Burke, L. G., Joyce, N., Baker, W. E., Biddinger, P. D., Dyer, K. S., Friedman, F. D., & Epstein, S. K. (2013). The effect of an ambulance diversion ban on emergency department length of stay and ambulance turnaround time. *Annals of Emergency Medicine*, *61*(3), 303-311.e1. doi:10.1016/j.annemergmed.2012.09.009

This journal excerpt looks at a study done in Boston on the effects of banning ambulance diversion. The study was performed in 2009. The primary concern with banning ambulance diversion was the effects it would have on ED overcrowding and ambulance off load times. The consensus was that the ban would likely slow ambulance off loading and amplify the overcrowding in emergency departments. Instead, these bans seemed to improve both areas. According to this article the hospitals developed plans to prepare for the anticipated ban and were then able to better handle the influx of patients and ambulances. This was then documented to have provided improved patient outcomes for patients in need of specialized care and for higher acuity patients.

This article will be helpful in providing an analysis of a seemingly unpopular approach to handling delayed stretcher turnaround times. The article provides clinical evidence that the delays in turnaround time root much deeper than the increase in patient volume and help to prove that "the system" is broken at all ends.

Cone, D. C., Middleton, P. M., & Marashi Pour, S. (2012). Analysis and impact of delays in ambulance to emergency department handovers. *Emergency Medicine Australasia*, 24(5), 525-533. doi:10.1111/j.1742-6723.2012.01589.x This article provides an overview of ambulance turn around and transfer of care delays in the emergency departments within a specific region. The article addresses a study which developed statistics showing average turnaround times for patients. The article looks at the effects of patient age, acuity, and emergency department size as factors which may or may not influence average patient wait times on a stretcher.

This article provides quantitative evidence of the effects of ED overcrowding. The article will also allow to provide a more focused solution to the problem by recognizing the patient demographics and hospitals most specifically and commonly affected by these delays.

Deo, S., & Gurvich, I. (2012, June 4). When hospitals turn away ambulances. Retrieved from https://insight.kellogg.northwestern.edu/article/when\_hospitals\_turn\_away\_ambulances

This webpage article discusses the effects of ambulance diversion on patient care and emergency department overcrowding. The authors in this article suggest that ambulance diversion may do more harm than it will good. The article points out that when used properly ambulance diversion may prove to be beneficial. The lack of coordination between neighboring facilities is what leads to a detriment in this particular method of handling large volumes of patients. According to the authors, "Numerous papers in the emergency medicine literature indicate that waiting times don't go up when diversion is banned," According to Gurvich "In the absence of coordination, the non-cooperative equilibrium might be such that all potential benefit is lost. And the policymaker can obtain much of the benefit with simple coordination mechanisms like no bed reservation—that is, not allowing ambulances to be diverted from emergency departments that have unused beds."

This article offers some insight on the effectiveness of ambulance diversion in cases of overcrowding in the emergency department. This article also offers a means upon which ambulance diversion can be beneficial. Gurvich and Deo also acknowledge the reactive and defensive nature of the use of ambulance diversion when two or more facilities are near one another in a geographic area. This is a problem seen quite frequently in Maryland and many other regions.

Harkin, T., & Sanders, B. (2011). Hospital emergency departments: Health center strategies that may help reduce their use (GAO-11-414R). Retrieved from United States Government Accountability Office website: http://www.gao.gov/assets/100/97416.pdf

This government generated report provides a break-down of emergency department visits by payment type, urgency, and even time of day. The report suggests that most emergency department visits in 2011 occurred on week nights and weekends. This report also suggests that only 5% of the patient visits to the emergency department were for patient's requiring "immediate" care. Surveys were conducted at 9 healthcare centers to develop a list of proposed solutions to emergency department overcrowding.

This source will be useful in providing recent facts and statistics which will support the need for alternative transport destination options and alternative treatment methods during times of illness. The article also offers some suggested methods for improving the current system and justifies the need for improvement in specific areas.

Ludwig, G. (2006, January 31). Emergency room overcrowding: Making ambulance crews wait. Retrieved from http://www.firehouse.com/news/10501159/emergency-roomovercrowding-making-ambulance-crews-wait This article discusses how emergency department overcrowding affected ambulance crews in the year 2006. The article also made predictions that overcrowding and "ambulance parking" will only continue to worsen in the coming years. Something that continues to be proven as a truth. The article offers reasons to as why this is a problem and even addresses some of the legalities involved.

This article will be useful in proving that hospital turnaround times are not just a temporary problem and will help to justify a need to address the issue sooner rather than later. The article will also help to place the urgency of this problem in the decision maker's lap by making the legalities and consequences a reality that will affect them directly.

Mandavia, S., & Samaniego, L. (2016). Improving ED efficiency to capture additional revenue. *Healthcare Financial Management*, 70(6), 66-69.
doi:10.2917/g.jen.2016.70.001

This article addresses the increase in the volume of patients utilizing the emergency department. The article offers statistics showing the effects of the new healthcare reforms on patient volume. The article also acknowledges the potential for an increase in profit for the hospitals as a benefit from these increases in patient volume. The article then proposes suggested methods for maximized profit and efficiency when dealing with increasing volume of patient's in the emergency department.

I find this article useful for several reasons. The article provides useful statistics which reflect the recent changes to the public mindset and the use of the emergency department. The article also offers strategies for improvement in efficiency and time management. This will help to develop a proposed resolution to the problem addressed in my paper. The article will also show the benefits of faster turnaround times in terms of patient satisfaction and financial gain.

Murphy, S. O., Barth, B. E., Carlton, E. F., Gleason, M., & Cannon, C. M. (2014). Does an ED flow coordinator improve patient throughput? *Journal of Emergency Nursing*, 40(6), 605-612. doi:10.1016/j.jen.2014.03.007

The authors of this article are describing the implementation of an emergency department flow coordinator position. The article shows the effects of this position on patient turnaround times as well as the frequency of hospital diversion status. The article suggests that there was a definitive improvement in ER wait times and patient turnaround times after the implementation of an ED flow coordinator position. The article suggests that the flow coordinator's primary job was to help push patient's through the system and through the definitive care process at an efficient rate. The coordinator also maintained open lines of communication with the ED charge nurse and other nursing staff members.

This article offers a descriptive analysis of a possible solution to the growing problem of lengthened ED visits for patients. This article suggests that the ED flow coordinator position is one way to definitively shorten the amount of time patients are boarded in the emergency department. This ultimately results in shorter off load times for incoming stretchers as well.