Reason for Change:
In order to maintain its status as an accredited institution, Mary Washington Hospital had to meet the new ED overcrowding standard put forth by the Joint Commission on Accreditation of Healthcare Organizations in 2005. Under this new standard, hospitals must identify any factors that hinder patient throughput, and seek changes to improve patient flow through the hospital.

At the same time that these issues needed to be addressed, patient volume in the ED was increasing, anticipated to reach 85,000 in 2005.

To address the new accreditation issues, Mary Washington Hospital formed a Patient Flow Excellence and Accountability Team (PFEAT) in August 2004. The team included the COO, CNO, various vice presidents, department heads, ED physicians, and industrial engineers. The goal of PFEAT was to improve patient flow, specifically focusing on volume, inpatient flow, and ED throughput.

Implementation:
Part of Mary Washington’s success at easing overcrowding has been in getting admitted ED patients into inpatient units quickly. This has been helped by improving the relationship between inpatient nurses and ED nurses, and earning the support from nurses and their supervisors by educating them. ED nurses put pressure on inpatient nurses to get patients admitted within an hour. Although this pressure can cause some tensions at times, a strong relationship helps ensure that this is done in a manner of mutual respect and support.

In help motivate staff, hospital administrators continuously update staff on their improvements, and demonstrate how these improvements can be seen. Data and results are posted, thus encouraging staff to work even harder. Staff members receive positive feedback for their successes.

One specific change that has been made in the ED has been to adjust staffing ratios. Both nurse-to-patient and physician-to-patient ratios have been adjusted, adding more staff to provide care. Administrators supported this change because its promoters were able to show that increasing staff would allow more patients to be seen in the ED, reduce the LWBS rate, and improve documentation, which means they will be able to capture more revenue.

The hospital also looked at the current use of tools and equipment, and made changes so that these could be used more effectively. Computers were moved to be more accessible by
nurses, as this made it easier for the nurses to complete patient documentation. Also relating to accessibility, trauma and code equipment was placed in each trauma room, rather than a centralized location. Also, each nurse was equipped with a wireless phone, so that he or she would be easier to locate and communication could be enhanced.

Mary Washington’s ED also redesigned its triage process. The ED previously used a three-level triage system, but determined that five-levels might help them to better stratify the treatment needs for each patient. Also, a triage nurse was added, who could monitor patient flow between the waiting room and treatment rooms, as well as flow out of the ED.

Additionally, the ED at Mary Washington has been trying out a virtual bed system. Under such a system, all patient tests are conducted up front to eliminate any unnecessary waiting. Immediately upon arrival a patient may have an EKG, receive medication, urine testing, splints, contrast for computed tomographies, and labs, as necessary. If needed, a patient will then be taken for X-rays. The patient next goes to the “Results Waiting” section of the waiting room, where he is kept up to date about his status. When all testing is complete, the patient is brought to a room for the completion of his treatment. In Mary Washington’s trial, average time to triage decreased by 39 percent, turnaround time for treat-and-release patients decreased by 16 percent, and door to physician time decreased 82 percent. The virtual bed system has led to increased patient satisfaction, with 95 percent of patients reporting a positive experience, and 75 percent saying the wait was shorter than expected.

Results/Impact:
Mary Washington was able to reduce patient throughput times, lower its LWBS rate, increase patient satisfaction, and increase revenue capture by implementing these improvements. Throughput time for treat and release patients has decreased from greater than 5 hours to 3 hours 18 minutes. The LWBS rate has also decreased, from 3.2 percent to 2 percent. PFEAT set a goal of less than one hour for the time from when the decision to admit a patient is made to the time the patient reaches the floor. Actually, the average time is now 41 minutes, much less than the goal.