

# ACADEMY FOR EXCELLENCE IN HEALTHCARE

## IMPACT ASSESSMENT PAPER

### Executive Summary

#### Reduction in Hematology Length of Stay — Improvements Focused on Discharge Process

Hematology staff at The Ohio State University Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (The James) are trying to make sure that the length of stay (LOS) for inpatient chemotherapy treatments is no longer than clinically necessary. A cross-functional team from the department began an improvement project with OSU's Academy for Excellence in Healthcare in August 2014 to improve Hematology admission and discharge processes, which could decrease LOS for inpatient treatments, increase patient satisfaction, improve bed availability, decrease cost, decrease clinical variations, and improve quality outcomes and patient safety.

The average LOS index for The James Hematology services — the ratio of actual LOS to expected LOS — was 1.12, compared to a goal of 0.95. Some Hematology inpatients waited as long as 6 hours to be discharged; long admission waits to receive *scheduled* chemotherapy also were common. Beds were often unavailable for scheduled treatment times, patients waited in admissions, and arrived in their rooms too late in the day for treatment to begin — the three- to five-day treatment period was one day behind schedule after just the first day.

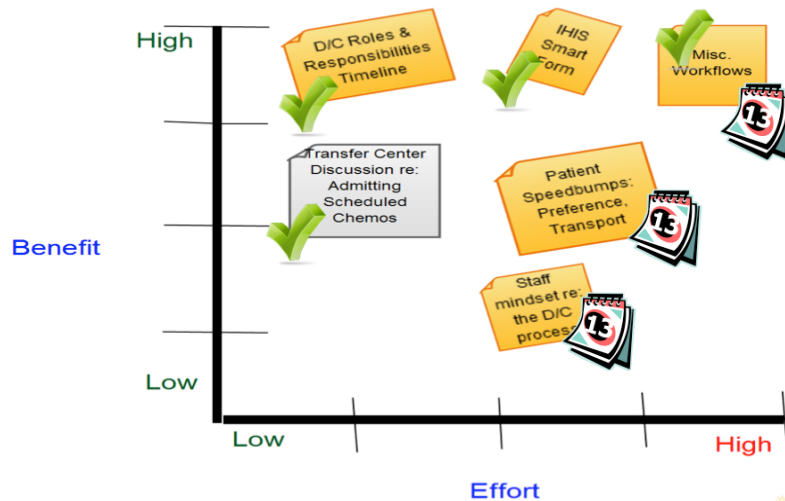
From observations of the discharge and admissions process and analysis of findings, the improvement team narrowed their focus to three areas of improvement — discharge process, multidisciplinary communication, and miscellaneous causes — and set goals to have 75 percent of chemotherapy inpatients discharged by 1 pm, and 50 percent of scheduled chemotherapy inpatients admitted by 3 pm. Many of the team's recommendations centered on discharge activities, the most significant contributor to delayed admissions and extended LOS.

By October 2014 the improvement team had trialed use of a standardized discharge worksheet for recording patient information: goals, referrals, labs/transfusion requirements, and outpatient orders. They also implemented visual management of admission and discharge status, tracking admissions (the number

occurring before and after 3 pm) and discharges (the number occurring before and after 1 pm) for the previous week, month to date, and project to date.

The improvement team monitored and analyzed the work of two of the department's four care teams (physicians, nurse practitioners, and nurses) during the trial. One care team had made significant progress: 51.8 percent of discharges by 1 pm and 57.7 percent of admissions by 3 pm. The improvement team is examining factors contributing to varying discharge and admission times of the teams. For example, the care team with better times had a higher percentage of scheduled therapy admissions (fewer unplanned admissions). The improvement team will eventually share and apply best practices and consistent processes across all four care teams.

### Discharge Improvement Recommendations



Source: The James Cancer Hospital, Hematology

[Read the full study of The James Hematology Length of Stay project](#), which illustrates how a complex problem often needs broken down into more manageable pieces. This project also shows how implementation of countermeasures in similar groups can highlight process variations and factors that can affect outcomes. Analysis of the two Hematology care teams and variations will help the improvement team avoid a one-size-fits-all solution, adjust improvements to accommodate variations, and share best practices and standards across groups.

**About the Academy for Excellence in Healthcare:** AEH blends in-person class time with hands-on project work, interactive simulations, and recurrent coaching, all aimed at helping healthcare teams spark actionable change at their organization. To learn more about AEH, contact [Margaret Pennington](#), Faculty Director, or [Beth Miller](#), Program Director.