LEVERAGING TELETRIAGE IN AN URBAN EMERGENCY DEPARTMENT TO IMPROVE PATIENT FLOW AND EXPERIENCE

Aditi U Joshi\(^a\), Frederick Randolph\(^a\), Anna Marie Chang\(^a\), Megan Sabonjian\(^a\), Frank D Sites\(^a\), Alexander P Ambrosini\(^a\) and Judd E Hollander\(^a\)

\(^a\)Thomas Jefferson University, USA

**Background:** Overcrowding in emergency departments leads to increased wait times and patients leaving without treatment, resulting in delayed care and a decrease in patient satisfaction. We and others have successfully implemented a physician in triage model to decrease left without being seen (LWBS), improve flow metrics and increase patient satisfaction. However, these programs have a significant cost associated with them. We studied whether a telemedicine physician could successfully be used to improve LWBS and door to provider time in an urban academic affiliated community hospital ED.

**Methods:** We conducted a before and after study. During the intervention period, an On-Demand Telemedicine provider was utilized to triage patients remotely in an urban community hospital emergency department. Tele-triage was conducted from 11am - 6pm, seven days per week. Tele-triage providers performed a brief history and physical, wrote a triage note and placed orders in the medical record. Our primary outcomes were the rates of patients that left without being seen (LWBS) and the time to provider (TTP) compared to the same two month period in the prior year (October 10-December 10, 2017 versus 2016). Data are presented as means with 95% confidence intervals (CI) and medians with interquartile ranges (IQR).

**Results:** Comparing tele-triage numbers in 2017 versus 2016, there were 6520 vs. 6362 patients who presented to the ED. Overall, the LWBS rates were reduced to 0.9%; (95% CI 0.6-1.1%) vs. 2.0%; (95% CI 1.6%-2.3%, p<0.001) and the TTP was also reduced (median 14 minutes, IQR 7.2-27.6 v 22 minutes, IQR 11-44). Compared to prior year, the overall door to discharge time (138.1 minutes IQR 84.4-215.5 vs. 150 minutes IQR 87-235, p<0.001) and door to admit time (185 minutes, IQR 131.4-253.2 vs. 192 minutes IQR 138-266.3, p<0.001) was also reduced.

**Conclusion:** Remote tele-triage for only seven hours per day in an urban community hospital emergency department reduced overall LWBS and TTP times compared to years prior. It also had a positive impact on overall door to discharge and door to admit times.

**Biography**

Aditi U Joshi is an Emergency Medicine Specialist in Philadelphia, Pennsylvania. She graduated with honors from University Of Illinois At Chicago Health Science Center in 2006. She is having more than 12 years of diverse experiences, especially in Emergency Medicine. She is particularly interested in the issues of patient access and engagement, provider education and fostering international collaboration. Currently she is the Medical Director of JeffConnect and part of Thomas Jefferson University Hospital’s Telehealth program.

Aditi.Joshi@jefferson.edu