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SIX SIGMA IN HEALTHCARE & HOSPITALS

A CASE STUDY OF REDUCING CYCLE TIME FOR CLAIM SETTLEMENT
PROCESS

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E-SIX SIGMA

a venture of sAvh Quality Solutions (Pune)



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Introduction

Six Sigma is world-wide renowned quality improvement methodology that mainly works on removing defects from the products, services and the processes across the sectors.

It was invented in 1980's at Motorola company. In its initial application, Six Sigma was limited to Manufacturing & Production industries however with its increasing popularity, it spread to all other sectors.

Today, Six Sigma is considered one of the prominent methods for Quality Management and being used by over 90% of Fortune 500 companies. Almost all National and Multi-National companies use Six Sigma in some or the other way.

Six Sigma has 4 key levels of expertise identified as-

- Six Sigma Yellow Belt
- Six Sigma Green Belt
- Six Sigma Black Belt
- Six Sigma Master Black Belt

Every level of expertise has its own roles & responsibilities in Six Sigma Project Implementation and generally lead by a Master Black Belt.

When integrated with Lean, which is, in simple words, a waste removal method, Six Sigma becomes Lean Six Sigma.

e-Six Sigma (www.esixsigma.in)

e-Six Sigma is a cloud-based Six Sigma Training & Certification Platform accredited by 'Council for Six Sigma Certification (USA)'. CSSC operates in over 165 countries across the world.

It has won a National Award for 'Best Online Six Sigma Training & Certification Platform in India 2017' by India Education Awards.

e-Six Sigma is being loved for its unique value of providing 'practical knowledge' through AWYL i.e. 'Apply What You Learn' activities which are meant to free your hands on the key topics being taught in the chapter (the curriculum for Six Sigma Green Belt is divided into 14 distinct chapters).

It is a brand of sAvh Quality Solutions, a sister concern of sAvh Technologies Pvt Ltd, an ISO 9001-2008 certified company based in Pune. sAvh is a venture by IIM-Alumnus & Ex-Infosys Employee.

sAvh has trained over 1800 students and professionals for Six Sigma Training.

Six Sigma and Healthcare & Hospitals

Six Sigma applications in Healthcare require an understanding of how the tools and methodologies translate to the people-intensive processes of patient care. Once applied, the possibilities are endless.

Six Sigma removes defects and in Healthcare, a defect can be the difference between life and death. It can be termed as any factor that leads to patient dissatisfaction.

According to multiple surveys, out of thousands of surgical operations being held only in India, over 5000 operations are being done in an incorrect manner. Over 2 Lacs wrong Drug Prescriptions are issued resulting into over 80 deaths in India every year. The study by IOM (Institute of Medicine, USA) reported 98,000 deaths and around 1.5 Lacs Injuries in the US in 1999 which was surprisingly very high for one of the most developed countries in the world.

Healthcare is one of the sectors where even 99% Efficiency is not sufficient. Employing Six Sigma principles in healthcare settings can help eliminate defects and variations in processes, and it can help make procedures more streamlined, less costly and help improve patient care.

Quality issues within the Healthcare sector can sprout from just about anywhere. The most common evolve around faulty equipment, lack of management or routine within a particular department, or there can even be problems throughout the organization as a whole. This process, when used and implemented correctly, can successfully alleviate procedural issues as they relate to medical care and operational issues like work-flow, registration, and billing.

First, Six Sigma asks that the 'customer' be prioritized as the first step to successfully repairing an issue. Usually, within the healthcare industry, the 'customer' could oftentimes be the patient, the nursing staff, the doctors, the stakeholder, the administrative staff, or the department manager.

It all depends on the quality issue at hand and who will directly benefit from the changes that will be made via Six Sigma. Of course the patients are the final customer when it comes to the health care industry, but since this process is a business theory, it needs to sometimes be viewed in a business light.

In some cases, some problems are not prime candidates for Six Sigma. This is because this process works best with complex issues with several variables involved that are repeated over and over. There are several other quality management programs that may help to solve simpler operational issues directed more towards facilitation, direction and building a consensus amongst all the people involved. Since most hospital procedures are repeated, it is a very viable option for most hospital processes, which is why Six Sigma is so beneficial when it comes to the healthcare industry.

The application of Six Sigma in Healthcare & Hospitals thus, became a boom for the past few years and will grow in coming times saving billions of dollars and millions of lives!

Case Study: Reducing Cycle Times for a Claim Settlement Process

While Six Sigma has been steadily revolutionizing a diverse range of corporations, the approach is relatively new to the healthcare industry. Mounting evidence of success in other industries suggests definite patient/caregiver rewards to be reaped by deploying Six Sigma strategies and techniques within hospitals and health systems.

The 'Patient Care' is core of the Healthcare industry perhaps it is the ultimate goal of it. The Patient Case has multiple dimensions ranging from filling up the admission form till post-discharge benefits.

Below is the Case Study of Reducing Cycle Time for the Orthopaedics Claims.

A team of healthcare professionals at one of the leading hospitals in Mumbai was chartered by the management team to tackle the problem of Excessive Cycle Time for processing Orthopaedic Disability Claims. For 75% of all the cases, it took longer than 10 days from the receipt of the request to mail the claim to the insurance company.

When the team started the process and defined the problem, Orthopaedics (Ortho) was named as the prime suspect. However, the analysis of actual data revealed that every step in the process, both in Ortho & Accounts Receivable, took an excessive amount of time. In addition, the variation in each step was enormous. For example, it could take anywhere from 1 to 10 days to open and read the mail within Accounts Receivable. When the team measured the amount of time that added value, they found that less than 0.5% of the time was spent on activities that moved the claim closer to reimbursement.

When they started to challenge the current process, the team made startling discoveries as:

- Less than 78% of the cases needed a referral to the MD, however, the existing process required a referral in every single case.
- Ortho maintained electronic files of patient records and allowing the Accounts Receivable department to access this system would eliminate the need to request the patients' files from the department.

Using process mapping and advanced statistical tools, the team was able to project the impact of potential improvements, which facilitated getting the buy-in from both departments to implement dramatic process improvements.

The results were impressive:

- Total Cycle Time was reduced from an average of 17 Days to less than 6 Days
- Variation was reduced by 60%
- Less than 16% of all the cases took longer than ten days– resulting in a dramatic increase in Cash-Flow.

Six Sigma offered multi-dimensional benefits to the hospital in the stipulated time-frame of 6 months.

Application of Six Sigma in Healthcare Industry

Every healthcare institute has diverse problems which need to be rectified. Not all are the same but most can be summarized under general headings.

For instance, most healthcare organizations tend to need aid with these types of projects:

- Reduce No of Human Errors in Medical Operations
- Enhance Patient Experience & Satisfaction Level
- Identify & Remove Requirement Gaps in different Hospital Processes
- Reduce Cycle Times of different Processes and many more.

The benefits of Six Sigma extent far beyond reducing cycle time or increasing efficiency:

- By using a common scale that is based on patients' needs to measure and evaluate every process in a healthcare business, Six Sigma provides senior management with an effective way to manage performance for such distinctly different processes such as transplanting organs, registering patients, filing claims, purchasing sutures, etc.
- The focus on reducing variation is particularly important for the healthcare industry, where every physician deploys a different process. The inherent variation in these processes make it difficult to achieve consistent standards of care and oftentimes prevents employing scientific thinking to identify the one best way. The sophisticated statistical techniques in the Six Sigma toolbox can help to identify best practices and coupled with the ability to manage change, help achieve substantial improvements when it comes to clinical processes.
- Consolidation in the healthcare industry has led to the formation of large hospital chains. However, few organizations have been able to transcend organizational legacies. As a result, few have gone further than establishing a common accounting system. But what about being able to look at similar processes across different organizational units and being able to replicate the most effective approach across the entire chain. The Six Sigma methodology provides a common language to understand differences in processes and make informed choices about which approach is the best.

Six Sigma alone may not be heralded as the saviour of healthcare delivery in this country, but its judicious application along clinical lines, combined with the best treatment, technology and expertise available, will certainly improve care for the patient and diminish uncertainty for caregivers. Time will bear witness to the efficacy and extent of the transformation.

Training & Mentoring by e-Six Sigma

e-Six Sigma offers Six Sigma Training & Certification Programs accredited by 'Council for Six Sigma Certification (USA)'. It is one of the renowned Accreditation Providers across the world that operates in over 165 countries.

e-Six Sigma is a venture by IIM-Alumnus & Ex-Infosys Employee that won a National Award in Feb 2017 by India Education Awards.

It provides state-of-the-art Virtual Infrastructure and Curriculum to learn Six Sigma at your convenience & pace to earn Globally Trusted Certification with life-time validity and Cross-Industry Applicability.

The main reason why our learners chose 'e-Six Sigma' over others, is that, we offer Practical Exposure through our Mandatory AWYL i.e. Apply What You Learn Activities and use of Real-life Examples for easy understanding.

With an extensive knowledge & experience of almost a decade in Training & Consulting, we partner with Academic Institutes, Corporates, Government Bodies & Individuals to gratify their respective Goals by empowering the way they perform.

You can learn more about its Training & Mentoring Programs at- www.eSixSigma.in.

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