

**Process Improvement of Reconciling  
State Insurance Deductions and Programs**

**Krissy Kaylor**

**Clemson University**

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**Problem statement:**

The process used to reconcile state insurance deductions and transactions at Clemson University with the Employee Insurance Program results in delay of refunds and collections and less staff time for completion of other job duties.

In the past, some employees have waited three or more months to be refunded or charged for collections from insurance transactions. Employees are entitled to timely refunds and timely collections are needed to fund the payment of the state insurance bill each month. Previously, refunds and collections for adjustments or changes were made after reconciliation for the month was completed. Reconciling continues to stay behind due to increased retirements and hiring, which results in a greater need for counseling.

Improving the state insurance reconciliation process is in line with the Clemson University's commitment to "Lean Thinking" (Womack, and Jones, Lean Thinking). Management received training on the purpose of lean, the process, commitment of top management and our role.

The lean approach or "Kaizen" is defined as "small daily improvements performed by everyone. Kai means "take apart" and zen means "make good." The point of kaizen implementation is the total elimination of waste." (Tapping, and Shuker, Value Stream Management for the Lean Office, p.148). "Kaizen" is being implemented at Clemson University to determine areas that provide value

where “muda” defined as “any activity that consumes resources but creates no value” can be eliminated and money found, while not eliminating staff, but reallocating resources where needed. (Womack, and Jones, Lean Thinking p. 350).

The process of lean involves assembling a team to look at a particular process, in detail from beginning to end, with the direct people who complete the process and determining the recommendations. Initially, the University committed to looking at about five processes. This was suggested by a consultant who was hired to conduct lean training and facilitate the initial phase of lean. Management solicited ideas from different departments and determined which process improvements would provide the most “bang for our buck.” Then teams were created to conduct the reviews. The idea is to devote the total resources needed for a week, to quickly determine and implement the best recommendation.

The University’s goal is to become a top 20 public university. With state supported funds continuing to decrease, it is imperative the University find other sources of funding to help reach that goal. In addition to the quest to increase money from research grants, the University is utilizing lean as a way to find money internally. Top management has been involved from the initial stage of lean, during the training and is continuing to play a role with process review.

Our role as managers is to be supportive with our time and staff who may be asked at some point to help on a team. We were also asked to determine processes or functions within the units we supervise and conduct mini-lean/Kaizen sessions. The reconciling process is a mini-lean session for the insurance unit.

The first response to a solution for faster refunds, collections and time for completion of other job duties may be to add more staff. However, that is not an option. A few years ago the benefits unit was cut a counselor position. It has taken years to document and gather support to obtain the position back.

**Data collection:**

The data collected includes reasons for the project, flow charts, project schedule, extraction of data from the Employee Insurance Program to compare to Clemson University's data for insurance, estimated current processing time for refunds and completion of reconciliation responsibilities and estimated costs .

It was important to document justification for the project to obtain the support from management, staff and the technical team to prioritize this project in relation to other goals for the unit, department and organization.

To ensure a new process did not eliminate any necessary steps, the benefits counselor responsible for reconciling, Mary Lee, was included in the

development of flow charts of Clemson University's processes [appendices 1 (DOC 1a-1j) and 2 (DOC 2a-2c)]. Since the University of South Carolina has similar reconciling needs, Clemson University decided to meet with their staff and flow chart their process for reconciling to compare [appendix 3 (DOC3a-3f)].

During the unit staff retreat, the insurance team met to discuss reasons for the project, resources needed to complete the project and a projected timeframe for completion, understanding that success also depended on the schedule of Clemson University's technical team.

Clemson University contacted the Employee Insurance Program to find out the current information that could be extracted from their system online, the format and timeframe available. Using this information and the flow charts of current processes from Clemson University [appendices 1 (DOC 1a-1j) and 2 (DOC 2a-2c)] and University of South Carolina [appendix 3 (DOC3a-3f)], benefits staff and technical staff developed a flow chart of a new improved process to reconcile state insurance [appendix 4 (DOC 4a-4e)]. The new process will speed up refunds and collections, while providing more time to complete other job duties.

Based on review of 2006-2007 refund request forms submitted, there were several instances where employees had to wait up to 3-4 months or longer to receive an insurance refund. It is estimated that over  $\frac{3}{4}$  of the refunds issued during this time period were 2-3 months after the insurance change or

termination was made. By viewing the 2007-2008 refund request forms we will be able to quickly identify refunds that are processed more than 2 months old. Our goal is 1-2 months wait time to receive a refund for 95% or more of the people due a refund. We'd also take into consideration some refunds may be older due to special circumstances, such as the state approving retro-active changes and terminations of programs. When we stopped the old method of reconciling a decision was made in the unit to write up the refunds as follow up to counseling, instead of writing them up as a part of the reconciliation process. This simple change has already made an impact of more timely refunds.

The process of reconciling all state insurance programs with the former and new method starts as soon as the second pay check of the month is confirmed by payroll (for insurance premiums to be deducted). The time frame for the former process required an average of one week staff time at a cost of \$762.75 per month ( $\$20.34$  hourly rate \*  $37.5$  work hours per week) \*  $12$  months a year =  $\$9,153$  yearly cost. This meant having to work on reconciling between counseling duties (many interruptions). Since the process required balancing premium amounts to the penny for each program, much research would be required when Clemson did not balance with the State – usually due to data entry errors in Access databases (decks) or on Excel spreadsheets. This could be very time-consuming on most occasions. Also, the method of reconciling each program individually was time consuming. Our goal was at a minimum to cut the

work time in half. Savings in this area will be applied to other counseling job duties.

In addition to the staff time for reconciliation, the unit would spend approximately 1 minute per transaction to key information into the insurance transaction access database. Each year the unit keys 8,000 state insurance transactions in this database, a cost of \$2,575.94 per year. This amount was calculated as follows: 1 minute \*8,000 transactions =8,000 minutes /60 minutes in an hour =133.33 hours a year \*19.32 (average hourly rate for unit staff). The goal with the new method was to eliminate this data entry point.

The number of errors using the old system was not tracked, just adds, changes and terminates. The initial onset of the new method was more time-consuming because of determining and clearing up errors that had not been caught in the old method (a 3 ½ page spreadsheet of entries to be corrected either by Clemson University or the State).

The process flow charts (appendices 1, 2, 3 and 4) are documented with operational definitions described.

**Data analysis:**

After observing the reconciling process, reviewing the flow charts, talking with staff and technical support, the reason why refunds and collections are slow and too much staff time is spent reconciling is the duplication of transactions and the manual processes that can be further automated. As noted on the Clemson University's current reconciling process flow charts (appendices 1 and 2), Clemson not only reconciles with the state but also within it's own system using access databases. Entries are made five times, as follows:

1. In the Electronic Benefits System for the Employee Insurance Program (EBS).
2. In the Clemson University Business System for employee deductions. (CUBS)
3. In Clemson University's Access Data Base to compare with deductions, identify adds, changes or terminations of insurance to reconcile with the state bill and to determine needed refunds or collections. (INS TRANS - ACCESS)
4. In Clemson University's Access Data Base to track the list of expected deductions. (DECK)
5. In an excel spreadsheet to reconcile with the state for each program. Balances are carried over to reconcile totals and counts from the previous month. (RECONCILIATION SHEET)

Entries will be made two times when the new process is implemented (appendices 4) as noted on the recommended process flowchart and as follows:

1. In the Electronic Benefits System for the Employee Insurance Program.

2. In the Clemson University Business System for employee deductions.

As the goal of lean is continuous improvement to eliminate waste, a goal of the insurance unit at Clemson University is to reduce data entry to one time for insurance transactions. It is difficult to measure a precise time saved for the data entry from the old system as we stop and start data entry on a daily basis among several other job duties and there is a different number of transactions completed based on the employees needs. However as mentioned earlier we are able to calculate a savings in staff time of approximately \$2,575.94 per year based on transaction count, estimated time per transaction and an average hourly rate. The number of transactions keyed is tracked using queries in CUBS. We can calculate that there are about 8,000 state insurance transactions a year entered in the EBS, CUBS, INS TRANS DATABASE, DECK and RECONCILIATION SHEETS. Each program entry is counted as 1 transaction in the query. For example if a new employee enrolls in health, dental, basic life, basic long term disability the system would count 4 transactions for them. The goal for the new process will be to eliminate 24,000 entries (8,000 INS TRANS DATABASE 8,000 DECK and 8,000 RECONCILIATION SHEETS) Until the state allows Clemson University to load data entry from their system it will still be necessary to key approximately 16,000 entries a year.

The goal to cut reconciliation time in half has already been surpassed. With the older errors identified and corrected at the beginning of the new process,

February 2007 only required about 4 hours total time to reconcile and 2 pages of entries/errors to be corrected. On average it will take about 2 hours a month for technical support. The new method will cost \$81.36 functional (4 hours \* \$20.34 hourly rate + \$56.80 technical (2 hours \* \$28.40 hourly rate). Quite an improvement from 1 week with the old method! That is a savings of approximately 4 days a month at an estimated savings of \$7,332.40 a year. This is calculated as follows: 4 days a week \* 7.5 hours a day=30 hours a month \* 20.34 hourly rate =\$610.20 month \*12 months=\$7,322.40.

Clemson University can work towards the goal for one data entry point when the Employee Insurance Program offers an option for employees to enter data via self service and they offer employers capability to download the data. It is estimated when this occurs that it will eliminate another 8,000 entries and possible more with self service options to subscribers.

Other areas of potential improvement determined from the flow charts (appendices 1, 2, 3 and 4) are:

- Decrease focus on program totals and counts and focus on each person's deductions by program. If correct, the totals and counts will be correct.
- List participants once and alphabetically, with all programs. This will decrease the duplication of their name being listed under every insurance program they are enrolled in. This will decrease the time it takes a counselor to look up their information and the amount of paper being printed.

- Print the differences only. This will decrease the amount of paper.
- Roll up the refunds, collections and the deduction amounts and carry balances from month to month until they are cleared by person. This will allow refunds and collections to be processed more timely.

**Implementation plan:**

The action steps for this implementation include:

- Conduct initial meetings and provide progress updates by Krissy Kaylor, Benefits Manager, to the individuals listed below for support:
  - Benefits Counselors: Mary Lee, Nancy McConnell, Amanda McCauley and Pablo Unda.
  - Management: Lawrence Nichols, Chief Officer of Human Resources, Michelle Piekutowski, Clemson University Business Systems lead for the Office of Human Resources.
  - Technical team: Janice Powell, Manager, and support staff Laura Price.
  - Initial meetings have been completed and updates continue to be provided.
- Conduct meetings by Krissy Kaylor with Mary Lee and Laura Price to draft the current reconciling process for state insurance deductions (appendices 1 and 2). Meetings have been completed and the flow chart developed.
- Conduct meetings by Krissy Kaylor with University of South Carolina payroll staff to document their reconciling process (appendix 3). Meetings have been completed and the flow chart developed.

- Request information by Krissy Kaylor and Laura Price from the Employee Insurance Program on the fields, format, and timing of insurance information available on-line. Information was requested and received.
- Conduct meetings by Krissy Kaylor and Laura Price to map out data fields. All fields have been mapped out.
- Download information on a monthly basis from the Employee Insurance Program website. The Employee Insurance Program only maintains current month and one month retro. Mary Lee will assume this responsibility. Mary currently downloads the information monthly.
- Conduct meetings by Krissy Kaylor with Mary Lee, and Laura Price to draft the recommended process (appendix 4). Meetings have been completed and the flow chart developed.
- Test the reports generated by Laura Price using the new process by Mary Lee and Krissy Kaylor to determine accuracy of information and provide feedback on needed changes. This step will be repeated until Krissy Kaylor, Mary Lee and Laura Price confirm testing is complete. Testing has started and so far reports appear to be correct. More testing will occur prior to other staff being cross trained.
- Generate a report by Laura Price retroactive to May 2006 for benefits staff (Krissy Kaylor, Mary Lee, Nancy McConnell, Pablo Unda and Amanda McCauley) to review and address any discrepancies (appendix 4 DOC 4c Comparison of CU and State EIP Insurance Deduction Information). This will

help cross train everyone on the new process. The unit will continue to assist until the process is caught up.

The first report was ready by January 26, 2007 to reconcile May 2006 (Appendix 5). The unit set a goal to reconcile two months at a time, to catch up before 2007 fall enrollment starts. The costs to the university are benefits and technical staff time, paper and use of computer equipment, printers and copiers. It is estimated that the staff cost to implement this project was about \$2,691.52. Calculated at 7.5 hours a week for technical and functional staff at combined hourly rate of \$51.76 \* 52 weeks year= \$2,691.52. It is difficult to access an exact cost of time from staff as the hours for the project were not logged by functional and technical staff and varied as we got closer to completing the project. However both areas tried to devote ½ a day a week on a regular schedule. Nor were the number of copies tracked or quantity of paper tracked. We can however estimate the savings in paper. The old method required about 2 reams of 8 ½ x 11 paper (1,000 sheets) a month. The new method takes about 60 sheets of legal paper. The savings for using less paper is \$125.52 a year. (\$.80 month versus \$11.26 month).

Time-frame to complete the project is a challenge. To overcome the challenge the unit schedules coverage between available staff for visitors and phone calls. Also, dividing the reconciling work load between all available benefits staff will help the unit catch up by September 2007. Evaluating our progress at monthly meetings will help us address concerns as they occur.

Technical support is essential for the success of this project. Krissy Kaylor and Laura Price meet to set smaller goals on a weekly basis to stay on track.

Staff support is critical for the project to be a success. Benefits counselors: Nancy McConnell, Pablo Unda and Amanda McCauley will help by assuming more daily counseling work, as Mary Lee and Krissy Kaylor must devote more time to the project. Initial communication with team to present reasons and obtain their support on the goals, resources and timeframe needed to accomplish the task has been valuable. Everyone on the team has been included in discussions throughout the process and is supportive.

The staff resources assisting with this project include the insurance benefits unit, management, technical team and the Employee Insurance Program. Office supplies and resources needed include computers and software, copier and paper.

Communication will be provided to all key stakeholders at Clemson University to include: the employees impacted, insurance benefits unit, technical team and management. The recommended changes and sample reports will be provided to the payroll staff at the University of South Carolina (Appendices 4 and 5).

As employees make insurance changes that result in refunds or collections needed, the benefits counselor who assists them calculates the refunds or collections needed, communicates the check date they will occur and the amounts to the employee either in person, by email, or phone.

A copy of this report is being shared with the insurance benefits unit, management, and technical team members involved. An update of the reconciling project will continue to be provided at Human Resources functional/technical meetings (HR Pulse Checks).

Mary Lee will type instructions for the new procedure to reconcile state insurance to be shared with all benefits staff and saved on the HR Benefits share drive under the Benefits Job Duties Instructions folder by February 28, 2007.

**Evaluation method:**

At monthly meetings the benefits unit will discuss the status of reconciling and any concerns and issues. At the annual unit staff retreat we will evaluate the progress made over the last year and our goal for next year regarding reconciling.

Mary Lee will compare the 2006 refund turnaround time (coverage month(s) and check issue date) as documented on the refund request forms to that of the 2007

year, to measure the improvement by changing our process. By February 2008, Mary Lee will document the time it takes to complete the monthly reconciliation in relation to the time it took using the old process. The unit will then discuss the savings in time and the best use of that time.

## **References**

Womack, James P., and Daniel T. Jones. Lean Thinking

Free Press, Copyright, 1996, 2003.

Tapping, Don, and Tom Shuker. Value Stream Management for the Lean Office

Productivity Press, a division of Kraus Productivity Organization LTD,  
Copyright 2003.

## Flow Chart Shapes and Descriptions

