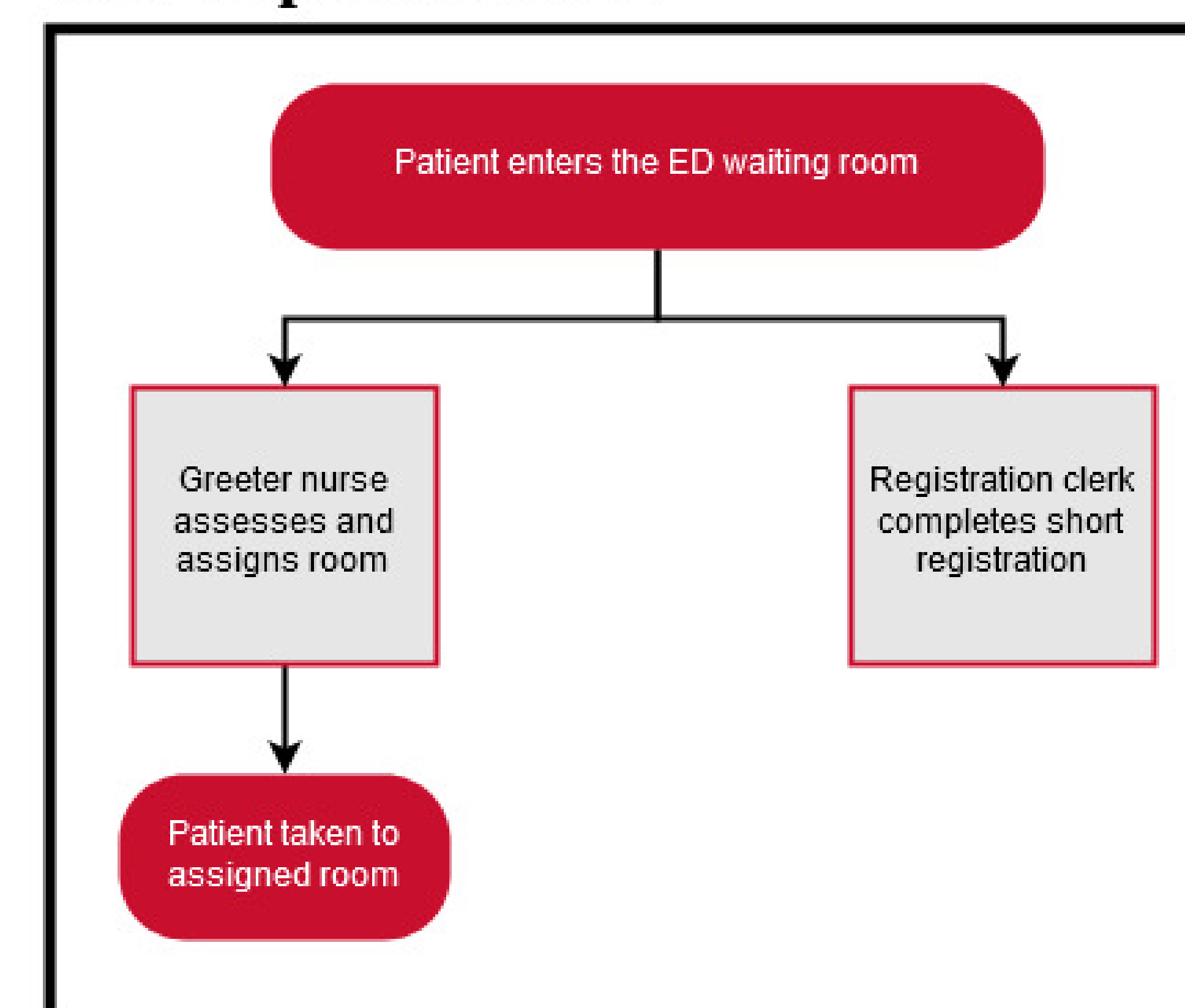
- Published between 2014-2019
- Peer reviewed journal article



Pre-implementation



Post-implementation



Marino, P. A., Mays, A. C., & Thompson, E. J. (2015). Bypass rapid assessment triage: How culture change improved one emergency department's safety, throughput and patient satisfaction. *Journal of Emergency Nursing*, 41(3), 213-220. doi:10.1016/j.jen.2014.07.010