

Chronicle of a Six Sigma Project

Abstract of article by Jill Sutton Finan, Master Black Belt candidate, Ortho-Clinical Diagnostics

The complete article and two brief introductory articles on the project may be found at www.stcrochester.org, on the newsletter page.

Six Sigma originated with manufacturing, but it also applies to transactional functions involving exchange of goods, services, or information. This article describes a Six Sigma project completed by a team of technical communicators. The team was charged with moving from paper manuals to electronic documentation delivered as part of the product. In the past, help text from the writers was incorporated into the product and when the software was submitted for testing many errors were found. The project goal, documented in the **Project Charter**, was to minimize or eliminate defects before delivery to software testing.

The project followed the five phases **Define, Measure, Analyze, Improve, Control (DMAIC)**. In the **Define** phase, the team listened to the **Voice of the Customer** to clearly understand the Critical to Quality (CTQ) elements, and created a **SIPOC (Suppliers, Input, Process, Output, and Customer) diagram** for the current process.

In the **Measure** phase, the team gathered data to determine the types of errors found in recent releases and identified five categories. With a **Pareto Chart** the team discovered most were in formatting and translation. For each step in the process map, the team performed a **Failure Modes and Effects Analysis (FMEA)**, asking “What can go wrong?” and “What will happen if this goes wrong?” The team checked to see if controls were in place to catch the failure before it became a problem, and found one control missing—verification of the help text before it was handed off to software testing.

In the **Analyze** phase, the team performed **Cause and Effect analysis**, and found a constant theme, “no time.” Verification had to be part of the development schedule. The team decided on software emulation so authors could view the electronic documentation as it would appear in the product and correct errors. To verify the solution, the team created test cases, and verified their utility with a **designed experiment**. To verify the test cases would consistently yield the same results with different evaluators, **Gage R&R** was used. From the results the team knew the solution was valid and the test cases would work.

In the **Improve** phase, the team developed an implementation plan for verifying the electronic documentation using test cases prior to handing off to software testing. In the **Control** phase, the team used a control chart to monitor errors reported from software testing. The team expected to see the number of errors decrease, ultimately to zero. The team leader continued to monitor errors and if the number of errors began to increase, the team planned to investigate. With the completion of this project, the team chartered another project to address the translation issues.

Next dinner meeting

April 23, 2003

Health Care

Alan E. Pedersen

Details: See pages 3 and 4 and www.asqrs.org.

Reservations: Call 585-234-8630 by noon April 22. Walk-ins are welcome.

Volunteer opportunities

To **volunteer to serve on a committee**, contact Volunteer chair Kathy Bannon, 585-453-4629, kbannon2@ocdus.jnj.com.

The Executive Committee seeks a volunteer to help analyze and evaluate the Section’s investments. Contact Kathy Bannon, 585-453-4629, kbannon2@ocdus.jnj.com.

Submit a proposal for presentation at the 18th Annual Toronto Quality Forum, October 2, 2003. Find details on the Special Events page on www.asqrs.org.

Learning and networking opportunities

Events in Rochester and outside the area are listed on the Special Events page of our web site, www.asqrs.org. Follow the link at the bottom of the home page.

Thank you

To Dr. Rita Ratcliffe for initiating a pro-bono effort by our section to support health care quality. Please look for the details on page 3.

To Ivan Enstrom for completing revision of the bylaws so they can be voted on by the members.

Quality Audit

American Society for Quality Rochester
Section newsletter

Published monthly September to June.
Deadline is the 15th of the preceding month.
Send submissions to the editor,
ann@annlwiley.com. Complete contact
information for all section leaders is on the
section web site, www.asqrs.org.

OFFICERS

Chair: BJ Coons BJ53@rochester.rr.com

**Vice Chair and Section Management
Process (SMP) chair:** Vacant

Administrative Secretary: Sue Bailey
sueb@theimc.com

Treasurer: Michele Hansen
mhansen2@ocdus.inj.com

Secretary: Deb Lydick
dlydick@ocdus.inj.com

Past Chair and Nominations: Vince Vezza
vincevezza@prodigy.net

Region 2 Deputy Director: Mary C. Tyler
mary.c.tyler@delphiauto.com

Region 2 Director: Daniel Sniezek
daniel.sniezek@lmco.com

EXECUTIVE COMMITTEE MEMBERS

The Section Officers and Kathy Bannon,
Ivan Enstrom, Kathy Grimes, Rich
Henderson, Dave Schreiber, Bob Stein,
Mary Tyler, Ann L. Wiley, Dave Yavorski

COMMITTEE CHAIRS

Audit and Strategic Plan: Ivan Enstrom
ienstrom@rochester.rr.com

Awards , Examining, Placement: Mary C.
Tyler mary.c.tyler@delphi.com

Certification and Education: Rich
Henderson rchender3@ocdus.inj.com

Communications and newsletter:
Ann L. Wiley ann@annlwiley.com

Conference: Kim Ludwig
kludwig@ultrafab.com

Database: Dave Yavorski
dyavorski@ocdus.inj.com

Historian: Ed Grizer
edison.grizer@kodak.com

Membership: Bob Stein bob@agcnow.com

Programs: Jim Coates CoaJam@aol.com

Re-certification: Vince Vezza
vincevezza@prodigy.net

Scholarship: David Schreiber
daschreiber@juno.com

Student Branch RIT: OPEN

Volunteers: Kathy Bannon
kbannon2@ocdus.inj.com

Webmaster: Chuck Hardy
webmaster@asqrs.org

TASK GROUPS

Customer Satisfaction: Joyce Kreiger
jkreiger@rochester.rr.com

Health Care: Dr. Rita Ratcliffe
drritamedex@aol.com

ISO 9000: OPEN

Small Manufacturing: Steve Bacon
sbacon@magnuscnc.com

Software QA: Trudy Howles tmh@cs.rit.edu

Letters from members

Rochester Section member **Dave Auda** inquired about how to inform members of our section about the **regular monthly meetings of the Rochester Chapter of the Society of Reliability Engineers**.

Anyone with a meeting to announce is welcome to **send the information to the editor**. We will provide a brief announcement on the **Special Events page of the web site**, www.asqrs.org, with a link to your site for the flyer. If a member of the Rochester Section of ASQ is the presenter at your meeting, please tell the editor, so we can highlight the accomplishments of our members.

Letters are important contributions and demonstrate involvement of our members. Please write to the editor, ann@annlwiley.com.

Message from the chair

by BJ Coons

I am writing this message on March 16th. The next few days and weeks may be challenging for many of us; filled with uncertainty. We will follow the news closely. Our leaders will be making difficult choices and they will seek our support for their decisions.

By the time you read this message many decisions will have been made, and our immediate course of action determined. Because Americans have a strong sense of survival we will move forward with our lives and do what is necessary. I believe we will find the strength we need to get through this difficult time and carry on. I wish you and your families well.

Message from the editor

by Ann L. Wiley

In April, 2002 Tom Mosgaller, President of the American Society for Quality, addressed the Second Gulf International Quality Conference in Bahrain. Mosgaller observed that early global connections developed from trade that originated in the very location of the conference. A mixing of cultures flourished, on account the driving force—trade; on account of a common language—that of trade; and on account of major centers between which trade occurred—the earliest cities. Each succeeding age contributed unique influences to culture.

Mosgaller then turned to the conference focus—quality, and observed quality professionals can contribute uniquely to our times.

A significant way to contribute is to share our experiences through feature articles. We want to devote the front page of our newsletter to an educational article by a member. This month an STC colleague has allowed me to abstract her article. Please send articles at any time to ann@annlwiley.com.

Dinner meeting report

At the March 20 meeting approximately 25 people heard Donald Riley, Chief Executive Officer of the Rochester-Genesee Regional Transit Authority, speak about ways the Transit Authority is using customer satisfaction measurements to expand on and improve services. Joyce Krieger led the Customer Satisfaction Task Group in a small group discussion before dinner.

Executive Committee report

The Executive Committee met on March 18. Conference registrations were coming in slowly. Plans for regional leadership training in June are being made. The Executive Committee will be reviewing our investments. A vote on the bylaws revisions is in progress, explained in the next column. All members are welcome to attend Executive Committee meetings. Please contact the Chair, BJ Coons, BJ53@rochester.rr.com.

ASQRS Scholarship news

The ASQRS Scholarship Committee has selected the recipients of the Section's Year 2003 College Scholarship Awards. The purpose of the ASQRS scholarship program is to encourage college students to include the application of quality concepts in their current education endeavors and in their future careers. The recipients are being recognized at the 2003 ASQRS Quality Conference luncheon, where each is being presented with an award certificate and a \$1000 check, to assist with their college expenses. The scholarship recipients are:

Bridget Caffrey. Bridget is a third year student at SUNY College at Fredonia, who is majoring in Elementary Education.

Kevin Macikowski. Kevin is a second year student at Nazareth College, who is majoring in History and Political Science.

Emily R. Mahns. Emily is a second year student at Monroe Community College, who is majoring in Communications and Media Arts. Emily will be transferring to SUNY Geneseo for her third year of college study.

Bryan M. Schuff. Bryan is a second year student at SUNY College at Oneonta, who is majoring in Music Industry.

Health Care Task Group

Health Care Task Group Chair Dr. Rita Ratcliffe encourages all members and others interested to attend the Task Group meeting at Logan's on April 23, at 5:00 PM *before dinner*, to learn more about our current initiative to apply standard quality tools to improve the delivery of health services. This is a pilot project with ASQRS members collaborating on a pro-bono basis with a local Family Practice office to improve patient flow and decrease wait times for patients in the office. Then stay to hear Alan Pedersen of Cayuga Medical Center discuss his interesting personal experiences in improving the delivery of health-related services.

Membership report

by Bob Stein, Membership chair

Currently the Rochester section has 818 members. Please welcome our new members, who joined in February.

William C. Brown
Christopher M. Burns
Tim Carroll
Andre Finley
Philip R. Gargantiel
Doreen M. Genga
Betty L. Green
Elisabeth Hager
Lawana Jones
John M. Lackey
James Francis Meyer
Roy L. Nichols
Ishrat J. Zaman

Vote on the bylaws

Members of the Executive Committee worked throughout the month to arrange for the vote on our revised bylaws.

The existing and proposed new bylaws and a summary of the changes are posted on our website, www.asqrs.org, on the Special Announcements page. The bylaws, along with the strategic plan, will be posted permanently for reference by all members.

Ballots are being mailed to all members and must be returned by March 28, as we go to print. We will solicit votes at the March dinner meeting and at the Conference.

We are required to obtain the votes of one quarter of the members, and two-thirds of the votes must be to approve. This shows the importance of participation by the members, and we will report the outcome.



Rochester Section 0204

American Society for Quality Rochester Section
PO Box 30885
Rochester, New York 14603

Phone: 585-234-8630

Web: www.asqrs.org

Non Profit Org
US Postage
PAID
Rochester NY
Permit No 216

April Dinner Meeting: Wednesday, April 23, 2003

Health Care. Alan E. Pedersen, Vice President, Human Resources, Cayuga Medical Center, Ithaca, NY

In health care, success in today's ever changing market depends on the necessary combinations of quality, patient satisfaction, and service excellence.

Alan Pedersen will provide an overview of how Cayuga Medical Center has grown to be a regional provider of health care services, by focusing on financial integrity, service excellence, patient satisfaction, and quality.

Alan has been instrumental in ensuring the mission of Cayuga Medical Center through refining the recruitment processes and developing programs with an employee focus.

The program will be held at **Logan's Party House** (390 to Scottsville Road, exit and go south one mile).

The Health Care Task Group meets at 5:00 PM.

Registration starts at 5:30 PM. The buffet dinner is at 6:00 PM and the program starts at 7:00 PM.

To register, call 234-8630 by noon on Tuesday, April 22, 2003.

The cost is \$15.00 (\$5.00 for student members). Payment is by cash, check or credit card. There is no charge to attend the program only. Walk-ins and guests are welcome.

ASQRS Seminar: Geometric Dimensioning and Tolerancing

Tuesday and Wednesday, **April 15 and 16, 2003**, 8:00 AM to 4:30 PM
Holiday Inn Rochester Airport, 911 Brooks Avenue

Fee: **\$540** includes course material handouts, refreshments and lunches.

Instructor: **Donald E. Day**, president of Tec-Ease Inc.

To register complete the form (available on www.asqrs.org, the education page) and send it, with payment, to: David Schreiber, 240 Maywood Drive, Rochester, NY 14618. Seminar completion qualifies for **2 Re-certification Units**. For **details** visit our web site, www.asqrs.org.