



Title: Real Time Locating System

Student name: Elena Kuznetsova
Visiting from: Vancouver, BC, Canada
Organization: Dana-Farber Cancer Institute
Sponsor: Sarah Kadish (DFCI)
CHOT mentor: James Benneyan (NU)
Project Dates: July - August 2011



Project focus

Elena Kuznetsova started her project in July 2011 and had a unique opportunity to assist the Dana-Farber Process Improvement team in facilitating a 3-day Lean Value Stream Mapping event with 25 front-line staff in collaboration with GE Healthcare consultants.



Her primary project was to improve utilization of data from the RFID/IR Real-Time Locating System (RTLS) which Dana-Farber Cancer Institute (DFCI) implemented in January 2011. This technology assists with patient tracking, room utilization, workflow optimization and reporting in their new Yawkey Center for Cancer Care. It is able to capture the patient's location, stage of care and alert staff to significant visit intervals or a patient's wait time. The staff can quickly find patient information on the Versus Glance-and-Go™ electronic displays to facilitate communication exchange.

Results

Elena interviewed DFCI stakeholders including top management and leadership team to define user requirements and performance metrics for the RTLS. She conducted baseline analysis of wait and cycle times to be used by the organization for upcoming Kaizen events and to justify Lean initiatives. She developed data analyses for leadership to improve operational performance by utilizing RTLS data and identified Data Quality indicators for the RTLS data. Elena developed SQL query to simplify and expedite data analysis. At the end of her project Elena shared her knowledge by training her team members. "It has been a great experience for me because it combined the three things that I am very passionate about: Operations Management, Process Improvement in Healthcare and Technology!"

Elena is a Business Operations Management graduate from the British Columbia Institute of Technology. Elena's project was sponsored by the W. Garfield Western Awards (administered by the Canadian Merit Scholarship Foundation) and organized by the Center for Health Organization Transformation (CHOT). Elena also helped develop the internal process for expanding the healthcare engineering internship program at CHOT.

Testimonial: "Having Elena join our team over the summer was fantastic. She brought enthusiasm to data analysis and was creative and skillful in her work. Elena was able to easily jump into our team's projects such as conducting a Value Stream Mapping event and brought value immediately. While Elena may have learned a lot over the summer, she taught us a great deal about using quality indicators and improving our analytical process. "

- Sarah Kadish, Director Process Improvement, DFCI