



CUSTOMER OVERVIEW

UPMC Shadyside Hospital
Pittsburgh, PA, USA

- 520 bed tertiary care hospital
- 1,000 primary care physicians and specialists
- Inpatient, outpatient, and emergency care, as well as highly specialized diagnostic and treatment procedures.
- \$19 billion world-renowned health care provider and insurer
- 40 hospitals with more than 8,500 licensed beds

Train the Trainer: Application of Shadowing to Transform Office Practice Flow

Measuring and improving patient satisfaction and staff vitality scores is essential in today's competitive healthcare environment. This shift in focus led the physicians and staff of a medical practice to study their office flow to uncover the root cause of increased patient wait times and clinical inefficiencies.



Creation of experience and clinically-driven patient education pathway to ensure ideal outcomes for patients and efficiency on day of surgery.



Operational efficiency in the clinical practice increased. Patient wait time reduced due to template adjustment. Reallocation of staff resources occurred so that all staff were working to the top of their



license internal capacity to participate and lead process improvement projects across departments was built. Staff satisfaction and professional pride increased.



Real-time qualitative and quantitative reports documented and spread ideal practices and identified areas for improvement across a large academic practice

“ In the past, we've always focused solely on the objective data – the times, the measurements, the quantities – and our data was plentiful but lacked power. By using goShadow, we've added power to the numbers. Patients' stories, their feelings and impressions, the engagement of staff – these are the powerful forces we need to drive change, and goShadow is the tool to pull it all together. ”

Jessica Carlson , RN
Improvement Specialist
UPMC Innovation Center



Executive Summary

Measuring and improving patient satisfaction and staff vitality scores is essential in today's competitive healthcare environment. This shift in focus led the physicians and staff of a medical practice to study their office flow to uncover the root cause of increased patient wait times and clinical inefficiencies.

Anecdotally, it was identified that lack of patient education, coordination and communication of various appointments were the source of much frustration for patients and staff. For this reason, department administration engaged goShadow's quality improvement (QI) specialists to collect hard data and qualitative insights to gain a full picture of the true flow through their office experience. The improvement specialists understood that identifying the current state of the experience was critical to making any lasting, impactful improvement by creating current state benchmarks to measure success in the future.

The goShadow Solution

At the conclusion of the shadowing experience, reports showed that 50% of total appointment time occurred in a waiting room. Through use of goShadow, it was identified that most patient dissatisfaction and confusion was due to multiple uncoordinated clinical hand-offs over the course of a single, lengthy appointment.

As a result, the quality improvement specialists and staff decided to focus on two high-impact areas: waiting room throughput and clinical assignments during peak times.



CHALLENGE 1:

Data Collection and Communication

Using traditional pen and paper shadowing, in-house QI specialists captured current state of the office practice flow over the course of a few weeks. However, they were unable to quickly collect multiple real-time data points or aggregate time stamped qualitative and quantitative information and found it nearly impossible to shadow multiple patients or caregivers at one time. The use of stopwatches and pen and paper had become cumbersome and limiting in a fast-paced office environment. The specialists needed to determine the best way to capture the entire patient appointment experience from multiple concurrent viewpoints while quickly sharing, reviewing and communicating data and impressions with the entire department.

CHALLENGE 2:

Reporting

Once multiple office appointment experiences had been shadowed, each of those objective and subjective data sets needed to be aggregated, analyzed and shared with a large audience that rarely met in person. On average, manual processing for a single experience and the subsequent creation of reports took approximately eight hours of staff time. After the reports were created, it often took weeks to communicate those findings with stakeholders and even longer to create an action plan, creating a bottleneck in the improvement pathway.

CHALLENGE 3:

Tests of Change

After aggregating and analyzing data from the entire experience, the QI team needed to identify areas for improvement and small tests of change. While running a few small tests, iterative shadowing of the entire patient experience continued. Data was collected and analyzed using standardized reporting templates to ensure consistency. This burden on the QI team created a data collection and reporting lag, which resulted in outdated information and inefficiencies in the execution of small tests of change and the overall improvement process.

Shadowing and goShadow

Shadowing was the ideal method for understanding the current state of the office experience and flow through the eyes of patients and staff. With the goShadow app and reporting platform, QI specialists were able to easily and efficiently shadow the office pathway from the perspective of the patients, their families, caregivers and clinicians. Combining concurrently running timers with automatically time-stamped notes, the QI specialists were able to document, categorize and communicate patient and staff impressions seamlessly. goShadow's automatic process reports and time studies made it easier to share information with multiple stakeholders. This enabled the quick identification of problem areas and rapid cycle testing. Small changes were planned and executed to address what had been categorized as quick wins for all stakeholders--patient waiting time and office flow. goShadow was used to quickly, iteratively and easily measure, track and report on those changes within the office and report to administrators. Scalable data collection templates were created by the QI specialists and goShadow team to measure improvement and to benchmark data over time.

Results and Future Steps

At the conclusion of the shadowing experience, reports showed that 50% of total appointment time occurred in a waiting room. Through use of goShadow, it was identified that most patient dissatisfaction and confusion was due to multiple uncoordinated clinical hand-offs over the course of a single, lengthy appointment. As a result, the quality improvement specialists and staff decided to focus on two high-impact areas: waiting room throughput and clinical assignments during peak times.

At the conclusion of the process discovery, the quality improvement specialists tested targeted changes, including dedicated technicians for patients receiving more than one test during peak times. These small changes allowed for fewer patient handoffs, increased testing throughput, fostered improved inter-office communication and resulted in the elimination of an entire office segment and patient waiting area. This led to a reduction in the total appointment time of almost 40%. Patients reported higher satisfaction and increased perceived value in their experience. Similarly, staff reported that they found increased vitality and engagement in their day-to-day work because they were a part of the improvement process. They were able to spend more time on direct patient care, which enabled them to focus on the patients' needs and perform their jobs more efficiently.

