Qualmentus
HEALTHCARE EFFICIENCY SOLUTIONS

Case Study

Reducing Costly Errors

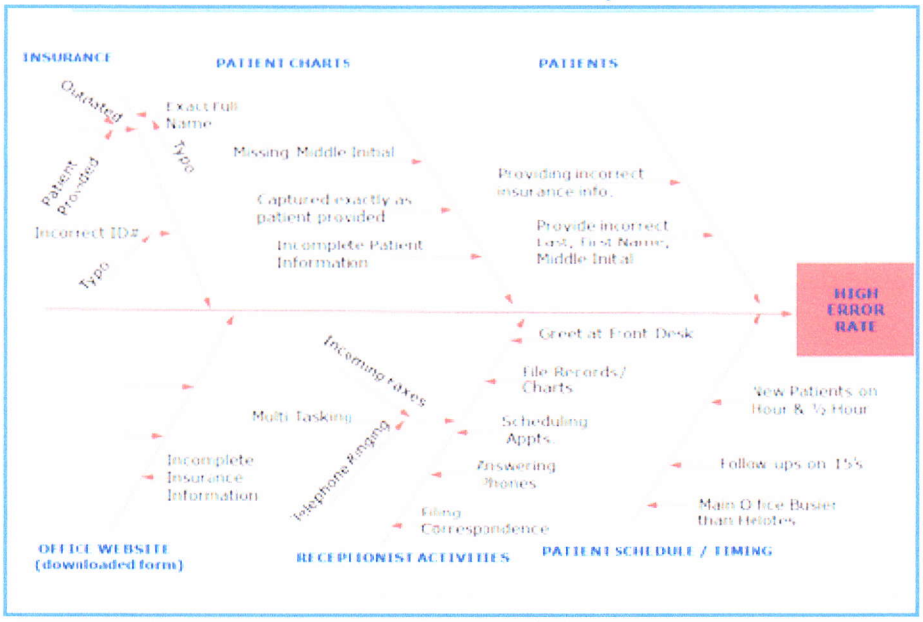
Project Background

A critical function within the front office area of this podiatrist practice is collecting, validating and processing demographic / insurance related data. Through manual inspection, the office management would identify up to 10% of patient charts to include at least one demographic and or insurance defect (e.g., incorrect name, Group ID#, SSN). This resulted in rework (waste) for both front office staff and office management which delayed insurance payments to the practice. The impact of these errors convinced the medical practice leadership to engage in a "kaizen" improvement event designed to simplify and standardize associated activities/processes.

Current State

Front office staff collected demographic and insurance data from their "new" patient setup, appointment scheduling and insurance validation processes. Somewhere in these processes, errors entered into the office database. Through a brainstorming process called "Ishikawa", the staff illustrated possible factors contributing to the high error rate.

"Ishikawa" Root Cause Analysis



These root causes enabled Qualmentus to focus on three specific areas where errors were occurring: 1) the patient providing inaccurate or outdated information, 2) the patient confusing the questions on the form and/or 3) the staff entering data incorrectly into the database (often due to distractions caused by multitasking up to 12 other activities at the same time). The key measure for this process was error rate, that is, any missing data field required by insurance companies (e.g., relationship to insured), incomplete demographic field (e.g., middle initial) or field value transposition (e.g., social security number) that was captured incorrectly. Baseline data indicated approximately 511 patient charts annually contained an error which translated into approximately $81,680 in error cost. The metric did not take into account errors that were never identified during inspection.

After a brief training introduction to Lean Six Sigma tools, the front office staff focused on capturing a high-level view of their processes. By mapping out each step in the high-level process, the staff was able to pinpoint certain steps that were non-value added and able to be eliminated.

Key Changes

- Rebalanced front office activities to provide sufficient time to focus on processes where errors were occurring. This allowed the front office clerk to focus on collecting and capturing data details that were critical to insurance company reimbursements.
- Developed & implemented Standard Operating Procedures to simplify and standardize the processes & forms used to collect data to mitigate the possibility of creating an error.
- Modified the New Patient check-in process to allow for patients to validate the data being entered into the database.

> **"I never knew how many errors we had in our charts and where they occurred until we started measuring them."**
>
> **- Office Manager**

Controlling the Gains

Making improvements to a process is often straightforward. Changing the behavior and adhering to a new process is more difficult but key to success. Sustaining the new process requires support and accountability from the entire practice. What gets measured often gets changed.

Conclusions & Results

Two weeks after the kaizen event, the office management effectively redistributed the work load balance across all core front office activities. Standard Operating Procedures contributed to a reduction in variability in completing the work which resulted in a reduction in errors by 70%. More importantly, the cost of poor quality decreased from $81,680 to $24,504 over a two month period.

About Qualmentus Inc.

Qualmentus is a consulting group comprised of certified efficiency specialists dedicated to the improvement of business operations within the healthcare community. Clients experience an increase in net income, staff productivity and patient satisfaction. Working closely with the office staff, Qualmentus designs and implements solutions with measurable results using an approach based on Lean Six Sigma.

Co Founder Patrick Widhelm — Seven years experience in process engineering and program management at USAA and in the US Air Force Space Program. Patrick holds a Masters in Public Policy from Harvard University and graduated Summa Cum Laude from the US Air Force Academy with a BS in Management. He is Six Sigma Black Belt certified and specializes in statistical analysis and data modeling.

Co Founder Sergio Trevino — Seven years of process engineering experience in the field of Health Care, Property & Casualty Insurance, Life Insurance, Banking, Financial Services and Grocery Supply Chain Management. Sergio earned an MBA from Our Lady of the Lake University in e-Commerce Management, graduating with honors. Lean Six Sigma Black Belt trained, Sergio specializes in strategic business planning and the implementation of lean operations.