



**2005 SACUBO Best Practices**

**Modernization of Services to Accommodate Today's Student**

**Wendy Littlejohn**

**Medical University of South Carolina**

**Joe Maggitti**

**Medical University of South Carolina**

**Christine C. Chapman**

**Medical University of South Carolina**

**Michelle Adelson**

**Office of the CIO (OCIO) - Information Services**

## *Abstract*

*Revenue Accounting, a division of the Controller's Office, is comprised of Student Accounting, Cashier's Office, and Accounts Receivable. The offices were joined through reorganization at the start of fiscal year 2004 (July 1, 2003 through June 30, 2004). Web based credit card payments were successfully implemented in December 2003. MUSC administration challenged Revenue Accounting to identify, design and implement additional processes to make student receipts, loan disbursements, refunds of financial aid, billing, and exit interview processes more convenient for our more than 2,300 students. In addition, students were requesting real time information and access to their accounting records anytime, from any location.*

*The following business process improvements were implemented to make student accounting services more efficient, customer friendly, and to identify a new revenue source to defray costs. These goals were achieved within an aggressive time line – that is, within fiscal year 2004.*

*Process improvements included:*

- ✓ Electronic bill presentment effectively eliminating paper bills;*
- ✓ Capabilities to accept electronic check payments from students;*
- ✓ Deposit financial aid overages electronically to student bank accounts;*
- ✓ Electronic signature for all promissory notes;*
- ✓ Convenience fee for web credit card payments for tuition;*
- ✓ Streamlined the exit interview process to one web site for all loan types; and*
- ✓ Data warehouse to automate and eliminate manual reconciliation processes.*

*These accomplishments were made possible through teamwork and collaboration from MUSC Student Accounting, MUSC Cashier's Office, MUSC Systems Accounting, MUSC Cash Management, and the technical staff of OCIO®, MUSC IT Lab, ECSI® and Wachovia Bank®. The full benefits of these improvements continue to be identified as many were recently implemented and are on going. The changes impacted processes in multiple Finance departments that had not been anticipated. Within twelve months, 3.5 full time employee positions were eliminated through attrition and over \$10,000 in convenience fees were recouped.*

## **Introduction of the Organization:**

Located in historic Charleston, South Carolina, the Medical University of South Carolina (MUSC) was established in 1824 and is recognized as the first medical college in the South. The University is a state institution of higher education and has as its primary mission, as determined by the Board of Trustees, to preserve and optimize

human life for the citizens of South Carolina and the nation through education of health care professionals and biomedical scientists, research in the health sciences, and provision of comprehensive health care.

The Medical University of South Carolina has component units, the largest being the Medical University Hospital Authority, and six colleges including the Colleges of Medicine, Dental Medicine, Pharmacy, Nursing, Graduate Studies, and Health Professions. Enrollment for the University's six colleges for fiscal year 2004 fall semester totaled 2,324 students. The University employs approximately 4,400 administration, faculty and staff members while the Medical University Hospital Authority employs an additional 4,400. Together, this makes the University one of the largest employers in the State system and the largest employer in the Charleston area.

**Statement (restatement) of the Problem/Initiative**

Prior to fiscal year 2004, many Student Accounting services were manual paper driven processes. Student Accounting consisted of seven full time employees and one part time employee to process semester billings, loan disbursements, refunds of financial aid, exit interviews and loan account reconciliations. Student loan billing and collections are outsourced to a third party vendor, Educational Computer Systems, Inc. (ECSI).

Student tuition bills mailed each term were manually reviewed, folded and inserted into envelopes. Hundreds of paper requisitions per semester were completed manually by the Student Accounting Office and sent to Accounts Payable where they were entered manually in the payables system. This was a very labor-intensive process for both offices. Additionally, Systems Accounting staff established each student in the vendor database before a physical check was issued. The resulting paper checks were

then verified, sorted, and hand delivered during the scheduled check disbursement.

Registration each semester was a two-day process with students standing in long lines to receive paper refund checks and/or make payments. This process required significant human resources to accommodate needs and frustrated students.

As at most institutions, MUSC students increasingly choose to use credit cards to pay their tuition bills. The annual cost to the University of accepting and processing credit card payments rose steadily to over \$100,000 and was centrally absorbed by the Cashier's Office.

Students were required to log into multiple web sites to complete the exit interview process. Because of the non-intuitive nature of this process, students having various types of loans were not completing the exit requirement timely and were unaware of this result until diplomas were withheld at graduation, leaving these students very unsatisfied with the process and level of customer service delivered.

Another significant problem was the requirement of a physical signature on all promissory notes. Students on day and offsite rotations found it difficult, if not impossible, to meet the due dates for required signatures and were assessed late fees for failing to sign the documents in a timely manner.

While Student Accounting has a widely used accounting software program package to maintain student tuition accounts, the office continued to maintain numerous detailed excel spreadsheets to capture and collect data in usable formats. As this was a manual process, mistakes were easily made and information was not readily available to the administration or the students.

## **Design**

A project team consisting of staff members from Revenue Accounting and in house technical staff from OCIO was formed to create specifications for web screens and verbiage for email confirmations, and to perform testing and documentation of the processes. The web screens were presented to the Controller and Chief Financial Officer for approval.

Once the screens were approved, one OCIO technical staff member was tasked with installing and implementing the electronic bill presentment feature available from the existing accounting software vendor. Another technical staff member was tasked to program a convenience fee calculation within the existing on-line credit card payment process. To mitigate student opposition to the convenience fee, an alternative means for students to conveniently pay their tuition bill on-line with no additional fee was needed. It was determined that implementation of an electronic check transfer (ECT) process was necessary.

To implement the ECT process, MUSC provided ECSI with specifications. ECSI for a nominal fee (\$1,000 setup charge, \$.40 transaction fee, and \$300 monthly maintenance) developed the ECT screens to debit students checking or savings accounts. In addition, they were requested to assist with implementing the screens to obtain consent from students to electronically deposit financial aid overages directly into the student's designated bank account. Again, the fee was nominal (\$1,000 setup charge, \$.40 transaction fee, and \$300 monthly maintenance) and ECSI also agreed to work under the aggressive "go live" date of December 1, 2003. MUSC was very pleased with the services ECSI provided for student loan accounts so another opportunity to work with this company was embraced. The previously mentioned costs were the only out of

pocket costs incurred with implementing the seven processes that had dynamic impacts on customer service and personnel time. These services were added to the existing Request for Proposal (RFP) with ECSI, which took effect July 1, 2003. The existing RFP also included an exit interview process whereby all loan types could be consolidated into one website maintained by ECSI, and all promissory notes could be signed electronically. MUSC welcomed the opportunity to make the change from the homegrown exit interview process, consisting of three separate websites, to ECSI's one stop shop and to provide students the convenience of signing their note on-line. Total loan disbursements are also available to students on the ECSI website.

Another technical staff member of OCIO was enlisted to work with the staff in the creation of a data warehouse to query tables from the student accounting system to create Access reports which would replace manual excel spreadsheets currently used for reconciling financial aid and student accounts. Ultimately, this warehouse would be used to create upload files to update the general ledger system, resulting in improved accuracy and eliminating manual journal entries.

## **Implementation**

The following "go live" deadlines were established for the seven process improvements:

August 2003 - Electronic bill presentment;

December 2003 - Convenience fee for web credit card payments for tuition;

December 2003 - Accept electronic check payments from students;

January 2004 - Deposit financial aid overages electronically to student bank accounts;  
March 2004 - Exit interview process converted to one web site for all loan types;  
March 2004 - Data warehouse to automate and eliminate manual processes; and  
June 2004 - Electronic signature for all promissory notes.

All deadlines were successfully met with professional products as the end result. During implementation, a project team consisting of three accountants from MUSC and seven technical experts from OCIO, ECSI and Wachovia was assigned testing responsibilities and contributed significant effort in testing the numerous scenarios that were envisioned to occur. The processes were given a final real time test by soliciting student volunteers from Student Government Association (SGA) to run actual processes to ensure that the instructions for each process were clear and concise. Frequent meetings with SGA officers were held to inform them of the ongoing efforts in each process and to obtain their full support of these changes.

### **Benefits**

One of the most important benefits was the improvement in student satisfaction. The spring 2004 Student Survey included the highest customer service ratings ever received. Students were overwhelmingly in favor of the changes and appreciated the convenience of direct deposit and paying on-line. One student who did not take advantage of the services complained because he was unaware they were available. Because there was some doubt that timelines would be met, there was no aggressive publicity regarding the process changes. Once the processes were fully operational, ongoing notifications to students began via email, flyers, brochures and communication from SGA. Each member of Student Accounting received the MUSC Applause award

for their efforts in these process changes with many awards nominated by students. An added benefit was improved communication with the student body from working consistently with SGA to present new processes for their approval, through participation in surveys and dissemination of student information.

On line bill presentation feature gave students the ability to access their account information in real time. The student check disbursement process was reduced from two days to four hours, essentially eliminating the need for registration. Students no longer wait in long lines to receive physical checks and the number of staff required is minimal. Staff may now perform other valuable functions such as learning how to use new software programs and other technology advancements to provide greater service to students. By implementing these seven process improvements, the University has saved in excess of \$117,800, with incidental costs such as postage not included. This recurring saving is expected to increase each year as more revenue is recouped from convenience fees and personnel costs decrease. Processing and personnel time was greatly reduced and efficiencies were measurable in Student Accounting and the Cashier's Office. The many additional benefits received from reducing work in Systems Accounting (vendor setup / paper check distribution) and Accounts Payable (requisitions, manual input to produce paper) were not anticipated. Currently, 100% of our students receive on-line bills, 40% pay on-line, more than 60% utilize direct deposit, and in turn 2,460 manual checks are no longer processed.

There has also been a remarkable increase in overall compliance with student exit interviews. Consequently, meetings involving Student Accounting, Deans and Provost concerning students prohibited from graduating have ceased. The one stop shop web site

showed 368 exit interviews were conducted on-line during fiscal year 2004 resulting in improved accuracy, reduction of loss of paperwork, fewer graduation holds, and greater student satisfaction. These new processes allow students more study time and patient training time. They can conveniently sign promissory notes electronically anytime and anywhere. Signature promissory notes are now downloaded to files to increase efficiencies in reconciling. Students have the ability to receive direct deposits (no longer have to spend time out of their hectic days to make bank deposits for refunds), make tuition payments on-line by either credit card or directly from their checking or savings account, and conduct their exit interview on-line.

MUSC has welcomed questions, inquiries and visits from peer institutions regarding our on-line processes.

### **Retrospect**

The IT Lab identified a potential security infraction with the firewall for the electronic deposits and checks. MUSC immediately worked with OCIO and ECSI to correct the problem and enhance security. Precautions such as implementing Blowfish encryption to strengthen and ensure students have a safe web environment to conduct their banking transactions continues.