Audit Committee Meeting

September 2015

Teacher Retirement System of Texas
1000 Red River Street, Austin, Texas 78701-2698
TEACHER RETIREMENT SYSTEM OF TEXAS
BOARD OF TRUSTEES
AND
AUDIT COMMITTEE

(Mr. Moss, Chairman; Ms. Charleston; Mr. Corpus; Ms. Palmer; & Ms. Sissney, Committee Members)

AGENDA

September 25, 2015 – 8:00 a.m.
TRS East Building, 5th Floor, Boardroom

1. Approve minutes of July 24, 2015 Audit Committee meeting
   – Mr. Christopher Moss, Chair

2. Receive State Auditor’s Office reports
   A. Planned audit of TRS’ Comprehensive Annual Financial Report for Fiscal Year 2015
      – Angelica Ramirez and Michael Clayton, State Auditor’s Office
   B. Audit of TRS’ Fiscal Year 2014 Employer Pension Liability Allocation Schedules –
      Angelica Ramirez and Michael Clayton, State Auditor’s Office

3. Receive Independent Audit Report on TRS-ActiveCare Service Providers – Sally Reaves, Sagebrush Solutions, and Yimei Zhao, TRS Health and Insurance Benefits

4. Receive Internal Audit reports
   A. Audit of Information Technology Controls at Third-Party Investment Service
      Providers – Hugh Ohn; Rene Hernandez and Tricia Callahan, Protiviti, Inc.
   B. Fourth Quarter Test Results of Investment Controls (Real Assets) – Hugh Ohn and
      Nick Ballard
   C. Overall Opinion on Investment Management Division Internal Controls – Hugh Ohn
   D. Quarterly Investment Testing (Agreed-Upon Procedures) – Nick Ballard
   E. Semi-Annual Testing of Benefit Payments (Agreed-Upon Procedures) – Amy Barrett
   F. Records Management Audit and Management’s Action Plan – Jan Engler, Toma
      Miller, and Jimmie Savage

5. Receive reports on the status of prior audit and consulting recommendations
   A. Follow-up Audit on Significant Benefit Audit Findings – Toma Miller and Jan Engler
   B. Report on the status of prior audit and consulting recommendations – Amy Barrett

6. Receive report on Quality Assurance Improvement Program (QAIP) Self-Assessment – Amy Barrett

7. Consider recommendations to the Board of Trustees regarding the proposed Audit Plan for
   Fiscal Year 2016 – Amy Barrett

8. Discuss or consider Internal Audit administrative reports and matters related to governance,
   risk management, internal control, compliance violations, fraud, regulatory reviews or
   investigations, new and outstanding complaints, fraud risk areas, audits for the annual
   internal audit plan, or auditors' ability to perform duties – Christopher Moss and Amy Barrett

NOTE: The Board of Trustees (Board) of the Teacher Retirement System of Texas will not consider or act upon any
item before the Audit Committee (Committee) at this meeting of the Committee. This meeting is not a regular meeting
of the Board. However, because the full Audit Committee constitutes a quorum of the Board, the meeting of the
Committee is also being posted as a meeting of the Board out of an abundance of caution.
TAB 1
TEACHER RETIREMENT SYSTEM OF TEXAS
AUDIT COMMITTEE MEETING
July 24, 2015

The Audit Committee of the Teacher Retirement System of Texas met on Friday, July 24, 2015 in the 5th floor Board room. The following persons were present:

**TRS Board Members**
Christopher Moss, Audit Committee Chair
Nanette Sissney, Board Vice Chair, Audit Committee Member
Anita Smith Palmer, Audit Committee Member
T. Karen Charleston, Audit Committee Member
R. David Kelly, Board Chair
Joe Colonnetta, Board Member
Todd Barth, Board Member

**TRS Staff**
Brian Guthrie, Executive Director
Ken Welch, Deputy Director
Amy Barrett, Chief Audit Executive
Karen Morris, Director, Pension Audit Services
Hugh Ohn, Director, Investment Audit Services
Jan Engler, Audit Manager, Internal Audit
Dinah Arce, Senior Auditor, Internal Audit
Toma Miller, Senior Auditor, Internal Audit
Nick Ballard, Senior Investment Auditor, Internal Audit
Rodrigo Dominguez, Intern, Internal Audit
Don Green, Chief Financial Officer
Britt Harris, Chief Investment Officer
Jerry Albright, Deputy Chief Investment Officer
Sylvia Bell, Director, Operations Group, Investment Division
Barbie Pearson, Chief Benefit Officer
Adam Fambrough, Business Implementation Manager
Chris Cutler, Chief Information Officer
T.A. Miller, Deputy Information Officer
Garry Sitz, Information System Architect
Carolina de Onis, General Counsel
Heather Traeger, Chief Compliance & Ethics Officer
Ronnie Bounds, Assistant General Counsel
Lynn Lau, Assistant Secretary to the Board and Program Specialist
Katrina Daniel, Chief Health Care Officer
Janet Bray, Director, Human Resources
Audit Committee Chair Christopher Moss called the meeting to order at 10:56 a.m. with a quorum of committee members present.

1. CONSIDER THE APPROVAL OF THE PROPOSED MINUTES OF THE JUNE 12, 2015 COMMITTEE MEETING

On a motion by Ms. Anita Palmer, and seconded by Ms. T. Karen Charleston, the proposed minutes of the June 12, 2015 Audit Committee meeting were approved as presented.

2. DISCUSS MATTERS RELATED TO GOVERNANCE, RISK MANAGEMENT, INTERNAL CONTROL, COMPLIANCE VIOLATIONS, FRAUD, REGULATORY REVIEWS OR INVESTIGATIONS, NEW AND OUTSTANDING COMPLAINTS, FRAUD RISK AREAS, TEAM PROJECTS RISKS, AUDITS FOR THE ANNUAL INTERNAL AUDIT PLAN, OR AUDITOR’S ABILITY TO PERFORM DUTIES

Mr. David Cook, TRS, and Mr. Jay Masci, Provaliant, provided the board with a brief overview of the risk assessment, mitigation, and reporting process used by the Project Management Office to monitor the TEAM project. Similarly, Mr. David Roe, Bridgepoint Consulting, provided an overview of the process used by the Independent Project Oversight Team to monitor and report on the risks associated with the TEAM project.

Pursuant to section 825.115 of the Texas Government Code, the Audit Committee adjourned into executive session to discuss confidential audit matters related to this agenda item. The time was 11:20 a.m.

The Audit Committee reconvened in open meeting at 12:32 p.m.
3. **RECEIVE PRESENTATION FROM FOCUS CONSULTING ON THE EXECUTIVE EVALUATION PROCESS**

Mr. Keith Robinson, Focus Consulting, presented information regarding the process used to conduct the executive assessment for the Chief Audit Executive, the Chief Investment Officer, and the Executive Director. He stated that the review process covers two components, the competency and the contribution of each individual, and is based on a five-point rating scale. The process begins with the individual completing an online self-assessment. Next, online competency assessments are gathered from management, board members, direct reports, peers and others in the organization. Lastly, phone interviews are conducted with the board members to discuss the performance of each individual. The ratings are averaged within each respondent category and included in the final evaluation report.


Pursuant to section 551.074 of the Texas Government Code, the Audit Committee adjourned into executive session to deliberate the individual evaluation, including the salary, of the Chief Audit Executive. The time was 12:40 p.m.

The Audit Committee reconvened in open meeting at 1:11 p.m.

On a motion by Mr. Moss and seconded by Ms. Sissney, the Committee recommended that the Board of Trustees approve the proposed performance appraisal of the Chief Audit Executive for fiscal year 2015. Mr. Moss also stated that the Audit Committee was deferring consideration of any salary increase to the Board of Trustees.

The meeting adjourned at 1:12 p.m.

Approved by the Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas on the 25th day of September, 2015.

Attested by:

____________________________
Christopher Moss
Chair, Audit Committee
Board of Trustees
Teacher Retirement System of Texas
TAB 2
TAB 2A
State Auditor’s Office Presentation

- Fiscal Year 2015 Teacher Retirement System Financial Opinion Audit
- GASB 68
- Fiscal Year 2014 Schedule of Employer
- Allocations and Employer Liabilities

Michael Clayton, CPA, CFE, CIDA, CISA
Managing Senior Auditor
State Auditor’s Office
Fiscal Year 2015 Teacher Retirement System
Financial Statement Audit

State Auditor’s Office Audit Team:

Angelica M. Ramirez, CPA, Audit Manager
Michael O. Clayton, CPA, CISA, CFE, CIDA, Project Manager
Kelley N’Gaide, CIA, CFE Assistant Project Manager
New and returning team members
Purpose and Scope of the Audit

Issue an opinion on the Teacher Retirement System’s fiscal year 2015 financial statements in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States.
Reporting Timeline

• Independent auditor’s report – November 16, 2015.
• Report on internal controls and on compliance and other matters – November 2015.
• Report to the Legislative Audit Committee – November 2015.
Administrative and Other Matters

- Audit work will be conducted from August 3, 2015, through November 16, 2015.
- Auditors will coordinate their work through TRS’s internal audit liaison but will still have direct access to records, employees, and external service providers.
- TRS internal audit will provide direct assistance to auditors through the performance of selected audit procedures as agreed upon between the State Auditor’s Office and TRS internal audit.
Administrative and Other Matters (cont.)

• The State Auditor’s Office is independent to conduct the audit of the Teacher Retirement System’s fiscal year 2015 financial statements. The State Auditor’s Office conducts all projects in an environment of full independence; that is, free of any personal, external, or organizational impairment.
Audit Considerations Related to the Implementation of Governmental Accounting Standards Board (GASB) Statement No. 68
Background/Overview

- Additional audit procedures for census data testing.
- Changes in the presentation of pension related information and how that pension information is audited.
Plan Controls Over Member Data

- Audit of plan controls over active member census data.
- Accuracy and completeness of census data provided to the actuary is a consideration.
- Absence of effective management controls by the plan is a deficiency in internal controls over financial reporting.
- Plan management processes for verifying the underlying payroll records of the participating employers to determine accuracy and completeness of data are a consideration.
New Schedules

- **Schedule of Employer Allocations** - This schedule calculates the pension contribution effort for each employer making contributions to the plan (percentage-based calculation).

- **Schedule of Pension Amounts by Employer** - This schedule shows the total change in pension amounts by change type for each employer contributing to the plan.
New Schedules Audit results

Auditors issued an unqualified opinion on the Teacher Retirement System’s 2014 Schedule of Employer Allocations and Schedule of Pension Amounts by Employer.
Additional Considerations

• Plan employers will need the opinions on the schedules because they will need to rely on the information issued by the plan.
• If employer auditors cannot rely on work done by plan auditors, the result could be a situation in which employer auditors may want to do their own audit work on the plan.
• Issuance of the opinions increases the overall audit risk for plan auditors.
State Auditor’s Office Audit Approach

• Issue a separate opinion on the schedules after the financial statement opinion.

• Report results of census data testing in the report of internal controls for the financial audit.
Audit Communication

• Communicating the time frame for the audit work to any employers that have a fiscal year that does not end on August 31, 2016.

• Ensuring that employers and their auditors know where to find the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer after the audit opinion is issued on those schedules.
Questions
TAB 2B
June 15, 2015

Members of the Legislative Audit Committee:

In our audit report dated May 29, 2015, we concluded that the Schedule of Employer Allocations and the Schedule of Pension Amounts by Employer as of August 31, 2014, for the Teacher Retirement System (System) are presented fairly, in all material respects in accordance with accounting principles generally accepted in the United States of America. The System has posted the schedules and our audit report on its Web site at http://www.trs.state.tx.us/

We also issued a report on internal control over financial reporting of the schedules and on compliance and other matters as required by auditing standards (that report, including responses from management, is presented in the attachment to this letter). Our procedures did not identify any material weaknesses in internal control over financial reporting of the schedules or any noncompliance with laws or regulations that materially affected the schedules. Our procedures did identify one significant deficiency in control related to the preparation of the schedules that we included as part of the report on controls and compliance. However, the major internal controls that we tested for the purpose of forming our opinions on the schedules were operating effectively.

Our procedures were not intended to provide an opinion on internal control over financial reporting of the schedules or to provide an opinion on compliance with laws and regulations. Accordingly, we do not express an opinion on the effectiveness of the System’s internal control over financial reporting of the schedules or on compliance with laws and regulations.

As required by auditing standards, we will also communicate to the System’s Board of Trustees certain matters related to the conduct of this audit.
We appreciate the System’s cooperation during this audit. If you have any questions, please contact Angelica Ramirez, Audit Manager, or me at (512) 936-9500.

Sincerely,

John Keel, CPA
State Auditor

Attachment

cc: Members of the Teacher Retirement System Board of Trustees
    Mr. R. David Kelly, Chairman
    Ms. Nanette Sissney, Vice Chair
    Mr. Todd Barth
    Ms. T. Karen Charleston
    Mr. Joe Colonnetta
    Mr. David Corpus
    Mr. Christopher Moss
    Ms. Anita Smith Palmer
    Ms. Dolores Ramirez
    Mr. Brian Guthrie, Executive Director, Teacher Retirement System
This document is not copyrighted. Readers may make additional copies of this report as needed. In addition, most State Auditor’s Office reports may be downloaded from our Web site: www.sao.state.tx.us.

In compliance with the Americans with Disabilities Act, this document may also be requested in alternative formats. To do so, contact our report request line at (512) 936-9500 (Voice), (512) 936-9400 (FAX), 1-800-RELAY-TX (TDD), or visit the Robert E. Johnson Building, 1501 North Congress Avenue, Suite 4.224, Austin, Texas 78701.

The State Auditor’s Office is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, national origin, age, or disability in employment or in the provision of services, programs, or activities.

To report waste, fraud, or abuse in state government call the SAO Hotline: 1-800-TX-AUDIT.
Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Pension Schedules Performed in Accordance with Government Auditing Standards

Independent Auditor’s Report

Teacher Retirement System Board of Trustees:
Mr. R. David Kelly, Chairman
Ms. Nanette Sisson, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the schedule of employer allocations of the Teacher Retirement System (System) Pension Plan, as of and for the year ended August 31, 2014, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System Pension Plan as of and for the year ended August 31, 2014, and the related notes. We issued our report thereon dated May 29, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the schedules, we considered the System’s internal control over financial reporting of the schedules (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the schedules, but not for the purpose of expressing an opinion on the effectiveness of the System’s internal control. Accordingly, we do not express an opinion on the effectiveness of the System’s internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity’s schedules will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

SAO Report No. 15-323
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control described in the accompanying schedule of findings and responses that we consider to be a significant deficiency.

<table>
<thead>
<tr>
<th>Summary of Findings and Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding Number</td>
</tr>
<tr>
<td>2014-1</td>
</tr>
</tbody>
</table>

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System’s schedules are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Auditors communicated an issue that was not material or significant to the audit objectives in writing to the System’s management.

System’s Response to Findings

System’s response to the finding identified in our audit is described in the accompanying schedule of findings and responses. The System’s response was not subjected to the auditing procedures applied in the audit of the schedules and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting of the schedules and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity’s internal control over financial reporting of the schedules or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity’s internal control over financial reporting of the schedules and compliance. Accordingly, this communication is not suitable for any other purpose.

John Keel, CPA
State Auditor
May 29, 2015
Schedule of Findings and Responses

Section 1
The System Should Strengthen Controls Over Employer Pension Liability Allocation Schedules to Ensure That the List of Reporting Entities Is Complete

Reference No. 2014-1

Type of finding: Significant Deficiency

The Teacher Retirement System (System) did not have a process to verify the completeness of the list of reporting entities (employers) for its employer pension liability allocation schedules for fiscal year 2014. As a result, the System inappropriately excluded six charter schools from its fiscal year 2014 Schedule of Employer Allocations and Schedule of Pension Amounts by Employer (schedules). Those six charter schools had from 91 students to 1,022 students enrolled as of October 2013. Based on the reported enrollment numbers, auditors estimated that those six charter schools should have paid an estimated $288,652 in employer contributions, which the System did not receive.

While the omission of those six charter schools was not material to the schedules as a whole, the System should implement a process to verify that the information the System provides in the schedules is complete. Performing periodic reconciliations between the list of reporting entities in the schedules to independent, third-party lists from the Texas Education Agency, the Higher Education Coordinating Board, and/or the Office of the Comptroller of Public Accounts would help the System ensure that all reporting entities are included on the schedules.

American Institute of Certified Public Accountants guidance entitled Special Considerations--Audits of Single Financial Statements and Specific Elements, Accounts, or Items of a Financial Statement: Auditing Interpretations of AU-C Section 805 states that retirement system management is responsible for the design, implementation, and maintenance of internal controls relevant to the preparation and presentation of the schedules.

The omission of reporting entities from the schedules could result in reporting entities not having the information necessary to produce their financial statements in accordance with governmental accounting and reporting requirements issued by the Governmental Accounting Standards Board.
Recommendations

The System should:

- Establish a process to periodically verify that it has included all reporting entities in the employer pension liability allocation schedules.
- Verify that all reporting entities properly pay both employee and employer contributions based on requirements.

Management’s Response

TRS agrees there is a need to strengthen controls related to Reporting Entities. The Benefit Accounting Department has an interim procedure in place to track new Reporting Entities with the effective start date. The current TRS Legacy system does not allow for adding reporting entities with a future date. The new Pension Line of Business system is being programmed to add new Reporting entities with a future start date. TRS will add a step to our Reporting Entity Setup Inactivation process, to verify that TRS’ list of Reporting Entities is complete by verifying our list against the Texas Education Agency, Higher Education Coordinating Board, or the Comptroller of Public Accounts.

Implementation date of the annual verification of reporting entities will be implemented July 2015. The interim procedure was implemented in May 2015. The Pension Line of Business which will allow TRS to enter future start dates for Reporting Entities will be September 2016.
TAB 3
INDEPENDENT AUDIT REPORT ON TRS-ACTIVECARE SERVICE PROVIDERS
For the period September 1, 2012 through August 31, 2014
Audit Conducted by Sagebrush Solutions for
TRS Health Insurance and Benefits Department

Audit Objective
Determine that the TRS-ActiveCare Health Plan Administrator (HPA), Blue Cross Blue Shield of Texas (BCBSTX) claims administration services are functioning effectively and in compliance with TRS contract requirements.

Scope:
Blue Cross Blue Shield of Texas (BCBSTX) - HPA (medical), TRS-ActiveCare benefit program was reviewed for the period September 2012 – August 2014.

Methodology:
Claims Audit Review
• Audit randomly selected sample claims
• Verify accuracy and appropriateness of claims payments
• Test reasonableness of processing controls
• Compare eligibility to claims payments

Operational Review
• Verify correctness & appropriateness of performance guarantee data reported to TRS
• Verify that total dollar amount of claims are consistent with amount reported to TRS
• Verify that BCBSTX follows its procedures to identify potential areas of claims abuse & fraud
• Assess vendor responses to a Claims Administration Questionnaire

Results

Claim Financial, Processing, and Payment Accuracy – The audited financial accuracy results in the samples were 99.98% and 99.99% for fiscal years 2013 and 2014, respectively. BCBSTX exceeded the contract performance guarantee financial accuracy standard of 99.00% for fiscal years 2013 and 2014. However, incorrect co-payments were applied to four (4) claims identified in the audit samples.

Claims Processing Timeliness – BCBSTX processed 95.79% and 95.85% of claims within fourteen (14) calendar days in fiscal years 2013 and 2014, respectively. BCBSTX satisfied the TRS-ActiveCare performance standard of processing 95.00% of claims within fourteen (14) calendar days for fiscal years 2013 and 2014.

Fraud – BCBSTX has in place a comprehensive and appropriate fraud control program.

Recommended Actions
Claim Financial, Processing, and Payment Accuracy – BCBSTX should assess the quality, training, and controls regarding its copayment assessment process, improve the system edits process, and BCBSTX supervisors should closely monitor as part of quality assessments.

Vendor Responses
BCBSTX will assess the quality, training, and controls for this process and BCBSTX supervisors will closely monitor this in quality assessments.

Legend of Results:
Red - Significant to TRS
Orange - Significant to Business Objectives
Yellow - Other Reportable Issue
Green - Positive Finding or No Issue
INDEPENDENT AUDIT REPORT ON TRS-ACTIVECARE SERVICE PROVIDERS
For the period September 1, 2012 through August 31, 2014
Audit Conducted by Sagebrush Solutions for
TRS Health Insurance and Benefits Department

Audit Objective

Determine that the TRS-ActiveCare Pharmacy Benefits Manager (PBM), Express Scripts, Inc. (ESI), claims administration services are functioning effectively and in compliance with TRS contract requirements.

Scope:
Express Scripts, Inc. (ESI) - PBM (pharmacy), TRS-ActiveCare benefit program was reviewed for the period September 2012 – August 2014.

Methodology:
Claims Audit Review
• Audit randomly selected sample claims
• Verify accuracy and appropriateness of claims payments
• Test reasonableness of processing controls
• Compare eligibility to claims payments

Operational Review
• Verify correctness & appropriateness of performance guarantee data reported to TRS
• Verify that total dollar amount of claims are consistent with amount reported to TRS
• Verify that ESI follows its procedures to identify potential areas of claims abuse & fraud
• Assess vendor responses to a Claims Administration Questionnaire

Result:
Claim Financial, Processing, and Payment Accuracy – ESI for 2013 and 2014:
• Tested financial accuracy rate of the sample is 100.00%, which exceeds the generally observed industry standard of 99.00%.
• Payment accuracy rate for the audit sample is 100.00%, which exceeds the generally observed industry standard of 95.00%.
• Procedural accuracy rate for the audit sample is 100.00%, which exceeds the generally accepted industry standard of 95.00%.

Claims Processing Timeliness – For 2013 and 2014, ESI is meeting its contractual turnaround time goal for claims processing of “non-protocol” prescriptions (prescriptions that do not edit out for any reason) within an average three business days and five business days for all protocol claims (claims that require manual intervention), and is, on average, processing claims in one day during these years.

Customer Service – During the virtual review of the customer service center, a call was identified where a participant who recently had surgery and needed a prescription related to the surgery prescription that required a pre-authorization. However, ESI did not provide the auditors with requested ESI policy and procedures information and other follow-up information about this call when asked.

Fraud – ESI has in place a comprehensive and appropriate fraud control program.

Recommended Actions

Customer Service – ESI should review its procedures to ensure the procedures contain adequate steps to assist participants in obtaining urgent and medically necessary medications under extraordinary circumstances.

Vendor Responses

TRS fully investigated the auditor’s recommendation for ESI. ESI confirmed that the member picked up the medication on the same day as the call after the prescriber completed a prior authorization required for the drug. ESI provided a thorough explanation on ESI’s policy and procedures for this situation.

Legend of Results:  
Red - Significant to TRS  
Orange - Significant to Business Objectives  
Yellow - Other Reportable Issue  
Green - Positive Finding or No Issue
### Audit Objective
Determine that the TRS-ActiveCare fully insured Health Maintenance Organizations (HMO), First Care, Allegian, and Scott & White Health Plan claims administration services are functioning effectively and in compliance with TRS contract requirements.

### Scope:
First Care, Allegian, and Scott & White Health Plan, TRS-ActiveCare HMO benefit programs were reviewed for the period September 2012 through August 2014.

### Methodology:
The auditor requested that each of the administrators complete a detailed Claim Administration Questionnaire addressing issues such as system capabilities, claim adjudication procedures, claim pricing, fraud procedures, timeliness, and training.

The auditor did not request electronic data files from the HMOs, First Care, Valley Baptist and Scott & White. HMO statistics were drawn from their internal quality reports.

In addition, the auditor performed an operational walk through, processed fictitious claims, and conducted interviews with key personnel for each HMO.

### Results

<table>
<thead>
<tr>
<th>Claims Processing Timeliness</th>
<th>All HMOs met or exceeded generally observed industry standards for processing claims.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claim Financial, Processing and Payment Accuracy</td>
<td>All HMOs exceeded industry standards for the reported financial and payment accuracy rates, except Allegian, which was .06% below the industry standard for financial accuracy in its Annapolis, Maryland office from July – August 2014</td>
</tr>
<tr>
<td>Fraud</td>
<td>All HMO benefit programs have comprehensive and appropriate fraud control programs and procedures.</td>
</tr>
</tbody>
</table>

### Recommended Actions

| First Care | None |
| Allegian | Take action to improve claim adjudication accuracy |
| Scott & White | None |

### Vendor Responses

| First Care | N/A |
| Allegian | Action has been taken to improve claim adjudication accuracy |
| Scott & White | N/A |

Legend of Results:
- **Red** - Significant to TRS
- **Orange** - Significant to Business Objectives
- **Yellow** - Other Reportable Issue
- **Green** - Positive Finding or No Issue
Teacher Retirement System of Texas

Report on the Audit of Insurance Carrier Operations Regarding the Teacher Retirement System of Texas TRS-ActiveCare Benefit Program

BlueCross BlueShield of Texas
Express Scripts Inc.
First Care
Allegian
Scott and White

For the period of September 1, 2012 through August 31, 2014
EXECUTIVE SUMMARY

The Teacher Retirement System of Texas (TRS) engaged Sagebrush Solutions to conduct an audit of the claim administration services provided by the Health Plan Administrator (HPA), Pharmacy Benefits Manager (PBM), and fully insured Health Maintenance Organization (HMO) plans of the TRS-ActiveCare program. Principal components of the audit program include:

- Audit randomly selected samples of HPA and PBM claims
- Review and verify the accuracy and appropriateness of claims payments by the HPA and PBM
- Test the reasonableness of the system of internal claims audit and processing controls at the HPA and PBM
- Test the reasonableness of the “allowable charge”
- Compare eligibility to claim payments
- Verify the correctness and appropriateness of the data reported by the HPA and PBM as it pertains to performance guarantees specified in their contract with TRS.
- Verify that the total number of claims from which the samples were selected by the Contractor are consistent with the number of claims reported by the HPA and PBM to TRS in the annual report for each plan year
- Verify that the HPA and PBM follow procedures to identify potential areas of claims abuse and fraud
- Assess vendor responses to a Claims Administration Questionnaire

The following benefit programs were reviewed under the audit program:

- TRS-ActiveCare PPO medical program administered by Blue Cross Blue Shield of Texas (BCBSTX)
- TRS-ActiveCare PPO prescription drug program administered by Express Scripts Inc. (ESI)
- First Care HMO
- Allegian HMO
- Scott & White Health Plan HMO (Scott & White)

Claim samples for the HPA and PBM were selected from electronic data files provided by Gabriel, Roeder, Smith & Company (GRS) for the population of TRS-ActiveCare claims processed between September 1, 2012 and August 31, 2014. Each claim in the samples was tested for:

- Payment and processing accuracy
- Adherence to plan benefits
- Timeliness of payment

Data were provided by:

- GRS, consultants and actuaries for TRS
- BCBSTX, the TRS-ActiveCare health plan administrator
- ESI, the TRS-ActiveCare pharmacy benefits manager
EXECUTIVE SUMMARY

We requested that each administrator complete detailed Claim Administration Questionnaire addressing issues such as system capabilities, claim adjudication procedures, claim pricing, fraud procedures, timeliness, and training. The questionnaire was also used as a framework for the claims audit by establishing the procedures and protocols for processing.

The audit also included a review to verify the claims payments and ensure that generally accepted accounting procedures and records support the data used to develop the annual accounting statements. The scope did not encompass a review of the financial statements of the administrator nor an audit of its accounting records.

The body of this report contains the detailed results and recommendations for improvement. Other than any noted deviations, the claims administration functions reviewed appear to be in accordance with contractual agreements.

The following provides a summary of the key findings of our audit:

Fraud

- BCBSTX, ESI, First Care, Allegian, and Scott & White each have in place comprehensive and appropriate fraud control programs and procedures.

Claim Processing Timeliness

- BCBSTX processed 95.79% of claims within fourteen (14) calendar days for fiscal year 2013. BCBSTX processed 95.85% of claims within fourteen (14) calendar days for fiscal year 2014. BCBSTX satisfied the TRS-ActiveCare performance standard of processing 95.00% of claims within fourteen (14) calendar days for fiscal year 2013 and fiscal year 2014.

- ESI processed prescription drug claims on average in 1 day for both fiscal year 2013 and fiscal year 2014. ESI met performance guarantee standards for the timely processing of prescription drug claims.

- FirstCare’s Turnaround time (TAT) for both fiscal year 2013 and fiscal year 2014 meets industry standards for processing claims.

- Allegian’s TAT meets industry standards for processing claims.

- Scott & White’s TAT meets industry standards for processing claims.

Claim Financial, Processing and Payment Accuracy

- BCBSTX - The audited accuracy results in the samples were 99.98% for fiscal year 2013 and 99.99% for fiscal year 2014. BCBSTX exceeded the contract performance guarantee financial accuracy standard of 99.00% for both fiscal year 2013 and fiscal year 2014. Based on the three (3) payment errors identified in the 2013 sample, the weighted payment accuracy rate is 99.97%. Based on the one (1) payment error identified in the
EXECUTIVE SUMMARY

2014 sample, the weighted payment accuracy rate is 99.95%. This accuracy rate meets or exceeds the minimum performance guarantee of 98.00% as shown in the contract between TRS-ActiveCare and BCBSTX.

There were no procedural errors identified in the fiscal year 2013 or fiscal year 2014 samples. Therefore, the weighted accuracy rate is 100.00% for both years. This accuracy rate met the minimum performance guarantee of 98.00% as shown in the contract between TRS-ActiveCare and BCBSTX.

- ESI - The financial accuracy rate of the 2013 fiscal year sample is 100.00%. The financial accuracy rate of the 2014 fiscal year sample is 100.00%. This accuracy exceeds the generally observed industry standard of 99.00%.

The payment accuracy rate for the 2013 fiscal year sample is 100.00%. The payment accuracy rate for the 2014 fiscal year sample is 100.00%. This accuracy exceeds the generally observed industry standard of 95.00% to 97.00%.

The procedural accuracy rate for both the 2013 fiscal year sample and the 2014 fiscal year sample is 100.00%. This procedural accuracy rate exceeds the generally accepted industry standard of 95.00%.

- First Care – The reported financial accuracy, payment accuracy, and non-payment accuracy rates for internal audits exceeded industry standards.

- Allegian – The reported financial accuracy rate for all internal audits at the Phoenix service center was 99.62%, which exceeded the industry standard of 99.00%. The reported financial accuracy rate for all internal audits at Allegian’s Annapolis service center was 98.94%, which is slightly below the industry standard. The reported payment accuracy and non-payment accuracy rates for internal audits exceed industry standards for the Phoenix and Annapolis service centers.

- Scott & White - The reported financial accuracy, payment accuracy, and non-payment accuracy rates for internal audits exceeded industry standards for both calendar years 2013 and 2014.

Recommendations

The information presented below highlights our major recommendations for each plan. Detailed descriptions of our observations and recommendations can be found in the body of this audit report.

BCBSTX

Benefit Application: Incorrect copayments were applied to four (4) of the errors identified in the audit samples. The claim system did not apply correct copayments for each date of service as
EXECUTIVE SUMMARY

required for three (3) claims. For one (1) claim, a copayment was not applied for a scheduled MRI.

Recommendation: BCBSTX should assess the quality, training, and controls for this process. BCBSTX should standardize this process to the extent possible in order to improve overall performance. The Blue Chip system should have standard edits to prevent payment errors where applicable. BCBSTX supervisors should closely monitor this in quality assessments.

BCBSTX Response: BCBSTX will assess the quality, training and controls for this process and BCBSTX supervisors will closely monitor this in quality assessments.

Bariatric Weight-Loss Surgery

Sagebrush observed during the audit this year that the in-network allowed amount for the surgeon’s fee will never be equal to or greater than $5,000.00. Therefore, adding this copayment to the surgeon’s fee is not very cost effective for TRS as the member will only be responsible for up to a few thousand dollars at most.

Recommendation: Sagebrush recommends that the TRS apply the copayment to the facility’s allowed amount. Or, since most of the claims for this type of service are billed with diagnosis code ICD-9 278.01, a copayment can be attached to the diagnosis and no payment will be made on related claims until the $5,000.00 copayment limit has been reached.

ESI

CUSTOMER SERVICE

During the virtual review of the customer service center, the auditors listened to a number of recorded calls from TRS participants and listened to an ESI quality auditor review the call. One of the recorded calls was from a participant who recently had surgery and needed an expensive prescription related to the surgery that required a pre-authorization. The CSR explained that a pre-authorization was needed and stated that the participant could pay 100% of the drug cost in order to receive the drug immediately rather than waiting to obtain a pre-authorization. The Sagebrush auditors made the following requests to ESI as a follow up to review of the call:

- Can you confirm whether the last caller actually received her drug or a generic equivalent, if available? If so, how many days passed from the call until the drug was dispensed?
- Can you please provide a copy of ESI’s policy and procedure for when the caller has an immediate medical need for the drug, e.g., last caller’s surgery, and is having difficulty obtaining the drug, e.g., last caller’s need for pre authorization? Specifically, does the procedure provide an opportunity for ESI to make an outbound call to the prescriber in order to process the pre-authorization and expedite the dispensing of the drug under the plan?
EXECUTIVE SUMMARY

Sagebrush made repeated attempts to obtain the answers from ESI to the above questions regarding the recorded call but ESI never provided the requested information.

**Recommendation:** ESI has a duty to TRS and the TRS-ActiveCare participants to respond to auditor requests. More importantly, ESI did not provide its policies and procedures so it is not known by the auditor whether ESI has procedures in place to assist participants in obtaining the documentation required to fill medically necessary prescriptions in a timely manner when there are extraordinary circumstances. ESI should review its procedures to ensure the procedures contain adequate steps to assist participants in obtaining urgent and medically necessary medications under extraordinary circumstances. Such procedures promote the health of the participant and avoid the liability if a participant is unable to pay 100% of the cost of a medically necessary drug to which the participant is ultimately entitled under the plan. ESI should provide a copy of such policies and procedures to its client and/or its auditor.
# TABLE OF CONTENTS

BACKGROUND ............................................................................................................................ 2  
CLAIM AUDIT REVIEW .............................................................................................................. 3  
  VERIFICATION OF CLAIM PAYMENTS .................................................................................... 3  
  CLAIM PROCESSING TIMELINESS ............................................................................................ 4  
  CLAIM PROCESSING AND PAYMENT ACCURACY ................................................................. 4  
  CLASSIFICATION OF PAYMENT ERRORS – FISCAL YEAR 2013 ......................................... 11  
  CLASSIFICATION OF PAYMENT ERRORS – FISCAL YEAR 2014 ......................................... 11  
OBSERVATIONS AND RECOMMENDATIONS ....................................................................... 12  
  OBSERVATIONS .................................................................................................................... 12  
  RECOMMENDATIONS ............................................................................................................ 14  
PRIOR YEAR’S AUDIT RECOMMENDATIONS .................................................................... 14  
OVERALL CONCLUSION .......................................................................................................... 14  
OPERATIONAL REVIEW .......................................................................................................... 16  
  Eligibility and Enrollment ....................................................................................................... 16  
  Coordination of Benefits (COB) ............................................................................................ 16  
  Claims Processing .................................................................................................................. 17  
  Customer Service .................................................................................................................. 18  
  Training ................................................................................................................................ 18  
  Background Checks ............................................................................................................... 19  
  TRS-ActiveCare Appeals Process .......................................................................................... 19  
  Quality Assurance ................................................................................................................ 19  
  Utilization Review and Care Management ............................................................................ 20  
  Refund Recovery ................................................................................................................... 23  
  Fraud and Abuse Program ..................................................................................................... 24  
  HIPAA ................................................................................................................................... 26  
  Disaster and Recovery .......................................................................................................... 26  
EXHIBITS .................................................................................................................................. 29  
BCBSTX Response ...................................................................................................................... 42
BACKGROUND

TRS-ActiveCare is a managed care plan offered by the Teacher Retirement System of Texas (TRS) to active teachers and their dependents at participating school districts. There was an average monthly enrollment of 445,920 participants for fiscal year 2013 and 420,524 participants for fiscal year 2014 in TRS-ActiveCare’s self-funded PPO plan. BlueCross BlueShield of Texas (BCBSTX), a division of Health Care Services Corporation, a Mutual Legal Reserve Company, was the PPO health plan administrator for TRS-ActiveCare during the 2013 and 2014 fiscal years.

Sagebrush Solutions tested a statistical sample of 350 TRS-ActiveCare medical claims for financial and processing accuracy for each fiscal year. The samples were selected from the population of TRS-ActiveCare claims processed between September 1, 2012 and August 31, 2014. Onsite testing of the claims at the BCBSTX Richardson, Texas location was conducted from February 2, 2015 through February 13, 2015. The claim samples were tested for eligibility, timeliness, payment accuracy, adherence to plan benefits, and administration procedures.

Additionally, Sagebrush performed the following tests:

- TRS annual invoice payment totals were compared to the totals from the claims data file prior to sampling to ensure the entire universe of claims was received.

BCBSTX provided claim documentation and workspace, and addressed questions about specific claim payments. During the audit, BCBSTX was given the opportunity to research each questionable claim and provide documentation substantiating the accuracy of each claim. An exit conference to discuss preliminary audit results was conducted on February 13, 2015 with BCBSTX Richardson audit staff and BCBSTX Wichita Falls staff, who are responsible for processing the claims.

Additionally, BCBSTX completed a detailed Claim Administration Questionnaire addressing topics such as claim adjudication procedures, system capabilities, claim pricing, benefits coordination, training, utilization review, and internal fraud control procedures. The Questionnaire was utilized as a framework for the audit by establishing BCBSTX procedures and protocols for claims processing.

Health Care Services Corporation, a Mutual Legal Reserve Company, has an AM Best rating of A+.
CLAIM AUDIT REVIEW

VERIFICATION OF CLAIM PAYMENTS

The TRS Health Benefits Finance division provided the total amounts paid to BCBSTX for fiscal years 2013 and 2014. Prior to sample selection, Sagebrush compared these totals to totals for the analytical claims data file provided by Gabriel Roeder Smith & Company (GRS) and the claims data file provided by BCBSTX. Details of this reconciliation are described below.

Fiscal Year 2013

GRS

TRS provided the year-end total paid dollars for fiscal year 2013 showing fiscal year to date (FYTD) claims payments of $1,491,109,958.66. Sagebrush compared the totals from the GRS claims data file to these totals. The results are as follows:

The GRS claims data file contains all transactions processed in fiscal year 2013. BCBSTX invoices TRS-ActiveCare on a weekly basis. We anticipated the reports to differ from the claims data plus or minus approximately one week’s expense, calculated as

$$ \frac{1,501,538,108.51}{52} \text{ weeks} = 28,875,732.86 $$

The difference between the TRS year-end total and the GRS claims data file = $1,501,538,108.51 minus $1,491,109,958.66 = $10,428,149.85.

Our comparisons above are within the expected tolerance level.

Fiscal Year 2014

GRS

Sagebrush also received the year-end total paid dollars for fiscal year 2014 from TRS showing fiscal year to date (FYTD) claims payments of $1,289,914,520.75. Sagebrush also compared the totals from the GRS data file to these reports as follows:

The GRS claims data file contains all transactions processed in fiscal year 2014. BCBSTX invoices TRS-ActiveCare on a weekly basis. We anticipated the reports to differ from the claims data plus or minus approximately one week’s expense, calculated as

$$ \frac{1,300,059,254.65}{52} \text{ weeks} = 25,001,139.51 $$

The difference between the TRS year-end total and the claims data file = $1,300,059,254.65 minus $1,289,914,520.75 = $10,144,733.90.

Our comparisons above are within the expected tolerance level.
Audit Category I: TRS-ActiveCare

CLAIM PROCESSING TIMELINESS

Turnaround time (TAT) is defined as the total number of days needed to process or deny a claim. TAT is calculated as the number of days from receipt of the claim to the day the claim payment is processed or denied plus one day. According to the Administrative Questionnaire response from BCBSTX, turnaround time includes weekends and holidays.

The Administrative Services Agreement, effective September 1, 2012, has a turnaround time standard to process 95.00% of claims within fourteen (14) calendar days.

TAT Methodology

It was established in previous audits that the original process date, not the final process date, be used in the turnaround time calculation for the purpose of the TRS-ActiveCare performance guarantees.

TAT

Fiscal Year 2013

Of the 4,951,588 claims processed in fiscal year 2013, 95.79% were processed within fourteen (14) calendar days and 98.67% were processed within thirty (30) calendar days.

Based on our review of fiscal year 2013 claims, BCBSTX satisfies the TRS-ActiveCare performance standard of processing 95.00% of claims within fourteen (14) calendar days.

Fiscal Year 2014

Of the 4,537,376 claims processed in fiscal year 2014, 95.85% were processed within fourteen (14) calendar days and 98.88% were processed within thirty (30) calendar days.

Based on our review of fiscal year 2014 claims, BCBSTX satisfies the TRS-ActiveCare performance standard of processing 95.00% of claims within fourteen (14) calendar days.

Please note that the number of claims used to calculate the turnaround time for each fiscal year is based on the number of unadjusted claims in the claims data received. If the adjustment sequence in the claims data was greater than zero, the claim was omitted from turnaround time.

CLAIM PROCESSING AND PAYMENT ACCURACY

Sample Selection

Gabriel Roeder Smith & Company (GRS) provided Sagebrush with an electronic data file of TRS-ActiveCare claims transactions. BCBSTX also provided an electronic data file of TRS-ActiveCare claims transactions. Data file integrity was initially verified through limited electronic testing. In order to include only final outcome claims in the sample population,
Audit Category I: TRS-ActiveCare

Sagebrush matched original claim payments with any subsequent adjustments on each claim within the sample timeframe. The data was separated into two files: fiscal year 2013 and 2014.

The data was stratified into seven (7) strata for each fiscal year. This stratified sampling methodology was designed to apply the sample results to the population with 95.00% confidence at maximum precision.

Stratified random samples of 350 for fiscal year 2013 claims totaling $7,023,629.82 paid and 350 for fiscal year 2014 claims totaling $10,814,119.30 paid were selected and tested from the population of TRS-ActiveCare claims processed during the respective TRS-ActiveCare fiscal years. Together, the two samples totaled 700 claims and $17,837,749.12 paid.

Sample Tests

Each TRS-ActiveCare claim in the selected sample was tested for payment and coding accuracy, adherence to plan benefits and administration procedures, and timeliness. Each claim was manually tested (“re-adjudicated”) using the BCBSTX claim adjudication system, Blue Chip, for financial and procedural accuracy. Claims were compared to system information, original claim documentation (imaged and electronic), a sample of provider pricing contracts, plan provisions, and written BCBSTX policies and procedures. The following elements were tested for each claim:

- Was the paper submission an unaltered original?
- Did it contain all required information to process the claim?
- Was the claimant eligible for medical benefits on the date(s) of service?
- Was the claim submitted within the specified time as defined by the plan?
- Were managed care discounts and contractual provisions applied correctly?
- Were the procedures covered, billed and paid, and were the procedures medically necessary and appropriate according to BCBSTX medical review?
- Were claims for multiple procedures, bilateral procedures, unbundled services, and experimental services submitted to the appropriate levels for review, and adjudicated correctly?
- Were benefit coordination and subrogation accurately determined if the claimant had other coverage available?
- Did the correct claimant or assignee receive payment?
- Did the claim contain all required information and was it coded properly in the claim processing system?
- Were benefits applied in accordance with plan requirements?
- Were the mathematical computations and the application of copayments, out-of-pocket limits, and deductibles accurate?
- Were allowable charge limitations of the plan correctly applied?
- Were preauthorization, second surgical opinion and ambulatory procedures followed and documented, when appropriate?
- Was the claim paid only once?
Did claim payment response time meet contractual provisions and generally accepted industry standards?

### Claim Adjudication Accuracy

All claims were tested for accuracy in three areas:

- Payment Accuracy
- Procedural Accuracy
- Financial Accuracy

Descriptions of the accuracy measures are outlined below. Our experience has shown that these measures are commonly found within the industry.

Since the tested medical sample was selected using stratification, the mathematical formulas described below for payment and procedural (non-payment) accuracy are first applied to each stratum. Then a composite rate is developed for the medical population by weighting each stratum based on the relative proportion of the given population stratum to the total population.

Summing the projected absolute dollar error for each claim stratum, and comparing the result to the total paid dollars in the population derive the estimated financial accuracy for the medical claim population. The projected absolute dollar error is based on the average tested dollar error times the number of claims in each stratum.

The sample items were tested for accuracy using the following accuracy measures and formulas:

**Financial Accuracy** = \( 1 - \frac{\text{Total Projected Absolute Dollar Error for all Claim Strata}}{\text{Total Population Dollars Paid}} \)

For purposes of a medical claims audit, financial accuracy reflects the financial implication of payment errors identified in the audit. The standard commonly found in the industry for financial accuracy is 99%.

**Payment Accuracy** = \( \frac{\text{Number of Claims Paid Correctly}}{\text{Number of Claims Paid}} \)

Payment accuracy reflects the percentage of bills that result in the correct payment of benefits. The common industry standard for this measure is 95% - 97%.

**Procedural Accuracy** = \( \frac{\text{Number of Claims without Procedural Errors}}{\text{Number of Claims Paid}} \)

Procedural accuracy reflects the percentage of claims that do not contain coding, data entry, or other errors not resulting in the incorrect payment of the claim. The common industry standard for this measure is 95%.
While procedural errors do not directly have a financial impact, they are noteworthy because procedural errors often lead to future payment errors. An example is when a procedure code on a given bill is keyed incorrectly. A subsequent duplicate payment could occur since the examiner or system logic will not be able to identify the duplicate procedure.

One error per claim was counted, and financial errors took precedence over procedural errors. Each identified potential error or question was submitted in writing to BCBSTX for its review and written response.

Payment Errors

Fiscal Year 2013

The review identified three (3) payment errors in the fiscal year 2013 sample resulting in a net overpayment of $1,710.00. BCBSTX agreed to two (2) of the payment errors. BCBSTX agrees to disagree with one (1) stating it is a provider billing error.

- One (1) claim was for therapy services on multiple days. A $30.00 copayment should apply for each date of service. The copayment was taken twice for two of the dates of service resulting in a $60 underpayment. (sample 156)

  **BCBSTX Response:** Claim was allowed to release with additional copays in error. Additional payment made on 03/11/2015.

- One (1) claim was for an inpatient confinement where the patient was transferred from one facility to another. On the initial facility claim the $150 per day copayment was taken for the two days leading up to the transfer. However, on the second facility claim, the remaining $600 ($150 copayment per day) of the $750 copayment per confinement was not taken, resulting in an overpayment of $600.00. (sample 332)

  **BCBSTX Response:** Operator incorrectly allowed the claim to release without applying the additional per day copayments, up to the maximum limit per confinement. A refund request was initiated 02/13/15. BCBSTX will continue to monitor until refund is received.

- The third claim is where BCBSTX agrees to disagree due to a provider billing error. The claim is a facility claim that billed a date span on a “UB92” Universal Billing Form. Revenue Code 361 for operating room was billed for each of these dates of service. However, the system only took the $150 outpatient surgery copayment for the initial date of service. This system “glitch” resulted in an overpayment of $1,050.00. (sample 285)

  BCBSTX states this is a provider billing error as outpatient claims for surgery should be billed as multiple confinements on separate claims. The line items submitted by the provider clearly show a different date of service for each revenue code 361. The system
should be able to identify the different dates of service and apply the copayment accordingly.

**BCBSTX Response:** When multiple claims are billed on a single claim, there is only one surgical ICD9 code and date billed resulting in a single copayment. Providers are instructed to bill outpatient claims for surgery on different dates of service on separate claims.

### Fiscal Year 2014

The review identified one (1) payment error in the fiscal year 2014 sample. BCBSTX agreed with the error. BCBSTX also agreed to one (1) out-of-sample payment error. The following provides an overview of the principal classifications of payment errors identified in the audited claim samples:

- The review identified one (1) error where a $100 copayment for high tech radiology was not taken. This category represents 100.00% of the total payment errors. (sample 472)

  **BCBSTX Response:** Claim was allowed to process without applying the High Tech Radiology copay. A refund request was initiated on 02/13/15. BCBSTX will continue to monitor until refund is received. BCBSTX identified a discrepancy between how the benefit was defined on the benefits matrices and subsequently coded versus how it was defined in the benefits booklet. BCBSTX confirmed the intent with TRS. BCBSTX is in the process of identifying other claims that may have been processed incorrectly and will provide a report to TRS.

- The out-of-sample error was due to a duplicate payment being made. The claim in the sample was the first claim paid therefore the related out-of-sample claim was the overpaid claim. (sample 375)

  **BCBSTX Response:** Duplicate charges processed in error. This is a provider billing error, the lab should not have billed these services. A refund request was initiated on 02/05/15. BCBSTX will continue to monitor until refund is received.

A detailed description of the findings can be found in the Audit Findings Report section at the end of this response.

* A detailed description of the errors can be found in the “Classification of Payment Errors” section of this report. A listing of all errors is provided in Exhibit A.

### Processing Errors

#### Fiscal Year 2013

Sagebrush did not identify any processing errors that did not have a financial impact in the fiscal year 2013 claims sample therefore no processing errors were assessed.
Fiscal Year 2014

Sagebrush did not identify any processing errors that did not have a financial impact in the fiscal year 2014 claims sample therefore no processing errors were assessed.

Payment Accuracy

Payment accuracy reflects the percentage of claims that result in the correct payment of benefits. Payment accuracy allows inferences to be made regarding the accuracy with which claims are paid. When comparing payment accuracy to financial accuracy, both rates count the same sample claims as errors. The difference is that payment accuracy is based on the “number” of accurate payments while financial accuracy is based on the “amount” of accurate payments. Calculating the respective accuracy for each stratum and then weighting these results by the number of claims in each stratum derive the weighted payment accuracy.

Fiscal Year 2013

Based on the three (3) payment errors identified in the 2013 sample, the weighted payment accuracy rate is 99.97%.

BCBSTX Response: Based on the two (2) payment errors that BCBSTX agreed to, the weighted payment accuracy rate is 99.98%.

Fiscal Year 2014

Based on the one (1) payment error identified in the 2014 sample, the weighted payment accuracy rate is 99.95%.

This accuracy rate exceeds the BCBSTX internal goal of 97.00%, as well as the generally observed industry standard of 95.00% to 97.00%, based on our experience. This accuracy rate also meets or exceeds the minimum performance guarantee of 98.00% as shown in the contract between TRS-ActiveCare and BCBSTX.

BCBSTX Response: Since BCBSTX agreed with the one (1) payment error, we agree with the payment accuracy rate of 99.95%.

Procedural Accuracy

Procedural accuracy reflects the percentage of claims that are processed correctly. Procedural accuracy allows inferences as to the integrity of data input into the claim system, which is used for management reports. Examples of procedural errors would include incorrect coding of type of service, place of service, and incorrect dates of service. Calculating the respective accuracy for each stratum and then weighting these results by the number of claims in each stratum derive weighted procedural accuracy.
Audit Category I: TRS-ActiveCare

Fiscal Year 2013

Sagebrush did not identify any processing errors in the fiscal year 2013 sample claims. The procedural accuracy rate for fiscal year 2013 is 100.00%.

Fiscal Year 2014

Sagebrush did not identify any processing errors in the fiscal year 2014 sample claims. The procedural accuracy rate for fiscal year 2014 is 100.00%.

The audited procedural accuracy rate exceeds the industry standard of 95.00% by several percent. This accuracy rate also meets the minimum performance guarantee of 98.00% as shown in the contract between TRS-ActiveCare and BCBSTX.

Financial Accuracy

The stratified random sampling method permits projection of the audited financial accuracy rate to the entire population. The auditor's ability to statistically project the audit findings in this manner depends on the sampling technique used.

Fiscal Year 2013

The tested gross financial error in the medical sample for 2013 is $1,710.00. Based on the distribution of the errors within the claim strata; our best estimate of the absolute (gross) financial error is $273,306.00 in the paid claim population of $1,501,538,108.51, resulting in a projected gross financial (dollar) accuracy within the claim population of 99.98%. The performance agreement between TRS-ActiveCare and BCBSTX for financial accuracy is 99.00%. The standard commonly observed in the industry is 99.00%.

BCBSTX’s performance meets or exceeds the performance guarantee.

BCBSTX Response: Based on the two (2) agreed to samples the financial error is $660.00 for a financial accuracy of 99.99%.

Fiscal Year 2014

The tested gross financial error in the medical sample for 2014 is $80.00. Based on the distribution of the errors within the claim strata; our best estimate of the absolute (gross) financial error is $191,323.20 in the paid claim population of $1,300,059,254.65, resulting in a projected gross financial (dollar) accuracy within the claim population of 99.99%. The performance agreement between TRS-ActiveCare and BCBSTX for financial accuracy is 99.00%. The standard commonly observed in the industry is 99.00%.

BCBSTX’s performance meets or exceeds the performance guarantee.
Audit Category I: TRS-ActiveCare

BCBSTX Response: Based on the one (1) agreed to sample BCBSTX agrees with the financial accuracy of 99.99%.

CLASSIFICATION OF PAYMENT ERRORS – FISCAL YEAR 2013

The claim review identified three (3) payment errors in fiscal year 2013. There are two (2) overpayments totaling $1,650.00 and one (1) underpayment totaling $60.00 for a net overpayment of $1,590.00.

Incorrect Benefit Application

Three (3) of the errors were due to incorrect copayments being applied.

- One (1) claim was for multiple dates of service with more than one (1) service per day. The $30.00 copayment was taken twice for two (2) of the dates of service resulting in an underpayment of $60.00. BCBSTX agrees with this error. (sample #156)

- One (1) claim was an inpatient confinement where the patient was transferred from one facility to another. The original claim was a one (1) day stay and applied the $150.00 copayment for the day. However, there should have been an additional $600.00 in copayments taken on the second claim. TRS-ActiveCare has a $150.00 copayment per day, up to $750.00 per confinement. BCBSTX agrees with this error. (sample #332)

- One (1) claim is a facility claim (“UB92” Universal Billing Form) for multiple dates of service. The claim is for minor surgery (revenue code 361) billed on multiple days. The UB92 shows a date span at the top, but the individual lines show the actual date of service. The claim included all necessary information to adjudicate the claim properly with the $150.00 outpatient surgery copayment for each date when it was manually processed. The system only took one (1) $150.00 copayment on the claim resulting in an overpayment of $1,050.00.

BCBSTX agrees to disagree with this error stating a provider billing error. BCBSTX states the provider should be submitting each individual date of service on a separate UB92 claim form. (sample #285)

CLASSIFICATION OF PAYMENT ERRORS – FISCAL YEAR 2014

The claim review identified one (1) overpayment error in fiscal year 2014 and an out-of-sample error.

Incorrect Benefit Application

One (1) claim was overpaid due to no copayment being taken.
• One (1) claim was for an MRI which should apply a $100 copayment. BCBSTX states the benefit matrix shows that the copayment for High Tech Radiology is waived for emergencies. Sagebrush disagreed with BCBSTX as the benefit booklet shows that the copayment is waived if performed during an emergency visit. There was no emergency room visit on this date of service, just a scheduled MRI. Therefore, the copayment should have been applied as this does not meet the TRS-ActiveCare definition of emergency. BCBSTX agreed to this error. (sample #472)

• During the review, Sagebrush identified a duplicate payment related to sample 375. The sample claim was the originally paid claim therefore the out-of-sample claim is the overpaid claim. This resulted in an overpayment of $18.32, which BCBSTX has agreed to recover.

Classification of Procedural Errors: fiscal year 2013 Claims

The claim review identified zero (0) procedural errors in fiscal year 2013 claim sample.

Classification of Procedural Errors: fiscal year 2014 Claims

The claim review identified zero (0) procedural errors in fiscal year 2014 claim sample.

OBSERVATIONS AND RECOMMENDATIONS

OBSERVATIONS

Provider Stop Loss Claims

Our review included numerous high dollar claims that were processed according to the Stop Loss clause of the provider contract. If an individual claim has billed charges that meet or exceed a specific dollar threshold as shown in the provider’s contract, the claim will price differently.

For example, Hospital A’s contract is written to price claims according to the DRG (diagnosis related group) which would allow a base rate x the DRG weight. The contract also shows a stop loss threshold of $155,000 and 75%. Therefore, if the eligible charges are equal to or exceed the $155,000, the claim will price at 75% of the eligible charge as opposed to the DRG payment.

We were able to review the majority of these claims against the actual provider contract and found no discrepancies in the pricing or payment of the claims. It appears that the contracts are loaded into the claim payment system correctly.

Bariatric Weight-Loss Surgery

During the fiscal years 2009 and 2010 audit, Sagebrush observed and reported figures on what seemed to be a high number of Bariatric Weight-Loss Surgery claims. Sagebrush offered
Audit Category I: TRS-ActiveCare

Prepared for
Teacher Retirement System of Texas

suggestions to TRS regarding changes to the plan benefits with respect to Bariatric Weight-Loss Surgery in order to contain costs.

Effective with the 2012 fiscal year, TRS added a $5,000.00 copayment to the surgeon’s fee for Bariatric Weight-Loss Surgery.

Sagebrush observed during the audit this year that the in-network allowed amount for the surgeon’s fee will never be equal to or greater than $5,000.00. Therefore, adding this copayment to the surgeon’s fee is not very cost effective for TRS as the member will only be responsible for up to a few thousand dollars at most.

**Recommendation:** Sagebrush recommends that the TRS apply the copayment to the facility’s allowed amount. Or, since most of the claims for this type of service are billed with diagnosis code ICD-9 278.01, a copayment can be attached to the diagnosis and no payment will be made on related claims until the $5,000.00 copayment limit has been reached.

**Excessive Units Billed**

During the review Sagebrush observed a claim with excessive units on a single date of service. The claim was for an interpretation of an elbow x-ray that was billed with 729 units. The claim was submitted electronically and auto-adjudicated by the system. The claim was resubmitted by the provider with the exact same service and units but a second service was added. The second service was for the exact same x-ray interpretation, but only one (1) unit billed. The first line denied as a duplicate. The provider of service issued a voluntary refund to BCBSTX for the line with 729 units billed. BCBSTX states the claim was paid correctly as billed.

**Recommendation:** Sagebrush recommends that BCBSTX implement a system edit that will flag the claim for review if it appears that the number of units being billed is excessive for the service provided.

**BCBSTX Response:** BCBSTX implemented a new edit rule in May 2013. This rule will deny claims when the units of service submitted for CPT/HCPCS codes by the same provider, same member and the same date of service, exceeds the Medically Unlikely Edits (MUE) established by CMS for that CPT/HCPCS. For example, if a given CPT codes has an MUE of two and the provider billed four, ClaimsXten and the claims system will reduce the allowed units to two. The other units are denied as over the maximum units.

The audit claim was processed in the month prior to implementation of the new edit. Under the new rule, two units would have been allowed for this claim.

It appears that the provider recognized this error and voluntarily refunded the claim payment and provided a corrected billing. As an additional precaution, we have asked the Special Investigation Division to review this provider to determine if there are any patterns of billing excessive units.
RECOMMENDATIONS

Overpayments: Appropriate steps should be initiated to recover or reach a settlement with respect to agreed upon overpayments identified during the course of this audit.

BCBSTX Response: All reports and refund requests have been initiated.

Benefit Application: Incorrect copayments were applied to four (4) of the errors identified in the audit sample. The claim system should be able to identify individual dates of service and apply a copayment for each date of service as required. As for specific copayments being waived if an emergency, this applies to those services being done in the emergency room as part of an emergency visit. The diagnosis alone should not determine whether a service is emergency or non-emergency in nature. The place of service should determine whether it is an emergency visit. A copayment should always be applied to outpatient surgery and high tech radiology, unless they are being billed in an emergency room setting.

BCBSTX should assess the quality, training and controls for this process. BCBSTX should standardize this process to the extent possible in order to improve overall performance. The Blue Chip system should have standard edits to prevent payment errors where applicable, including the ability to review claims history for potential duplicate and related claims. BCBSTX supervisors should closely monitor this in quality assessments.

BCBSTX Response: BCBSTX will assess the quality, training and controls for this process and BCBSTX supervisors will closely monitor this in quality assessments.

PRIOR YEAR’S AUDIT RECOMMENDATIONS

BCBSTX has taken necessary steps to recover the overpayments identified in the prior years’ audit.

BCBSTX has provided additional training to the customer service representatives and claims processors regarding updating Coordination of Benefits (COB) information and including the amount for non-covered charges in the patient share amount on the claims system.

OVERALL CONCLUSION

Our review of the BCBSTX systems encompassed the on-line testing of each claim in the statistical sample. Our on-line testing consisted of “re-adjudicating” each of the 700 claims sampled, just as a BCBSTX examiner would have paid the claim using the Blue Chip system. Our review did not include the application of BCBSTX systems to functions beyond the scope of claims processing, such as member services, utilization management, or general financial functions.

Through our testing of claims in the statistical claim audit and review of the internal audit process included in the administrative questionnaire, we conclude that BCBSTX has a comprehensive internal audit program that ensures that consistent quality measurements are applied within all aspects of the claims administration program. The reported quality control
Audit Category I: TRS-ActiveCare

Approach within each process step is consistent with industry standards and appropriate controls have been developed to monitor system and processor accuracy.

However, we cannot test the benefit of the internal audit program based on its structure alone. Application and scope of the internal audit methodology are important aspects that should be reviewed in future audits. A test of the internal audit results is necessary to ensure that the reviews are consistent, that high standards are met, and that self-reported results accurately reflect all-important aspects of claims processing.
OPERATIONAL REVIEW

Prior to Sagebrush’s onsite visit, BCBSTX provided an overview of claim operations and responses to an Operational Questionnaire. The administrative questionnaire addressed issues such as system capabilities, claim adjudication procedures, member services, mail processing, quality assurance, training and staffing. The audit team was not on-site in the Marshall office and did not observe and interface with the examiners during the audit.

The following topics were included on the Operational Questionnaire:

Eligibility and Enrollment

Member Eligibility information is received by BCBSTX daily via electronic file, paper application, email and BAE (portal).

Eligibility is maintainedUPDATED in the BlueStar system. Manual updates are performed by the Membership Specialist. Electronic files are passed to BCBSTX by the school districts or their vendors and released and processed by the Membership Specialist. Benefit Administrators enter eligibility information through BAE (Blue Access for Employers).

Claims processors can view this instantly (real time). The eligibility information is available within 24-48 hours of being entered into BlueStar for claims processing.

Paper enrollment sent to BCBSTX is stored in IMAGE. IMAGE information is available indefinitely. Spreadsheet enrollments are stored electronically and are available from 12-25 years on the FSU Common drive for viewing if not legible in IMAGE.

COBRA eligibility is identified by the cancel reason codes provided by the school district. Reports are worked by the Marion Full Service Unit (FSU) and information is sent to eligible members. They are coded with a status of C-COBRA.

The updates are maintained through BAE (Blue Access for Employers). They are received and entered by the Marion Full Service Unit (FSU).

Coordination of Benefits (COB)

Any indication of other insurance received on a claim begins the investigation and a questionnaire is sent to the member. Additionally, if BCBSTX is in need of COB information from the member, a screen pop will initiate a discussion with the caller/member to determine other possible eligibility from another carrier. The Customer Advocate will update the file accordingly.

A questionnaire is sent out yearly to determine if the member has other insurance.
Coordination information is housed in COB Solutions and is available to claims, customer service, and eligibility. Keep in mind that all Medicare information is held within the BlueStar membership application.

The Examiners that are assigned to TRS are responsible for working COB claims. The processor role has now been dissolved and the Examiner is responsible for all aspects of the claim until it requires a Technician or above to complete.

The COB savings for the period audited is:

**FY13**

- Benefits Paid: $1,490,876,018
- COB Savings: $9,831,643
- COB w/Medicare: $53,878,923
- Ratio to Paid: 4.27%

**FY14**

- Benefits Paid: $1,289,010,696
- COB Savings: $11,995,016
- COB w/Medicare: $58,684,480
- Ratio to Paid: 5.48%

**Claims Processing**

BCBSTX notes that 96.68% of claims are received electronically and 3.32% of claims are received via paper submission at the Wichita Falls FSU. BCBSTX states that 79.8% of TRS-ActiveCare claims processing is auto-adjudicated.

BCBSTX indicates that currently, there are 21 management/supervisory staff members, 109 examiner/processor staff members and 39 technical staff members in the Marshall office claims department.

BCBSTX processes TRS-ActiveCare claims on the Blue Chip claims system. Based on our observations, the system seems to perform adequately. The system appears to have sufficient edits and accumulators as evidenced by the low incidence of accumulator errors.

On May 2, 2011, BCBSTX implemented ClaimsXten™, a code auditing tool developed by McKesson Information Solutions, Inc. The software reviews the specific services submitted to determine appropriate reimbursement, using principles such as incidental (meaning a service is clinically integral to accomplishing the principal procedure/service or considered a component of the more comprehensive procedure), mutually exclusive (meaning procedures that are not reasonably performed on the same patient on the same day), and rebundling (meaning two or
more procedures are used to describe a service when a single, more comprehensive procedure exists that more accurately describes the complete service performed). This may result in non-payment for certain procedures or services.

ClaimsXten™ allows BCBSTX to expand claim processing with aggregate historical claims data. This will assist in adjudicating claims more effectively and in a more cost-effective manner. With the implementation of ClaimsXten™, BCBSTX will be better able to evaluate claims for global periods, as designated by the Centers for Medicare and Medicaid Services (CMS) Physician Fee Schedule, in addition to reviewing multiple claims for a single date of service.

Customer Service

BCBSTX has a service unit separate from claims processing to handle member service phone calls, as well as written questions and letters, although most of the written correspondence is handled in Mattoon, Illinois.

The primary responsibility of the CSR is to handle phone calls from members and providers. ICM (Intelligent Call Management) systems supported by Cisco, is used to route customer service calls. The NICE auditing allows the supervisor and auditor to hear as well as see what screens are accessed by the Customer Advocates. All supervisors have the capability to service observe on any call. Call volumes are monitored through the use of ICM (Intelligent Call Management) systems and supported by Cisco.

Inquiries per rep per day for fiscal year 2013 were 58.56 and for fiscal year 2014 YTD through November were 37. The average wait time for incoming calls was 38 seconds for fiscal year 2013 and 33 seconds for fiscal year 2014. The performance guarantee for TRS-ActiveCare is 45 seconds. The average talk time with a customer is at or around 6 to 6 ½ minutes.

The abandoned call rate reported by BCBSTX for fiscal year 2013 was 1.89% and 0.78% for fiscal year 2014. The performance guarantee for TRS-ActiveCare is 5.00%.

BCBSTX has met the performance guarantee for customer service.

Training

Claims Processing

High school diploma or GED is required. Prospective Claims Examiners are also given a data entry test as well as a personality profile. All job related training is either provided by Computer Based Training (CBT) or instructor led.

The Claims Examiner training is an 8 week course. The training blends web based training (conceptual and simulation lessons), instructor led components, hands on practice, and timed and quality checked application exercises. Included in the 8 weeks are 2 weeks of live claims processing under direct supervision and one-on-one technical assistance.
Customer Service

Customer Service is 8 weeks of corporate training, using a blended approach for instructor led and web based lessons, as well as simulated call with Learning Coaches and live claims and calls in the classroom. Then an additional 2 weeks of full service unit specific training is completed by our on-site Developmental Specialist.

Background Checks

HCSC requires New Hire Background Investigations (NHBI) and substance abuse testing on each new hire in compliance with state law. For each potential workforce member, the NHBI involves criminal checks and confirmation of work history, as well as verification of certain professional licensing. All new hires are screened through a check of state and federal government debarment databases.

Contracting agencies conduct the background investigations for all temporary service workforce employees. All suppliers and contractors are screened through a check of state and federal government debarment databases. HCSC has adopted a contracting protocol whereby all contractual arrangements with suppliers, with authorized exceptions, contain applicable background check obligations and agreement to adhere to the Drug Free Workplace Act, on the part of the supplier and any respective supplier subcontractors.

TRS-ActiveCare Appeals Process

As of 9-1-2011 all levels of appeals are now being handled by BCBSTX. Members are no longer referred to TRS for appeals.

BCBSTX provided a spreadsheet log that contained 2,597 appeals received during the audit period of 9-1-2012 through August 31, 2014. Of these, only 153 or .06% resulted in the original claim decision being overturned.

Quality Assurance

Claims are audited for financial and statistical accuracy and adherence to group-specific benefits. Divisionally, claims are also audited on the entire FSU using the same criteria (i.e. SIP, MTM). In addition TRS has a Performance Guarantee audit conducted by the Audit and Performance review Department.

A random sample of claims are pulled specific to the Examiner based on the groups they are responsible for processing. This sample could include groups outside of the TRS account. One to five audits per week are performed internally for each of the claims personnel. The percentage outcome varies based on the release amounts performed by the claims personnel.

Are the following elements included in your audit protocol and what are your accuracy goals for each element?
Audit Category I: TRS-ActiveCare

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
<th>Accuracy Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment accuracy</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Non-payment accuracy</td>
<td>X</td>
<td></td>
<td>Superior Goal</td>
</tr>
<tr>
<td>Financial accuracy:</td>
<td>X</td>
<td></td>
<td>Superior Goal</td>
</tr>
</tbody>
</table>

Please provide audit results relative to Accuracy Rate for the following categories for the most recent twelve-month time period.

Criteria

<table>
<thead>
<tr>
<th># of Claims Reviewed</th>
<th>12,570</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Accuracy</td>
<td>not tracked</td>
</tr>
<tr>
<td>Non-Payment Accuracy</td>
<td>99.46%</td>
</tr>
<tr>
<td>Financial Accuracy</td>
<td>95.41%</td>
</tr>
</tbody>
</table>

Utilization Review and Care Management

1. Utilization Review Services (Care Management)

Utilization review services are provided by BCBSTX.

Care Management facilitates participant access to the appropriate level of care at the appropriate time and ensures the utilization of network providers. Care Management activities are conducted in accordance with standards developed by the Medical Advisory Committees, specialty panels, internal medical staff and nationally recognized guidelines.

The Milliman USA Care and Technology Evaluation Center guidelines are the primary decision support tools employed to make clinical appropriateness determinations. The guidelines are descriptions of best practices for managing medical conditions in a variety of settings. All potential medical necessity or benefit denials are reviewed by a physician reviewer who contacts the attending physician to discuss the patient’s plan of treatment and alternative care or benefit options prior to making any denial.

Inpatient Preauthorization - All elective inpatient admissions must be preauthorized with the exception of maternity care related to delivery. The participant’s network provider is responsible for preauthorizing in-network care and approved out-of-network care. For other out-of-network or out-of-area care, the patient is responsible for calling a toll-free number to initiate the
Audit Category I: TRS-ActiveCare

Preauthorization process. Emergency admissions must be authorized the first business day, following the admission.

Extended Care/Home Infusion Therapy (EC/HIT)

Extended Care/Home Infusion Therapy provides an alternative to inpatient hospitalization. Preauthorization of EC/HIT services is required and can be initiated via telephone or facsimile by the member/patient, patient’s representative, facility personnel or provider.

EC/HIT includes the following types of services:
- Extended Care:
  - Home Health Visits - (Skilled Nurse/Private Duty Nurse (RN), Physical Therapist (PT), Occupational Therapist (OT), Speech Therapist (ST) and/or Home Health Aide (HHA) visits),
  - Hospice - home and institutional, and
  - Skilled Nursing Facility (SNF); and
- Home Infusion Therapy.

In support of the preauthorization process, an annual review of claims data is completed as a collaborative project by the Utilization Management (UM) and Medical Department teams. The review includes analysis of data by individual diagnosis to compare current year utilization and cost to prior year information in order to identify aberrant shifts in utilization or cost drivers that require more intense focus. The goal of the Focused Review process is to ensure the most cost effective utilization of services.

Focused Review - Based on the outcome of the claims analysis, intense review of the designated diagnoses is initiated. Currently the diagnostic categories for all PPO participants include: Circulatory, Musculoskeletal, Gastrointestinal or Neurological procedure or condition, and Septicemia.

Onsite Review – Places a BCBSTX RN in designated facilities in the Dallas/Ft. Worth, Austin and Houston areas to provide care management support. In addition, if supported by the employer group – consideration will be given to place onsite RNs in facilities outside of Texas where large numbers of group employees reside.

Concurrent Review/Episodic Case Management - Once an admission and length of stay are preauthorized, the admission is monitored to ensure continued medical necessity, proactive discharge planning and identification of any required case management intervention. Throughout the care process, the participant’s medical conditions, as well as identified psychosocial or personal support system issues are taken into consideration. On a case by case basis, participant contact during hospitalization may occur as appropriate to facilitate transition of the participant to an alternate level of care or to the home setting.

2. Case Management Guidelines
Audit Category I: TRS-ActiveCare Final Report

Complex cases are coordinated in collaboration with the patient and his/her physicians and providers through the utilization of services from PCPs, SCPs, facilities, durable medical equipment (DME) companies, EC/HIT companies, and other providers. Case types may include, but are not limited to members/patients:

- Experiencing a catastrophic event, such as Traumatic Brain Injury, Spinal Cord Injury and/or major Burns and/or requiring long-term intensive rehabilitation;
- Requiring High Risk Obstetrical/Neonatal care;
- Eligible for the Special Beginnings™ Program;
- Requiring Transplant and/or related services, including the Blue Cross Association (BCA) Program (except Kidneys and Corneas);
- Requiring social service intervention;
- Requiring inpatient and/or outpatient pain control programs;
- Requiring admission to long term acute (transitional/sub-acute) care (LTAC) facilities, air/ground ambulance transport over fifty (50) miles, private duty nursing services and/or extra-contractual agreements;
- Requiring complex negotiations;
- Requiring inpatient rehabilitation not managed by UM;
- With any claim greater than fifty thousand dollars ($50,000.00) per month and/or quarterly claims reports;
- With complex discharge planning needs; and
- Identified through the predictive model process.

CM works in collaboration with all health plan departments/divisions including, but not limited to:

- Utilization Management
- Condition Management (Disease Management)
- Health Care Management
- Professional Provider Network
- Facility Provider Network
- Quality Improvement Programs
- Provider Services
- Delegation Oversight Programs/Behavioral Health Services
- Internal Quality Monitoring Program
- Full Service Units
- Legal Department
- Group Accounts
- Marketing

3. Case Management Staff Qualifications

- Texas R.N. license in good standing or master’s degree in social work with advanced clinical and current Texas license;
- Minimum of 1 year of experience as a case manager;
- Three years of experience in clinical settings relevant to case management specialty such as:
Audit Category I: TRS-ActiveCare

- rehabilitation
- orthopedics
- pediatrics
- oncology
- general medical/surgical
- high-risk obstetrics
- compromised neonatal
- solid organ and bone marrow transplants
- neurology

- Demonstrated written and verbal communication skills
- Preferred: case management certification or actively working toward case management certification

Refund Recovery

A systematic request is processed as a claims adjustment through Blue Chip. Applicable letters to providers are generated requesting the refund. Refunded amounts are credited when the refund is received or withheld from future payments. The claim in Blue Chip is adjusted when funds are received to reflect update in claims history. Additionally, BCBSTX uses a claims recovery unit. This unit focuses on claims that should be refunded due to retro termination, coordination of benefits administration, etc.

HCSC will pursue the recovery of overpayments due to duplicate claims, retroactive terminations or eligibility issues, and coordination of benefits paid up to 18 months after the paid date of the claim. Procedure: 1. HCSC queries the paid claims history file on a monthly basis to identify potentially overpaid claims due to duplicated payments. 2. A thorough audit is conducted on each claim identified to determine if an overpayment exists. 3. If it has been 18 months or less since the paid date of the claim, a request for claim refund will be generated to either the provider or member, depending on who received payment for the claim.

Targeted claims are reviewed monthly to identify claims containing potential overpayments. Requests for Claim Refund (RFCR’s) are initiated on any overpayments identified during auditing. Once the RFCR is completed, it creates a receivable record in the Corporate Financial Suspense System (FSS) and will create a series of automated refund request letters. FSS is monitored to ensure the overpayments are returned. In many cases, TRS will receive immediate credit for the overpayment on the customer statement. Otherwise, TRS will generally receive credit within 120 days.

BCBSTX states if refund is $49.99 or under they will not pursue it.

Recommendation: Sagebrush would like to recommend that TRS-ActiveCare include in their contract with the plan administrator language that states a refund will be requested and pursued on any and all overpayments, regardless of dollar value.
Fraud and Abuse Program

BCBSTX identifies, investigates, and refers suspected fraudulent providers and subscribers to law enforcement for investigation and prosecution. BCBSTX’s anti-fraud efforts are headed by the Vice President of the Special Investigations and Security departments and the Executive Director of the Special Investigations Department, both of whom are former high-ranking FBI officials with extensive law enforcement contacts and experience in managing complex criminal investigations.

BCBSTX has organized its anti-fraud resources into a Data Intelligence Group and an Investigative Group. There are four Data Analysts and six Investigators in the Richardson, TX Headquarters as well as two Investigators in the Houston office. BCBSTX-Richardson also has two Registered Nurses on staff, two support employees and one Senior Manager, all of whom work together in identifying and investigating allegations of health care fraud.

Intelligence Group

The intelligence group identifies providers and subscribers suspected of fraud using all available internal and external resources, including the following:

- **Proactive data analysis:** BCBSTX uses state-of-the-art data mining software that analyzes the behavior patterns of providers and members within identified peer groups. Behaviors are compared to other members of peer groups, and scored by provider and member depending on many factors, some of which are the frequency, location, or type of behavior. Outliers are identified for further investigation.

- **Fraud identified by FSUs:** FSU personnel are experienced in identifying suspicious and/or unusual claim patterns. Suspicious claims are electronically routed to the Special Investigations Department for further review and analysis.

- **Databases:** The Special Investigations Department uses several databases such as Accurint and ChoicePoint, which have been specifically tailored for health care fraud utilization. These databases are used to research court records, media articles, fraudulent Social Security numbers, state licensing information, and backgrounds on businesses and individuals.

- **Law enforcement contacts:** BCBSTX maintains contacts with law enforcement officials and regulatory and prosecutorial agencies to facilitate the referral of cases and gain intelligence regarding current fraudulent schemes. BCBSTX works closely with federal law enforcement in all four Judicial Districts within the state of Texas.

- **The Special Investigations Department is an active participant of numerous Health Care Fraud Task Forces in Texas.**
Audit Category I: TRS-ActiveCare

Final Report

- Contacts with other health care providers: Through organizations and associations, the Special Investigations Department has established excellent contacts throughout the health care industry. Some of these associations maintain databases and issue bulletins and newsletters alerting members of fraudulent health care schemes. Information identified is queried through BCBSTX’s databases to detect similar situations.

- Hotline calls: BCBSTX encourages members to report suspicion of fraud and abuse through a toll-free hotline which is available 24 hours a day, seven days a week. A statement regarding BCBSTX’s commitment to identifying fraud is included on every EOB statement, and the hotline is answered by experienced interviewers. Hotline calls are aggressively pursued by the Special Investigations Department. Representatives from the Special Investigations Department speak to employer groups in an attempt to educate members on the elements of health care fraud and encourage them to report suspected fraud.

Investigative Groups

After verifying information, collecting information of fraud, and developing cases that demonstrate probable cause that indicates a crime has been committed against BCBSTX or its members, the Investigative Groups refer the cases to law enforcement officials for criminal prosecution. Cases that do not rise to the level of referral to law enforcement, the Special Investigations Department will work with the provider in an attempt to recover any over-payments and refund money back to the affected group. In other instances where errors have been detected but there was no intent to deceive, the Special Investigations Department will refer a provider to the Provider Education Department (PASS) for education on the proper billing.

Computerized Claim Reviews

The computer security system automatically limits access to claim processing functions by individual, location, and transaction. System controls ensure that only authorized personnel enter claims data and approve claim payments. Only high-level claims personnel may release high-dollar claim payments according to a corporately approved schedule.

Numerous edits ensure that potentially fraudulent or abusive claims are not automatically paid by the system. Eligibility files are checked to ensure:

- Patient data matches the eligibility record
- Diagnosis is reasonable for the patient’s sex and age
- Charges are reasonable for the services coded on the claim
- Payment amount does not exceed the billed amount
Audit Category I: TRS-ActiveCare

Claims that fail these edits are pended for individual review by claims processing personnel, claims management, medical staff nurses and physicians, and the Special Investigations Department, as appropriate.

Operations Security

The claims data center is located in Waukegan, Illinois, in a fenced and controlled area. Access is limited to a small number of data processing, security, and building support personnel. Access within the building is further controlled to allow only certain personnel access to certain areas. Monitoring devices provide further security control.

Claims Quality and Financial Accuracy Programs

To reduce the risk of internal fraud, a random sample of each processor’s claims is reviewed daily by a claims supervisor. The claims processing division also conducts claims quality and financial accuracy reviews of thousands of claims each year.

HIPAA

The Corporate Privacy Office at HCSC, the parent company of Blue Cross Blue Shield of Texas, was established as an enterprise function to oversee the compliance and implementation of the provisions and subsequent amendments to the HIPAA, including the Health Information Technology for Economic and Clinical Health Act (HITECH). The Corporate Privacy Office works with Legal to ensure that the organization develops the appropriate processes to meet the compliance dates of these rules and regulations. Currently, HCSC complies with the HIPAA provisions that are effective and apply to its business.

Disaster and Recovery

HCSC maintains two corporate-owned Tier 4 data centers with redundant physical and environmental controls to minimize the likelihood that an event could disrupt data center operations. Should a catastrophic event render the primary data center unusable, critical technology is designed to be recovered at the secondary data center within pre-defined RTOs. HCSC has made a significant investment in industry leading technologies for security, backup and reclamation of data in order to remain compliant with the HIPAA Security Rule and applicable National Association of Insurance Commissioners Model Audit Rule (NAIC MAR) controls.

Alternate Data Recovery Sites

Primary data center operations reside in Waukegan, IL, and the secondary in Fort Worth, TX, thus mitigating impacts caused by regional events through a geographically diverse, dual data center model. The secondary data center site serves as offsite storage for backup data with center-to-center data replication. This high-availability strategy eliminates reliance on vendors, enables flexibility in exercise schedules, and supports shortened systems recovery times. In addition, HCSC sustains a hardware footprint in the recovery environment to support highly
critical applications, and vendor contracts to procure hardware to support all other applications/services.
EXHIBITS
EXHIBITS

TRS-ActiveCare 2013
Claims processed from September 1, 2012 through August 31, 2013.
Summary of TRS-ActiveCare FY2013 Claim Audit Errors

<table>
<thead>
<tr>
<th>Sample #</th>
<th>DCN #</th>
<th>Original Claim Payment</th>
<th>Correct Payment</th>
<th>Payment Error</th>
<th>Error Description</th>
<th>BCBSTX agreed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>156</td>
<td>3080502J6120X</td>
<td>$2,877.80</td>
<td>$2,937.80</td>
<td>($60.00)</td>
<td>6 dates of services on claim. Copayment was taken twice on 2 dates of service.</td>
<td>Agree</td>
</tr>
<tr>
<td>285</td>
<td>310650341X20X</td>
<td>$16,227.00</td>
<td>$15,177.00</td>
<td>$1,050.00</td>
<td>Multiple dates of service for minor surgery billed on a UB92. System only recognized the first date of service to apply the $150.00 copayment. There were 8 dates of services on the claim.</td>
<td>Agree to Disagree</td>
</tr>
<tr>
<td>332</td>
<td>309450189Y50X</td>
<td>$145,179.78</td>
<td>$144,579.78</td>
<td>$600.00</td>
<td>Claim was released without applying $600.00 inpatient confinement copayment.</td>
<td>Agree</td>
</tr>
</tbody>
</table>
Audit Category I: TRS-ActiveCare

Final Report

TRS-ActiveCare EXHIBIT B
ERRORS (FY2014)

TRS-ActiveCare 2014

Claims processed from September 1, 2013 through August 31, 2014.
Summary of TRS-ActiveCare FY2014 Claim Audit Errors

<table>
<thead>
<tr>
<th>Sample #</th>
<th>DCN #</th>
<th>Original Claim Payment</th>
<th>Correct Payment</th>
<th>Payment Error</th>
<th>Error Description</th>
<th>BCBSTX agreed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>375 / 701</td>
<td>471150385G30X</td>
<td>$18.32</td>
<td>$0.00</td>
<td>$18.32</td>
<td>Sample claim for duplicate payment is 4163502B0490X (sample 375) $18.32 overpaid. BCBSTX identifies this error as Sample 701.</td>
<td>Agree</td>
</tr>
<tr>
<td>472</td>
<td>3351506266C0X</td>
<td>$1,331.12</td>
<td>1,251.12</td>
<td>$80.00</td>
<td>High Tech Radiology has a $100 copayment not applied on this claim.</td>
<td>Agree</td>
</tr>
</tbody>
</table>
ANALYSIS OF AUDIT - HPA - BCBSTX
### Audit

**TRS-ActiveCare-- Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)**

#### Audit Objectives

1. To review the health claims adjudication of TRS-ActiveCare PPO benefit options by the HPA.

BCBSTX completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls.

A stratified sample of 350 claims was selected for each year. Supporting documentation for each sampled claim was reviewed to ensure:

- Claim was submitted within the specified time as defined by the plan.
- Managed care discounts and contractual provisions were applied correctly.
- Procedures that were billed and paid were covered by the plan.
- Procedures were medically necessary and appropriate according to BCBSTX medical review.
- Claims for multiple procedures, bilateral procedures, unbundled services, and experimental prescription drugs/services were submitted to the appropriate levels for review.

#### Audit Procedures

- TRS-ActiveCare Plan of Benefits
- BCBSTX internal policies and procedures for claims adjudication
- BCBSTX internal policies for utilization review
- BCBSTX provider contracts and “Summary of Understanding” of provider contracts for network providers
- American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures
- COB guidelines published by the National Association of Insurance Commissioners (NAIC)
- Medicare coordination rules

#### Criteria for Procedures

- Claim Turnaround Time: Fiscal year 2013 - 95% -100% of claims within 14 calendar days. Fiscal Year 2014 – 95% -100% of claims within 14 calendar days.
- Claim Processing Accuracy: 98% -100%.
- Claim Payment Accuracy: 98% -100%.
- Claim Financial Accuracy: 99% -100%.
- Inquiry Resolution: 95% - 100%.
- Abandoned Calls: 0%-5%.
- Average Speed to Answer: 0 -45 seconds.
- Customer Satisfaction: 85% -100%.

### Vendor Providing Services

**Blue Cross and Blue Shield of Texas**, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare.
**Audit**

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS-ActiveCare— Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)</td>
<td>and adjudicated correctly. • Benefit coordination, including coordination with Medicare, and subrogation were accurately determined if the claimant had other coverage available and recoveries were properly pursued when appropriate. • Correct claimant or assignee received payment. • Benefits were applied in accordance with plan requirements. • Mathematical computations and the application of coinsurance, out-of-pocket limits, and deductibles were accurate. • Allowable charge limitations of the plan were correctly applied. • Preauthorization, second surgical opinion, and ambulatory procedures were followed and documented, when appropriate. • Claim payment response time met contractual provisions and was consistent with generally accepted industry standards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vendor Providing Services</strong></td>
<td>Blue Cross and Blue Shield of Texas, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Audit

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| TRS-ActiveCare – Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA) | • Claim was properly coded and reflects the supporting documentation submitted by the claimant or the provider of services and was properly authorized for payment.  
• Claim was properly reconciled with other claims for that individual with the same dates of service to ensure appropriate payment with all claims related to the date of service.  
• Claim was paid only once, i.e., the claim payment is not a duplicate payment. | | | |

| | | | | |
| | Expanding on the tests described above in #1, each sampled claim was tested to ensure:  
• HCFA or UB claim form (if paper) is unaltered and contains sufficient information to process the claim  
• Paper or electronic claim is correctly loaded to the claims system  
• Patient is eligible  
• Coordinated with other | • TRS-ActiveCare Plan of Benefits  
• BCBSTX internal policies and procedures for claims adjudication  
• BCBSTX internal policies for utilization review  
• American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
• COB guidelines published by | | |

2. To test the reasonableness of the system of internal claims audit and processing controls used by the HPA to ensure the validity of TRS-ActiveCare claims and that these claims are processed and paid in accordance with the terms of the Plan design.
## Audit

**TRS-ActiveCare – Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)**

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Objectives</td>
<td>Audit Procedures</td>
<td>Criteria for Procedures</td>
<td>Contract Provisions</td>
<td>Internal Controls</td>
</tr>
<tr>
<td>3. To test the reasonableness of the “allowable charge” procedures utilized by HPA in the claims payment process for both in and out-of-state claims and to ensure that the allowances are properly applied and reflect the standard allowable amounts established by the HPA for adjudication of claims.</td>
<td>• BCBSTX Network Providers: Pricing was verified to “Summary of Understanding”, a summary of the provider’s contract or fee schedule. For a subset of claims, pricing was verified back to the paper contract with the provider.</td>
<td>• BCBSTX internal policies and procedures for claims adjudication</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Out-of-State Blue Card Providers: Pricing was verified to the pricing instructions received from the Home BCBS plan.</td>
<td>• BCBSTX provider contracts and “Summary of Understanding” of provider contracts for network providers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Out-of-Network Providers: Ensured that negotiated discounts or Usual &amp; Customary pricing was</td>
<td>• American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>parties, if applicable</td>
<td>• COB guidelines published by the National Association of Insurance Commissioners (NAIC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Service is covered by the plan of benefits</td>
<td>• Medicare coordination rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Service is correct for age and sex of claimant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Copayments/deductibles and coinsurance was calculated correctly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any plan design limitations, such as limit on number of visits, is applied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any requirements for pre-certification or authorization are met</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Vendor Providing Services

**Blue Cross and Blue Shield of Texas**, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare.

3. To test the reasonableness of the “allowable charge” procedures utilized by HPA in the claims payment process for both in and out-of-state claims and to ensure that the allowances are properly applied and reflect the standard allowable amounts established by the HPA for adjudication of claims.
## Analysis of Audit - HPA – BCBSTX

### Vendor Providing Services

Blue Cross and Blue Shield of Texas, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare.

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 4. To identify TRS-ActiveCare claims processing problems or areas in need of further review or audit. | Observations and recommendations made in the audit report. | • TRS-ActiveCare Plan of Benefits  
• BCBSTX internal policies and procedures for claims adjudication  
• BCBSTX internal policies for utilization review | | |
| 5. To verify that the claimant for each sample is a qualified participant and covered under TRS-ActiveCare at the time of service. | Researched the patient’s eligibility on the BCBSTX system for each sampled claim. Reviewed the age of dependent patients relative to plan limitations on student and disabled children. Requested additional supporting documentation if age limits were exceeded. | | | |
| 6. To test the reasonableness of the procedures employed by the HPA to obtain a level of coordination of benefits (COB) | BCBSTX completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire | • COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
• Medicare coordination rules  
• Industry norms for COB | | |

Prepared for
Teacher Retirement System of Texas
## Audit

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>recoveries from both private and government plans that are consistent with industry standards and the characteristics of the Plan.</td>
<td>includes the level of COB savings in terms of dollars and as a percentage of total paid dollars. Also, coordination/subrogation opportunities were reviewed for each sampled claim. BCBSTX was asked to provide documentation showing investigation procedures were followed on opportunities. Calculations were verified when coordination activities occurred in the sampled claims.</td>
<td>recovery as a percentage of paid claims</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Vendor Providing Services

**Blue Cross and Blue Shield of Texas**, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare.
## Audit

**TRS-ActiveCare – Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)**

### Vendor Providing Services

**Blue Cross and Blue Shield of Texas**, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 7. To verify the correctness and appropriateness of the data reported by the HPA as it pertains to performance guarantees specified in the contract with TRS-ActiveCare. | Results from the statistical audit were compared to results reported by BCBSTX in the Administrative Questionnaire. Wide disparities were investigated to determine whether a difference in measurement standards exists and explains the disparity. | Performance guarantees:  
- Claim Turnaround Time: Fiscal year 2013 - 95% - 100% of claims within 14 calendar days. Fiscal Year 2014 – 95% - 100% of claims within 14 calendar days.  
- Claim Processing Accuracy: 98% - 100%.  
- Claim Payment Accuracy: 98% - 100%.  
- Claim Financial Accuracy: 99% - 100%.  
- Inquiry Resolution: 95% - 100%.  
- Abandoned Calls: 0% - 5%.  
- Average Speed to Answer: 0 - 45 seconds.  
- Customer Satisfaction: 85% - 100%. | | |
| 8. To conduct a reasonableness test to verify that the total | The data totals were compared to the year-end financial reporting for each respective year prior to | | | |

---

**Prepared for**  
*Teacher Retirement System of Texas*
**Audit**

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS-ActiveCare— Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)</td>
<td>sample selection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of claims from which the samples were selected by the Contractor are consistent with the total number of claims reported by the HPA to TRS-ActiveCare in the annual report for each plan year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. To verify that the HPA follows its procedures with respect to the identification of potential areas of claims abuse and that these procedures are adequate; i.e., fraudulent claims, duplicate claims, overcharging by providers, unnecessary services, etc.</td>
<td>BCBSTX completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire included specific questions regarding system edits, provider profiling and other fraud and abuse controls. The sampled claims were examined for alterations and to ensure both provider and participant were valid. The sampled claims were reviewed to ensure services were valid, BCBSTX’s medical necessity criteria were satisfied, and the claim was paid only once.</td>
<td>• Industry norms for systems, edits and controls for fraud and abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. To review the administrative processes and procedures used by the HPA to obtain, verify, maintain, and</td>
<td>BCBSTX completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vendor Providing Services**

Blue Cross and Blue Shield of Texas, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare
<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS-ActiveCare– Administration and Medical Claims Adjudication by the Health Plan Administrator (HPA)</td>
<td>Blue Cross and Blue Shield of Texas, a division of Health Care Services Corporation, a Mutual Legal Reserve Company (BCBSTX), is the Health Plan Administrator (HPA) for TRS-ActiveCare</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>share eligibility data originating from Participating Entities.</td>
<td>controls. The Questionnaire included a section on the collection of eligibility information. BCBSTX collects and maintains eligibility information for the TRS-ActiveCare program and disseminates this information electronically to other vendors, including pharmacy and HMOs. Receipt of the eligibility data feeds was verified with the other vendors, including Questionnaires and discussions of issues with the received data, if any.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prepared for
Teacher Retirement System of Texas
BCBSTX Response

March 19, 2015

Darlene Wojnarowski  
Sagebrush Solutions, Inc.  
15820 Addison Road Suite 100  
Addison, Texas  75001  

RE:  TRS/Sagebrush Solutions Audit

Dear Darlene:

Attached is BCBSTX’s response to Sagebrush Solutions’ draft audit report regarding the review of the Teacher Retirement System of Texas (TRS) health care benefits program for the audit period of September 1, 2012 through August 31, 2014. (Excerpts from your report are in black; BCBSTX responses are in blue.) It is our request that this response be included in your final report to TRS.

If you have any questions, please contact me at 972.766.5113.

Sincerely,

April Alston, Senior Manager Customer Audit  
Audit & Performance Services

copy:  
Karen Rosenberg  
Ann Lein  
FSU rep
Blue Cross and Blue Shield of Texas
Response to the Draft Audit Report

Sagebrush Solutions
Dated February 27, 2015

Teacher Retirement System of Texas
Medical Benefits Program
September 2012 – August 2014

March 19, 2015
This response addresses the audit commentary provided by Sagebrush Solutions on Blue Cross Blue Shield of Texas’ (BCBSTX) performance of the administration of the Teacher Retirement System of Texas medical benefits for the period September 2012 through August 2014.

CLAIM AUDIT REVIEW

Payment Errors  (page 8)

Fiscal Year 2013

The review identified three (3) payment errors in the fiscal year 2013 sample resulting in a net overpayment of $1,710.00. BCBSTX agreed to two (2) of the payment errors. BCBSTX agrees to disagree with one (1) stating it is a provider billing error.

- One (1) claim was for multiple dates of service. A $30.00 copayment was taken twice for two of the dates of service resulting in a $60 underpayment. (sample 156)

Claim was allowed to release with additional copays in error. Additional payment made on 03/11/2015.

- One (1) claim was for an inpatient confinement where the patient was transferred from one facility to another. On the initial facility claim the $150 per day copayment was taken for the two days leading up to the transfer. However, on the second facility claim, the remaining $600 ($150 copayment per day) of the $750 copayment per confinement was not taken, resulting in an overpayment of $600.00. (sample 332)

Operator incorrectly allowed the claim to release without applying the additional per day copayments, up to the maximum limit per confinement. A refund request was initiated 02/13/15. BCBSTX will continue to monitor until refund is received.

- The third claim is where BCBSTX agrees to disagree due to a provider billing error. The claim is a facility claim that billed a date span on a “UB92” Universal Billing Form. Revenue Code 361 for operating room was billed for each of these dates of service. However, the system only took the $150 outpatient surgery copayment for the initial date of service. This system “glitch” resulted in an overpayment of $1050.00. (sample 285)

BCBSTX states this is a provider billing error as outpatient claims for surgery should be billed as multiple confinements on separate claims. The line items submitted by the provider clearly show a different date of service for each revenue code 361. The system should be able to identify the different dates of service and apply the copayment accordingly.

When multiple claims are billed on a single claim, there is only one surgical ICD9 code and date billed resulting in a single copayment. Providers are instructed to bill outpatient claims for surgery on different dates of service on separate claims.
The review identified one (1) payment error in the fiscal year 2014 sample. BCBSTX agreed with the error. BCBSTX also agreed to one (1) out-of-sample payment error. The following provides an overview of the principal classifications of payment errors identified in the audited claim samples:

- The review identified one (1) error where a $100 copayment for high tech radiology was not taken. This category represents 100.00% of the total payment errors. (sample 472)
  
  Claim was allowed to process without applying the High Tech Radiology copay. A refund request was initiated on 02/13/15. BCBSTX will continue to monitor until refund is received.

- BCBSTX identified a discrepancy between how the benefit was defined on the benefits matrices and subsequently coded versus how it was defined in the benefits booklet. BCBSTX confirmed the intent with TRS. BCBSTX is in the process of identifying other claims that may have been processed incorrectly and will provide a report to TRS.

- The out-of-sample error was due to a duplicate payment being made. The claim in the sample was the first claim paid therefore the related claim out-of-sample was the overpaid claim. (sample 375)
  
  Duplicate charges processed in error. This is a provider billing error, the lab should not have billed these services. A refund request was initiated on 02/05/15. BCBSTX will continue to monitor until refund is received.

A detailed description of the findings can be found in the Audit Findings Report section at the end of this response.

Payment Accuracy (page 9)

Fiscal Year 2013

Based on the three (3) payment errors identified in the 2013 sample, the weighted payment accuracy rate is 99.97%.

Based on the two (2) payment errors that BCBSTX agreed to, the weighted payment accuracy rate is 99.98%.

Fiscal Year 2014

Based on the one (1) payment error identified in the 2014 sample, the weighted payment accuracy rate is 99.95%.

Since BCBSTX agreed with the one (1) payment error, we agree with the payment accuracy rate of 99.95%.

This accuracy rate exceeds the BCBSTX internal goal of 97.00%, as well as the generally observed industry standard of 95.00% to 97.00%, based on our experience. This accuracy rate also meets or exceeds the minimum performance guarantee of 98.00% as shown in the contract between TRS-ActiveCare and BCBSTX.

Financial Accuracy (page 10)
Fiscal Year 2013

The tested gross financial error in the medical sample for 2013 is $1,710.00. Based on the distribution of the errors within the claim strata, our best estimate of the absolute (gross) financial error is $264,418.20 in the paid claim population of $1,360,308,009.22, resulting in a projected gross financial (dollar) accuracy within the claim population of 99.98%. The performance agreement between TRS-ActiveCare and BCBSTX for financial accuracy is 99.00%. The standard commonly observed in the industry is 99.00%.

BCBSTX’s performance meets or exceeds the performance guarantee.

Based on the two (2) agreed to samples the financial error is $660.00 for a financial accuracy of 99.99%.

Fiscal Year 2014

The tested gross financial error in the medical sample for 2014 is $80.00. Based on the distribution of the errors within the claim strata, our best estimate of the absolute (gross) financial error is $191,099.20 in the paid claim population of $1,298,610,690.01, resulting in a projected gross financial (dollar) accuracy within the claim population of 99.99%. The performance agreement between TRS-ActiveCare and BCBSTX for financial accuracy is 99.00%. The standard commonly observed in the industry is 99.00%.

Based on the one (1) agreed to sample BCBSTX agrees with the financial accuracy of 99.99%.

BCBSTX’s performance meets or exceeds the performance guarantee.

OBSERVATIONS AND RECOMMENDATIONS

Excessive Units Billed (page 13)

During the review Sagebrush observed a claim with excessive units on a single date of service. The claim was for an interpretation of an elbow x-ray that was billed with 729 units. The claim was submitted electronically and auto-adjudicated by the system. The claim was resubmitted by the provider with the exact same service and units but a second service was added. The second service was for the exact same x-ray interpretation, but only one (1) unit billed. The first line denied as a duplicate. The provider of service issued a voluntary refund to BCBSTX for the line with 729 units billed. BCBSTX states the claim was paid correctly as billed.

Recommendation: Sagebrush recommends that BCBSTX implement a system edit that will flag the claim for review if it appears that the number of units being billed is excessive for the service provided.

BCBSTX implemented a new edit rule in May 2013. This rule will deny claims when the units of service submitted for CPT/HCPCS codes by the same provider, same member and the same date of service, exceeds the Medically Unlikely Edits (MUE) established by CMS for that CPT/HCPCS. For example, if a given CPT codes has an MUE of two and the provider billed four, ClaimsXten and the claims system will reduce the allowed units to two. The other units are denied as over the maximum units.

The audit claim was processed in the month prior to implementation of the new edit. Under the new rule, two units would have been allowed for this claim.
It appears that the provider recognized this error and voluntarily refunded the claim payment and provided a corrected billing. As an additional precaution, we have asked the Special Investigation Division to review this provider to determine if there are any patterns of billing excessive units.

**RECOMMENDATIONS**

**Overpayments:** Appropriate steps should be initiated to recover or reach a settlement with respect to agreed upon overpayments identified during the course of this audit.

All reports and refund requests have been initiated.

**Benefit Application:** Incorrect copayments were applied to four (4) of the errors identified in the audit sample. The claim system should be able to identify individual dates of service and apply a copayment for each date of service as required. As for specific copayments being waived if an emergency, this applies to those services being done in the emergency room as part of an emergency visit. The diagnosis alone should not determine whether a service is emergent or non-emergent in nature. The place of service should determine whether it is an emergency visit. A copayment should always be applied to outpatient surgery and high tech radiology, unless they are being billed in an emergency room setting.

BCBSTX should assess the quality, training and controls for this process. BCBSTX should standardize this process to the extent possible in order to improve overall performance. The Blue Chip system should have standard edits to prevent payment errors where applicable, including the ability to review claims history for potential duplicate and related claims. BCBSTX supervisors should closely monitor this in quality assessments.

BCBSTX will assess the quality, training and controls for this process and BCBSTX supervisors will closely monitor this in quality assessments.

**TRS Audit Findings Report**

**2012 – 2013**

<table>
<thead>
<tr>
<th>Sample Item #</th>
<th>Total Charge</th>
<th>Dollar Error-Over</th>
<th>IA Dollar Error-Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>156</td>
<td>$4,650.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Internal Item # 59092</td>
<td>$2,877.80</td>
<td>$60.00</td>
<td>$60.00</td>
</tr>
</tbody>
</table>

**Outside Auditor** Copay applied twice for same date of service.

**BCBS Response** Agree: Claim was allowed to release with additional copays in error. Additional payment made 03/11/2015.

<table>
<thead>
<tr>
<th>Sample Item #</th>
<th>Total Charge</th>
<th>Dollar Error-Over</th>
<th>IA Dollar Error-Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>285</td>
<td>$73,098.00</td>
<td>$1,050.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Internal Item # 59221</td>
<td>$145,179.78</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

**Outside Auditor** Surgical copay not applied for multiple dates of service within 1 claim.

**BCBS Response** Disagree: This is a provider billing error. Outpatient claims for surgery should be billed as multiple confinements on separate claims. When billed as one claim, there is only one surgical ICD9 code and date billed, so it pulls as one surgery applying one copay.
3  Sample Item # 332  Total Charge $362,949.44  Dollar Error-Over $600.00  IA Dollar Error-Over $600.00
Internal Item # 59268  Total Paid $2,877.80  Dollar Error-Under $60.00  IA Dollar Error- $60.00
Outside Auditor  Copay not applied.
**BCBS Response**  Agree: Operator incorrectly allowed the claim to releases without applying the per admit copay. Refund initiated 02/13/15.

### 2013 – 2014

4  Sample Item # 472  Total Charge $3,272.00  Dollar Error-Over $80.00  IA Dollar Error-Over $80.00
Internal Item # 59408  Total Paid $1,331.12  Dollar Error-Under $0.00  IA Dollar Error- $0.00
Outside Auditor  High Tech Radiology Copay not applied.
**BCBS Response**  Agree: Claim was allowed to process without applying the High Tech Radiology Copay. Refund initiated 02/13/15.

### Out of Sample

5  Sample Item # 701  Total Charge $174.25  Dollar Error-Over $18.32  IA Dollar Error-Over $18.32
Internal Item # 59637  Total Paid $18.32  Dollar Error-Under $0.00  IA Dollar Error- $0.00
Outside Auditor  Duplicate charges processed in error.
**BCBS Response**  Agree: associated with sample 375: Duplicate charges processed in error. This is a provider billing error, the lab should not have billed these services. Refund initiated 02/05/15.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td>2</td>
</tr>
<tr>
<td>VERIFICATION OF CLAIMS PAYMENTS</td>
<td>2</td>
</tr>
<tr>
<td>SAMPLE SELECTION</td>
<td>3</td>
</tr>
<tr>
<td>SAMPLE TESTS</td>
<td>3</td>
</tr>
<tr>
<td>CLAIM PROCESSING AND PAYMENT ACCURACY</td>
<td>5</td>
</tr>
<tr>
<td>HIGH DOLLAR CLAIMS</td>
<td>7</td>
</tr>
<tr>
<td>CLAIM PROCESSING TIMELINESS</td>
<td>7</td>
</tr>
<tr>
<td>OPERATIONAL REVIEW</td>
<td>9</td>
</tr>
<tr>
<td>IMPACT OF ESI-MEDCO MERGER</td>
<td>9</td>
</tr>
<tr>
<td>TRS DATA - ELIGIBILITY</td>
<td>10</td>
</tr>
<tr>
<td>STAFFING</td>
<td>10</td>
</tr>
<tr>
<td>MAIL ROOM</td>
<td>10</td>
</tr>
<tr>
<td>CLAIM PAYMENT AND PROCESSING</td>
<td>11</td>
</tr>
<tr>
<td>DRUG PRICING</td>
<td>11</td>
</tr>
<tr>
<td>CUSTOMER SERVICE</td>
<td>11</td>
</tr>
<tr>
<td>APPEALS</td>
<td>13</td>
</tr>
<tr>
<td>TRAINING</td>
<td>13</td>
</tr>
<tr>
<td>INTERNAL AUDIT PROGRAM AND FRAUD DETECTION</td>
<td>15</td>
</tr>
<tr>
<td>DISASTER AND RECOVERY</td>
<td>18</td>
</tr>
<tr>
<td>HIPAA</td>
<td>20</td>
</tr>
<tr>
<td>OVERALL CONCLUSION</td>
<td>21</td>
</tr>
</tbody>
</table>
BACKGROUNDF

Express Scripts, Inc. (ESI) was the pharmacy benefits manager for the Teacher Retirement System of Texas, TRS-ActiveCare PPO plan. During the 2013 fiscal year, there was an average monthly enrollment of 445,920 participants in the plan. During the 2014 fiscal year, there was an average monthly enrollment of 420,524 participants in the plan.

Sagebrush Solutions tested a random sample of 700 pharmacy claims. The sample was selected from the population of TRS-ActiveCare pharmacy claims invoiced to TRS between September 1, 2012 and August 31, 2014. Testing of the claims was completed in our offices using screen prints of the pertinent processing information. The claim samples were tested for timeliness, eligibility, financial accuracy, payment and procedural accuracy and adherence to plan benefits and administration procedures.

ESI provided the pharmacy claim documentation and addressed questions about specific claim payments. During the audit, ESI was given the opportunity to research each questionable claim and provide documentation substantiating the accuracy of each claim.

In addition to testing claims, Sagebrush conducted an onsite review of ESI’s mail order processing and customer service center in Fort Worth, Texas on January 14, 2015.

ESI also completed a detailed Claim Administration Questionnaire, addressing issues such as prescription claim adjudication procedures, system capabilities, claim pricing, training, drug utilization review, internal fraud control procedures, and use of data. The questionnaire was utilized as a framework for the audit by establishing ESI procedures and protocols for processing and customer service.

VERIFICATION OF CLAIMS PAYMENTS

The TRS Health and Insurance Benefits Finance division compiled a report containing the total amounts paid to ESI Scripts, Inc. for fiscal years 2013 and 2014. Prior to sample selection, Sagebrush compared these totals to totals for the claims data file provided by Gabriel Roeder Smith & Company (GRS). Details of this reconciliation are described below.

Fiscal Year 2013

The TRS provided total invoiced amount for fiscal year 2013 is $300,664,901.85. Sagebrush compared the TRS total with the total from the GRS data file as follows:

The GRS claims data file contains all transactions processed in fiscal year 2013 and the TRS totals reflect amounts invoiced to TRS-ActiveCare on a biweekly basis; we anticipated the difference to be plus or minus approximately two weeks’ expense, calculated as $290,701,742.57/26 weeks = $11,180,836.25.
The difference between the TRS year-end total and the GRS claims data file = $300,664,901.85 minus $290,701,742.57 = $9,963,159.28.

Our comparisons above are within the expected tolerance level.

**Fiscal Year 2014**

The TRS provided total invoiced amount for fiscal year 2014 is $333,053,915.82. Sagebrush compared the TRS total from the GRS data file as follows:

The GRS claims data file contains all transactions processed in fiscal year 2014 and the TRS totals reflect amounts invoiced to TRS-ActiveCare on a biweekly basis; we anticipated the difference to be plus or minus approximately two weeks’ expense, calculated as $340,347,980.09/26 weeks = $13,090,306.93.

The difference between the TRS year-end total and the GRS claims data file = $333,053,915.82 minus $340,347,980.09 = $7,294,064.27.

Our comparisons above are within the expected tolerance level.

We conclude that the information reported and billed on the documents provided is reasonable in comparison to the claims paid amounts.

**SAMPLE SELECTION**

GRS provided Sagebrush with an electronic data file of TRS-ActiveCare claims transactions.

A random sample of 350 TRS-ActiveCare pharmacy claims totaling $1,009,631.15 in paid dollars was selected and tested from the population of TRS-ActiveCare pharmacy claims processed by ESI during fiscal year 2013.

A random sample of 350 TRS-ActiveCare pharmacy claims totaling $1,703,097.13 in paid dollars was selected and tested from the population of TRS-ActiveCare pharmacy claims processed by ESI during fiscal year 2014.

Based on the documentation received from ESI, we were able to verify that the payments were calculated correctly and copayments were applied accordingly for all claims sampled.

**SAMPLE TESTS**

Each TRS-ActiveCare pharmacy claim in the selected sample was tested for payment and dispensing accuracy and adherence to plan benefits and administration procedures. We reviewed claim payment and member eligibility screen prints for 206 mail order and 494 retail claims in the 700 claims sample. Copies of the original prescription and label were provided for the mail
order claims in the sample. There were no member submitted (direct) claims selected in the sample population.

TRS-ActiveCare will pay ESI for Covered Drugs dispensed by ESI under the Mail Order Pharmacy Program in an amount equal to an Ingredient Cost plus Dispensing Fee for each Covered Drug dispensed, less the applicable Copayment/Coinsurance amount, as such terms are defined below:

- **Ingredient Cost** - The Ingredient Cost is the lower of AWP minus (-) 26% or MAC.
- **Dispensing Fee** - The Dispensing Fee per prescription or authorized refill is $0.00. Dispensing Fees are inclusive of postage.
- **Copayment/Coinsurance** - The Copayment/Coinsurance amount for each prescription or refill dispensed by ESI under the Mail Order Pharmacy Program shall be as designated for each Group in the applicable Plan Design(s). If the amount of the applicable Copayment/Coinsurance paid by an Eligible Person for a prescription or refill dispensed by ESI exceeds the Ingredient Cost (as defined above) plus Dispensing Fee (as defined above) plus any applicable taxes, then ESI shall return to the Eligible Person an amount equal to the Copayment/Coinsurance amount, less the sum of the applicable Ingredient Cost plus Dispensing Fee plus any applicable taxes, for the prescription or refill. Eligible Persons must pay the applicable Copayment or Coinsurance amount to ESI for each prescription or authorized refill under the Mail Order Pharmacy Program. Medco may suspend Mail Order Pharmacy Program services to an Eligible Person who is in default of any Copayment or Coinsurance amount due ESI.

TRS-ActiveCare will pay ESI for Covered Drugs having a days supply of up to a thirty-one (31) days supply and are dispensed and submitted by Participating Pharmacies under the Retail Pharmacy Program in an amount equal to the lowest of (i) the pharmacy's usual and customary price, as submitted ("U&C") plus applicable taxes, (ii) the pharmacy's submitted cost, (iii) the maximum allowable cost ("MAC"), where applicable, plus the Dispensing Fee contracted with the pharmacy plus applicable taxes, or (iv) AWP less the AWP discount plus Dispensing Fee contracted with the pharmacy plus applicable taxes. Payment by TRS-ActiveCare is subject to the applicable Copayment/Coinsurance amount.

Our testing included a review of the “Blue Book” pricing screen prints from ESI’s online system with Medi-Span®. The pricing is updated on a daily basis and the screen prints showed the pricing in effect at the time the claim was adjudicated. For retail generic claims, we reviewed the MAC pricing screens, which contained the applicable MAC prices at the time the generic claims were processed. Additionally, we reviewed the submitted charge and the usual and customary allowance for each claim.

The following elements were tested for each claim:

- Was a paper prescription provided for all mail order claims? Did the information on the paper match the information in the system?
- Was the claimant eligible for benefits on the date(s) of service?
Did the correct claimant or assignee receive payment?
Were benefits applied in accordance with plan requirements?
Were the claims accurately priced using the appropriate and most current AWP, MAC, U&C, or submitted charge allowances?
Were the mathematical computations, discounts, application of co-payments, and professional fees accurate?
Did the claim processing response time meet contractual provisions?

Accuracy Audit

Participant Copayment Verification

We reviewed the claims in the random sample to verify that the participant’s mail order copayment was the amount shown on the claim record and was correctly applied to the participant’s account. ESI supplied an account activity screen for all recent claim activity.

New invoices are created when prescriptions or refill orders are received. The orders are processed and the participant’s copayment is applied to a member account. Copayments are paid by check, money order, or credit card. If the participant has given ESI permission, security-masked credit card information is stored in the member account screen, to reduce repeating unnecessary and redundant processing for future orders.

We found that the copayment applied to the claim was consistent with the copayment that the participant paid. We also found that the participant accounts appeared to be correctly invoiced and credited for each transaction. The amounts processed in the participant accounts were consistent with the claims processing and plan payment information.

CLAIM PROCESSING AND PAYMENT ACCURACY

Claim Adjudication Accuracy

Each identified potential error or question was submitted in writing by email to ESI for review and written response. Email was also utilized to clarify certain responses. All claims were tested for accuracy in three areas:

<table>
<thead>
<tr>
<th>Audit Category II: Express Scripts, Inc</th>
<th>Final Report</th>
</tr>
</thead>
</table>

- Financial Accuracy = \( \frac{\text{Dollars Paid Correctly in the Sample}}{\text{Total Paid Dollars in the Sample}} \)
- Payment Accuracy = \( \frac{\text{Total # of Claims Paid Correctly in the Sample}}{\text{Total # of Claims in the Sample}} \)
- Procedural Accuracy = \( \frac{\text{Total # of Claims without a Procedural Error in the Sample}}{\text{Total # of Claims in the Sample}} \)
Financial accuracy reflects the financial implication of payment errors identified in the audit. Payment accuracy reflects the percentage of claims that result in the correct payment of benefits. Procedural accuracy reflects the percentage of claims that are processed correctly.

Payment accuracy allows inferences to be made regarding the accuracy with which claims are paid. Procedural accuracy, on the other hand, allows inferences to be made as to the integrity of data input into the claim system, which is used for management reports. Procedural errors could eventually lead to payment errors.

Only one error per claim was assessed, and financial errors took precedence over procedural errors.

**Audit Results Fiscal Year 2013**

**Financial Accuracy:** The tested financial accuracy rate of the sample is 100.00%. This accuracy exceeds the ESI internal goal of 98.50% and the generally observed industry standard of 99.00%.

**Payment Accuracy:** The payment accuracy rate for the audit sample is 100.00%. This accuracy exceeds the ESI internal goal of 98.50% and the generally observed industry standard of 95.00% to 97.00%.

**Procedural Accuracy:** The procedural accuracy rate for the audit sample is 100.00%. This accuracy rate exceeds the generally accepted industry standard of 95.00%. ESI does not currently measure procedural accuracy internally.

The table below outlines the results of the audit sample.

**Audit Results Fiscal Year 2014**

**Financial Accuracy:** The tested financial accuracy rate of the sample is 100.00%. This accuracy exceeds the ESI internal goal of 98.50% and the generally observed industry standard of 99.00%.

**Payment Accuracy:** The payment accuracy rate for the audit sample is 100.00%. This accuracy exceeds the ESI internal goal of 98.50% and the generally observed industry standard of 95.00% to 97.00%.

**Procedural Accuracy:** The procedural accuracy rate for the audit sample is 100.00%. This accuracy rate exceeds the generally accepted industry standard of 95.00%. ESI does not currently measure procedural accuracy internally.

The table below outlines the results of the audit sample.
The audit findings indicate that ESI’s administration of TRS-ActiveCare pharmacy claims exceeds financial, payment and procedural accuracy goals for contractual, internal, and generally accepted industry standards.

**HIGH DOLLAR CLAIMS**

Sagebrush sampled 10 of the highest dollar claims from fiscal year 2013 and from fiscal year 2014. The high cost drug claims reviewed appeared to be legitimate claims from all documents provided. High cost drugs consisted of Acthar H.P., Advate, Cinzyre and Benefix, Copaxone, Gilenya, Incivek, Glecvec, Raviecti, Sovaldi and Stelara. All drugs are on the preferred formulary and only Stelara required precertification, which was on file.

**CLAIM PROCESSING TIMELINESS**

Sagebrush calculated the claim turnaround time using the received date and the fill date in the claims data provided by GRS. Our results are as follows:

**Fiscal Year 2013 Turn Around Time**

<table>
<thead>
<tr>
<th>Calendar Days</th>
<th>Number of Claims</th>
<th>Percentage of Pop.</th>
<th>Cumulative Calendar Days</th>
<th>Cumulative Number of Claims</th>
<th>Cumulative Percentage of Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3 days</td>
<td>4,655,309</td>
<td>98.78%</td>
<td>3 days</td>
<td>4,655,309</td>
<td>98.78%</td>
</tr>
<tr>
<td>4 - 5 days</td>
<td>18,418</td>
<td>.39%</td>
<td>5 days</td>
<td>4,673,727</td>
<td>99.17%</td>
</tr>
<tr>
<td>6 - 10 days</td>
<td>11,531</td>
<td>.24%</td>
<td>10 days</td>
<td>4,685,258</td>
<td>99.41%</td>
</tr>
<tr>
<td>Over 10 days</td>
<td>27,713</td>
<td>.59%</td>
<td>Over 10 days</td>
<td>4,712,971</td>
<td>100%</td>
</tr>
</tbody>
</table>

On average, claims were processed in 1 day in fiscal year 2013.
Fiscal Year 2014 Turn Around Time

<table>
<thead>
<tr>
<th>Calendar Days</th>
<th>Number of Claims</th>
<th>Percentage of Pop.</th>
<th>Cumulative Calendar Days</th>
<th>Cumulative Number of Claims</th>
<th>Cumulative Percentage of Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3 days</td>
<td>4,684,791</td>
<td>96.79%</td>
<td>3 days</td>
<td>4,684,791</td>
<td>96.79%</td>
</tr>
<tr>
<td>4 - 5 days</td>
<td>16,812</td>
<td>.35%</td>
<td>5 days</td>
<td>4,701,603</td>
<td>97.14%</td>
</tr>
<tr>
<td>6 - 10 days</td>
<td>10,325</td>
<td>.21%</td>
<td>10 days</td>
<td>4,711,928</td>
<td>97.35%</td>
</tr>
<tr>
<td>Over 10 days</td>
<td>128,178</td>
<td>2.65%</td>
<td>Over 10 days</td>
<td>4,840,106</td>
<td>100%</td>
</tr>
</tbody>
</table>

On average, claims were processed in 1 day in fiscal year 2014.

Contractually ESI guarantees that “non-protocol” prescriptions (prescriptions that do not edit out for any reason) will be processed within an average 3 business days and 5 business days for all protocol (claims that require manual intervention) claims. As per the completed Administrative Questionnaire, ESI’s internal goal is to process protocol and non protocol claims within 2 business days of receipt and all other paper claims within 10 business days of receipt.

**CONCLUSION**

We conclude that the ESI is meeting its contractual turnaround time goal for claims processing of “non-protocol” prescriptions (prescriptions that do not edit out for any reason) within an average 3 business days and 5 business days for all protocol claims (claims that require manual intervention).
OPERATIONAL REVIEW

Sagebrush conducted an onsite review of the ESI Riverside Pharmacy in Fort Worth on January 15, 2014. Additionally, ESI provided an online demonstration of the customer service software to Sagebrush on February 20, 2015 and an online demonstration of the customer service audit software on February 27, 2015. The demonstration of the customer service audit software, Verint, included listening to recorded calls with TRS participants.

IMPACT OF ESI-MEDCO MERGER

Activities resulting from the ESI-Medco merger, including consolidation of systems and operations, was completed in 2014. All ESI claims processing activities were migrated to the former Medco software platform, TelePAID™; this system migration did not affect the TRS-ActiveCare account since this account was previously processed on the Medco system.

ESI also consolidated operational facilities during the merger. During the previous audit period, the TRS-ActiveCare account was largely serviced by the Fort Worth Pharmacy and customer service functions handled by the Irving Call Center. Since the last audit, ESI has closed both of these facilities effective June 2014. During the current audit period, TRS mail orders were routed to thirteen ESI pharmacies based on availability. The pharmacies are located in the following cities:

- Albuquerque, New Mexico
- Bensalem, Pennsylvania
- Fairfield, Ohio
- Fort Worth, Texas
- Grove City, Ohio
- Harrisburg, Pennsylvania
- Mason, Ohio
- Memphis, Tennessee
- St Louis, Missouri
- Tampa, Florida
- Tempe, Arizona
- Troy, New York
- Versailles, Pennsylvania

The largest percentages of TRS-ActiveCare mail orders, approximately one-third of the total TRS-ActiveCare mail orders, were processed in ESI’s Riverside Pharmacy located in Fort Worth, prior to being closed. Sagebrush conducted an onsite review of this facility as a component of the audit program.

Since the merger, ESI has transitioned its customer service model from regional centers to a work-at-home model, where the majority of customer service representative work from a dedicated location in their homes. Supervisory customer service personnel for the TRS-
ActiveCare account are now based out of ESI’s Tampa office. Since there is no longer a Texas-based service center for the TRS account and the representatives largely work at home, Sagebrush conducted its “onsite” review of the customer service functions for this study period virtually through Internet demonstrations of systems and telephonic interviews of key ESI personnel.

**TRS DATA - ELIGIBILITY**

BlueCross BlueShield of Texas (BCBSTX), the administrator of the self-funded TRS-ActiveCare medical plan, is responsible for preparing and transmitting TRS eligibility files to ESI. This data exchange process was well established prior to this audit period. In September 2010, BCBSTX enhanced the eligibility data files exchanged with ESI. Before September 2010, BCBSTX simply sent a file listing changes to eligibility. The new data feeds are complete eligibility files, reducing the need for programming to implement the record changes and therefore reducing the probability for programming errors that could occur in the data transfer process. Historical eligibility information is maintained in the system. The live system will show the last 3 eligibility changes made to a member’s record. Anything prior to the last 3 updates is archived. All archived claims can be retrieved but an SSR needs to be scheduled. The retrieval time varies based on the number of claims.

Claims are paid in accordance with current and historical eligibility; i.e., the eligibility status of the member as of the date of service is used to determine payment of a claim. TRS is responsible for any claims paid under active eligibility, where the member may later be retroactively terminated.

**STAFFING**

There were 980 employees in the Texas call center and home delivery pharmacy where TRS-ActiveCare prescriptions were entered and reviewed prior to being closed. ESI did not specify how many of these employees were dedicated to the TRS-ActiveCare account.

During the audit period, Cognizant scanned direct claims (paper claim submissions from participants) and data entered the information into ESI’s systems for adjudication. The scanned image was then transferred to ESI. In March 2015, ESI engaged Xerox and began to migrate this function from Cognizant to Xerox. The transition should be complete in July 2015.

ESI uses Iron Mountain as an outside vendor to store paper claims after processing. Iron Mountain also provides data storage (back up tapes). In addition to storage, Iron Mountain is also Express Scripts’ vendor for on-site shredding of documents placed into shred bins (primarily non-record hard copy documents).

**MAIL ROOM**
Since ESI’s acquisition of Medco, the company has and continues to work to consolidate certain functions and procedures to increase efficiencies. The mail room function (inbound) is consolidated to three of ESI’s offices: Fairfield, Ohio; St. Louis, Missouri; and Tempe, Arizona. TRS participants continue to send correspondence to a Dallas P.O. Box; however, the United States Postal Service (USPS) automatically re-directs the mail received in the Dallas P.O. Box to the Fairfield P.O. Box. The re-routing of participant mail increases the handling time by the USPS. This additional handling time is not reflected in any turnaround time statistics because the turnaround time begins when the mail is received in the Fairfield mail room.

Outbound mail, specifically prescription drugs, is sent to participants from various ESI locations. After the TRS mail order claims are processed in various ESI offices based on availability, ESI’s Columbus, Ohio office is responsible for routing the prescriptions for fulfillment to various ESI pharmacies, maximizing efficiencies. Routing factors include matching to the pharmacy closest to participant combined with considering the pharmacy’s inventory of the prescribed drug.

CLAIM PAYMENT AND PROCESSING

ESI acquired Medco and continues to service the TRS account using the TelePAID℠ claims processing system that was previously used by Medco. Over 99% of the mail order and retail claims are automatically adjudicated with minimal manual processing.

An evolution in the pharmacy industry is the increasing use of technology by providers. Specifically, 60% of mail order claims are now received by ESI electronically from a clearinghouse, SureScript. In the past, physicians wrote manual prescriptions and the paper claim and script was submitted by the patient to ESI. Using SureScript, the provider can either enter the prescription claim information into a handheld device or computer or can submit a paper claim to SureScript for conversion to an electronic format using optical character recognition (OCR). The result of the SureScript process is an electronic feed of prescription claims to ESI, reducing processing time and increasing accuracy and participant satisfaction.

DRUG PRICING

Effective September 2010, ESI began using the Medi-Span data base for average wholesale pricing (AWP). First Data, ESI’s former data supplier, no longer publishes AWP. Medi-Span is now the predominant supplier of AWP data in the pharmacy industry.

CUSTOMER SERVICE

Inbound customer service calls are handled by ESI customer service representatives (CSRs). ESI uses the “Route-It” system to track customer service inquiries. CSRs do not have access to the claims processing system, but they have access to the participant’s claims histories, plan design, eligibility information, and retail pharmacy information. The calls, the inquiry type, and the resolution are tracked in the Customer Service Processing System. Approximately half of the
calls received are for prescription refills. Calls are also received for information requests, claims status, and related inquiries.

Since the previous audit period, ESI has implemented automated outreach calls to participants. The automated outreach calls are initiated by the front-end mail order entry staff when an issue first arises. Issues are most often related to payment, such as an expired credit card. Automated outreach calls are the first method of contact with the participant to resolve issues, and outreach calls are only made on claims that are less than seven days old. Subsequent outbound contacts and contacts on claims seven days or older are made by CSRs.

ESI received 200,155 calls from TRS-ActiveCare participants during fiscal year 2013 and 135,276 calls during fiscal year 2014. For comparison to the prior audit period, ESI received 207,324 calls from TRS-ActiveCare participants during fiscal year 2012. The call volume declined year over year. The decrease in volume is likely due to an increase in automation and access to ESI via the Internet.

The TRS-ActiveCare contract performance guarantee abandonment rate standard is 5% or less of all incoming calls each fiscal year. Abandonment rate means the percent of calls in which the caller selected the option to speak with an agent but hung up while waiting for an agent to answer. ESI reported an abandonment rate of 1.05% for fiscal year 2013, and an abandonment rate of 1.45% for fiscal year 2014, which met the contract performance requirement. For comparison, the abandonment rate in fiscal year 2012 was 3.05%. ESI attributes the reduction in the abandonment rate to moving the TRS-ActiveCare account from a dedicated service center to the calls being sent to the first available CSR.

The TRS-ActiveCare contract performance guarantee Average Speed of Answer (ASA) standard is 30 seconds or less for all incoming calls each fiscal year. ASA means the time from when the caller selects the option to speak with an agent until an agent answers the call. ESI reported an ASA of 37.4 seconds for fiscal year 2013, and 22.0 seconds for fiscal year 2014. The fiscal year 2013 performance did not meet the performance guarantees, and ESI paid the contract-required penalty to TRS. The 2014 performance for ASA met the contract performance requirements.

ESI does not track some of the common customer service standards for the TRS-ActiveCare account, including the average hold time before or after the call has been received, blocked calls, and the number of outbound pharmacist calls.

During the virtual review of the customer service center, the auditors listened to a number of recorded calls from TRS participants and listened to an ESI quality auditor review the call. One of the recorded calls was from a participant who recently had surgery and needed an expensive prescription related to the surgery that required a pre-authorization. The CSR explained that a pre-authorization was needed and stated that the participant could pay 100% of the drug cost in order to receive the drug immediately rather than waiting to obtain a pre-authorization. The Sagebrush auditors made the following requests to ESI as a follow up to review of the call:
Audit Category II: Express Scripts, Inc

Final Report

Prepared for
Teacher Retirement System of Texas

- Can you confirm whether the last caller actually received her drug or a generic equivalent, if available? If so, how many days passed from the call until the drug was dispensed?
- Can you please provide a copy of ESI’s policy and procedure for when the caller has an immediate medical need for the drug, e.g., last caller’s surgery, and is having difficulty obtaining the drug, e.g., last caller’s need for pre authorization? Specifically, does the procedure provide an opportunity for ESI to make an outbound call to the prescriber in order to process the pre-authorization and expedite the dispensing of the drug under the plan?

Sagebrush made repeated attempts to obtain the answers from ESI to the above questions regarding the recorded call but ESI never provided the requested information.

**Recommendation:** ESI has a duty to TRS and the TRS-ActiveCare participants to respond to auditor requests. More importantly, ESI did not provide its policies and procedures so it is not known by the auditor whether ESI has procedures in place to assist participants in obtaining the documentation required to fill medically necessary prescriptions in a timely manner when there are extraordinary circumstances. ESI should review its procedures to ensure the procedures contain adequate steps to assist participants in obtaining urgent and medically necessary medications under extraordinary circumstances. Such procedures promote the health of the participant and avoid the liability if a participant is unable to pay 100% of the cost of a medically necessary drug to which the participant is ultimately entitled under the plan. ESI should provide a copy of such policies and procedures to its client and/or its auditor.

**APPEALS**

The ESI call center collects complaints on the “C1” report. Unresolved complaints or “grievances” are escalated to TRS-ActiveCare. ESI reports that the number one complaint from all participants is order status. ESI received 296 total complaints from participants in fiscal years 2013 and 2014. The reported number of complaints in this audit period is significantly fewer than the previous audit period: ESI received 702 complaints from participants in fiscal year 2012. Moreover, the auditor has observed a decreasing trend in the total number of complaints since fiscal year 2009. Decreases in customer complaints is likely a result of increased automation, such as automated outreach calls and electronic prescriptions, and greater access to information through the Internet.

The number one complaint, other than miscellaneous, continues to be order timeliness in each fiscal year, although turnaround time statistics show that ESI handles orders in a timely manner. A participant’s perception of order timeliness may be skewed by time in the mail, both to mail in an order and to receive the medication.

**TRAINING**
The ESI training program is primarily hands-on training for new processors and is both classroom and on-the-job based. Ongoing training is also provided for experienced examiners, supervisors, and team leaders. New pharmacists receive one-on-one training from a lead pharmacist who is responsible for ensuring that the appropriate skills are taught.

**Claims and Exception Processors:** Most claims processors are promoted from within the organization and must have previous claims processing experience. Processors receive hands-on training in both a classroom setting and on the job. Processors must maintain claims processing standards that are monitored and measured daily, and are required to spend several weeks of training on ESI’s various quality checks.

Claims processors are trained by a supervisor on claim processing procedures for new claims, rejects, exceptions, compounds, and pharmacy and national drug code verification. Exception processors are trained by a supervisor on exception claim processing procedures, which include COB, claims filled in a foreign country, and adjustments.

**Ongoing Training:** The various departments of the Claims Processing Division are organized into teams consisting of a team leader matched with six to eight employees. This organizational structure allows for communication from the supervisor to the processor as well as from the processor to the supervisor. Ongoing training is initiated through the results of a monthly quality audit. The audit highlights issues that need to be addressed, which are then discussed with the teams on a biweekly basis.

When a system change is installed, a representative of the systems and process control department provides the supervisors and team leaders with an overview of the system change.

Other supervisors and managers in their respective departments within the Claims Processing Division train supervisors and managers. They also receive training in each of the other departments for a period of one week per department.

**Mail Service Pharmacists:** ESI provides training to ensure that pharmacists develop and maintain comprehensive knowledge and understanding of their required job functions. The training is monitored on an ongoing basis to ensure completion to deliverables, including continuing progress and accuracy.

**New Pharmacist Training:** New pharmacist training for staff pharmacists takes approximately three months and includes an orientation and comprehensive instruction in coding, doctor calls, and dispensing. Training includes a review of all standard operating procedures related to these functional areas. The training involves a one-on-one relationship with lead pharmacists whose function it is to ensure that the new employee is thoroughly competent with ESI’s operation. The lead pharmacist reviews all work done by the new employee until proficiency is achieved.

**Conclusion**

We conclude that the ESI training program appears appropriate and adequate.
INTERNAL AUDIT PROGRAM AND FRAUD DETECTION

ESI maintains a broad Pharmacy Audit program on behalf of their plan sponsors that is results efficient improvements to pharmacy performance and compliance. The audit program provides the following benefits to plan sponsors:

- **Financial Savings** from Audit Recoveries
- **Modifications in Pharmacy Behavior** resulting in Sentry Effects potentially many times actual recoveries, and increased quality and service levels in their retail pharmacy network
- **A Broad Audit Presence** at both local and national levels to ensure compliance with program guidelines and to detect and deter fraud
- **Field Audit Investigators** provide additional provider relations representatives in the pharmacies to provide direction and guidance to pharmacists and detect and deter fraud

The Pharmacy Audit Program has several key objectives:

- **Help to protect the financial integrity** of the provider network by identifying those claims that may have resulted in overpayments to the pharmacies and recovering overcharges where appropriate
- **Deter fraudulent claim submissions** among participating pharmacies through the prospect of an audit
- **Educate participating pharmacies** to ensure compliance with program guidelines, through guidance in correct procedures in the administration of their prescription drug program
- **Sanction pharmacies** that display flagrant or repetitive disregard for program guidelines

**Audit Program Overview**

ESI’s Pharmacy Audit program utilizes claims analysis to identify aberrant dispensing trends, conduct field and desk audits, and generate financial savings for their plan sponsors. By utilizing claims analysis, ESI continually improves their ability to effectively target resources, conduct more audits, and analyze more claims.

**Audit Selection**

ESI’s claims analysis programs evaluate all pharmacies participating in ESI’s retail networks. On a quarterly basis, all claims processed during the previous three months are analyzed as part of ESI’s Audit programs. This constant evaluation process provides the latest available profile
for each of ESI’s provider pharmacies, allowing for timely and accurate analysis of dispensing patterns.

Pharmacies participating in ESI’s prescription drug programs are selected for audit based on several criteria, including:

- **Deviant Pharmacies Identified by ESI’s Fraud Claims Analysis**
  - A number of audit criteria are utilized by ESI to identify aberrant dispensing trends including, but not limited to, the following:
    - Claim Cost
    - Utilization of overrides
    - Generic dispensing
    - Product mix

- **Networking** – ESI takes advantages of opportunities to work with law enforcement and regulatory agencies regarding potential inappropriate activities by participating pharmacies.

- **Information from Plan Sponsors and Members** can also lead to quality audits.

The majority of ESI audits are identified by their advanced claims analysis, which utilizes sophisticated criteria that audit candidates with the greatest potential for recoveries.

**Audit Types**

ESI performs both Desk and Field Audits of retail pharmacies. Desk Audits, including a daily-targeted review of POS claims for accuracy, complement on-site field audits, in which claims are evaluated against the pharmacy’s prescription records. Combined, Desk and Field Audits provide plan sponsors with a consistent, timely and accurate approach to managing their pharmacy benefit plan by allowing for both proactive concurrent and retrospective claim review.

**Types of Audits**

- **Desk Audits**

  Many discrepancy types can be uncovered without conducting an in-store claims review. For example, a desk audit can uncover claims contested by patients or physicians through the confirmation letter process. In addition, on a daily basis, the Pharmacy Audit Department reviews the previous day’s POS claims for accuracy. Claims data is downloaded to a proprietary database system, and run through a series of internally designed filters. The filters are designed to eliminate claims patterns previously reviewed and found to be accurate, and create a subset of claims for additional targeted review.

  Targets for additional review include prescription medications that are frequently submitted by participating pharmacies with inaccurate information
(e.g., metric quantity). Targets are updated regularly based on both auditing experience and the introduction of new medications into the marketplace. By keeping the targeting process dynamic rather than static, ESI is able to quickly address new error patterns and proactively resolve any issues identified.

When an erroneous prescription is identified, the Retail Pharmacy Audit Department works, as necessary, with the pharmacy to reverse the initial incorrect claim and to resubmit the claim with the correct information.

**Field Audits**

ESI’s Field Auditors, who review participating pharmacies’ prescription records, perform on-site audits. The field auditor compares claims reimbursed to the pharmacy against the pharmacy’s paper prescriptions and associated prescription records and notes any discrepancies.

During the on-site audit the Field Auditor will:

- Check the pharmacy’s license.
- Utilize both pharmacy knowledge and audit experience to identify potential unusual patterns of claim submissions and claims of interest. For example, unusual combination of medications dispensed to the same patient, a high rate of telephone prescriptions in relation to original prescriptions, low generic substitution rates, etc.
- Verify that a paper prescription exists for all prescription claims reviewed and that the drug names, strengths and quantities billed are in accordance with the physician’s prescription order.
- Identify discrepancies between the patient’s last name and the cardholder’s name.
- Verify that the pharmacy’s dispensing practices do not violate the terms of its agreement with ESI.
- As required, verify that members actually received medications billed through patient and physician confirmation letters.

At the conclusion of the on-site field audit, ESI’s Field Auditor will review the discrepancies noted with the pharmacist in charge or the pharmacy owner. The auditor also prepares a detailed itemization of any discrepancies identified during the audit.

Following the field visit, a Pharmacy Audit Analyst will, as necessary, target specific members and physicians to receive confirmation letters. The patient contact is a computer-generated letter mailed to patients of the pharmacy, which is being audited. The letter lists all of the medications, which were reimbursed to the audited pharmacy under the specific patient's member number.
The patient is asked to review the accuracy of the drug names, strengths, quantities and dates dispensed. The patient is also requested to complete a form describing the physical characteristics of generically substitutable medications so that ESI can verify that the pharmacy is billing for the medication that was actually dispensed.

In addition, where appropriate, letters are sent to the physicians who are identified as prescribing specific prescriptions. This letter requests the physician to verify the validity of the prescriptions in order to ensure that unauthorized changes were not made. The types of claims identified for physician confirmation letters include: expensive telephone prescriptions, unusual combinations of medications — medications not generally prescribed together and prescriptions which appear to be altered.

After the patient and physician contact results are reviewed and evaluated, the Discrepancy Evaluation Report, a detailed report listing each discrepancy identified during the audit, is prepared and forwarded to the pharmacy. Included with the report is the recovery amount represented by the discrepancies found.

The audited pharmacy is given the opportunity to review the Audit Department's findings and, if so elected, provide support documentation for certain discrepancies. Upon review of the documentation, a recalculation of the amount identified for recovery could be made.

- **Fraud Detection:** Inappropriate dispensing patterns are identified through ESI’s proprietary modeling software. The programs develop dispensing profiles for each of the participating pharmacies and compare them against other participating pharmacies in the same area. Pharmacies with unusual dispensing profiles are flagged for audit review. High volume pharmacies and pharmacies identified by the fraud detection modeling software are selected for audit. Additionally, audits are identified through relationships that ESI has established with State and Federal Regulatory and law enforcement agencies.

**Conclusion**

Based on the documentation provided, we conclude that ESI has developed a comprehensive pharmacy audit program that is effective at detecting and preventing fraudulent behavior.

**DISASTER AND RECOVERY**

Express Scripts has a formal Disaster Recovery (DR) Planning program to respond to a disaster or an interruption. The DR plan identifies steps to stabilize and restore the organization's critical systems and technical environment. The plan addresses recovery of critical IT facilities, IT systems, applications, and telephony systems. The DR plan defines the resources, actions, tasks, equipment and data required to manage the technology recovery effort. DR Planning is a component of the overall Business Continuity Plan that describes how to recover and restore IT technology to operation if it is interrupted or destroyed by a disastrous event. This includes the following:

*Prepared for*  
*Teacher Retirement System of Texas*
Audit Category II: Express Scripts, Inc

Finally Report

Prepared for Teacher Retirement System of Texas

- IT systems and applications
- Telephone systems and features
- Telecommunications connectivity
- Data center availability

Express Scripts utilizes disaster recovery services from industry leaders in business continuity/disaster recovery - HP Enterprise Services, HP BCRS (Business Continuity and Recovery Services), IBM Business Continuity and Resiliency Services, and Iron Mountain.

Data center locations are geographically disbursed throughout the United States to provide geographic distance, continual data access and critical data availability.

System and Application Data — The process for data backups includes:
- Transactions are backed up daily online, replicated to the secondary recovery datacenter.
- Incremental backups of member information, client and relevant data are performed daily, along with disk replication and virtual tape replication between the production datacenter and secondary recovery data center sites. Multiple generations of data backups are retained to minimize data lost in the event of a disaster.
- Production servers, with the use of backup data, are fully recoverable.
- Software tools such as FDR (Fast Dump Restore), SRDF (Symmetrix Remote Data Facility) and DFDSS (Data Facility Data Set Services) are deployed on a daily basis to capture critical data for recovery of the system infrastructure.
- Daily backups are reported on and audited allowing for any exceptions to be identified and corrected.
- System and database files are copied and saved on a daily basis, and replicated to the secondary recovery site, ensuring security and recoverability of the data if needed for recovery.

Network — Network architecture is designed that entire portions of the system could be shut down without impact to production. Express Scripts, Verizon or AT&T can re-route traffic to maintain connectivity. Internet feeds are provided by multiple carriers, and sites are connected through redundant network links. In addition, a separate hot backup site for Express Scripts’ web site is available.

Internet/Website — Backup capability for these services is provided through Interactive Voice Response (IVR) Contact Center technology, voice calls to Contact Center patient care advocates, and the use of Home Delivery prescription refill forms. This process is tested annually to ensure processes and procedures remain current and valid.

Retail Claims Adjudication — The claims adjudication system has separate load-balancing systems for redundancy within the primary production data center. The multiplex system is designed and sized to ensure that claims adjudication will continue processing if one of the
systems experiences an outage. Recovery of claims adjudication is tested annually to ensure recovery requirements, including the Recovery Time Objective, and procedures remain current and valid.

**Pharmacy Operations/Home Delivery Distribution** — Express Scripts’ regional home delivery pharmacies provide complete back-up/contingency and redundant capabilities in the event of a disaster at any pharmacy site. The Rx Router allows the dispensing of medication from any pharmacy in the national network. In the event of a failure at one home delivery pharmacy, prescription records are easily transferred to other pharmacies for fulfillment without significant processing interruption. Express Scripts’ dispensing process allows automatic sorting and isolation of packages by destination zip code or shipping carrier, facilitating alternate delivery methods. Express Scripts’ maintains relationships with several shipping carriers, reducing shipping carrier failures. The shipping carriers work closely with Express Scripts during a natural disaster such as a hurricane, flood and wildfire to determine alternate delivery or pick-up locations, minimizing delivery disruptions.

**Call Center Customer Service Operations** — In the event of a disruption at a Call Center, calls can be readily routed to an alternative site. Call routing assures uninterrupted service to members in the event of a disaster at a site.

**HIPAA**

Patients have the right to expect all records pertaining to care will be treated as confidential, and consistent with applicable laws and regulations. ESI is committed to protecting patient privacy and has years of experience in assuring the confidentiality of patients’ health information (PHI). At ESI, the confidentiality of medical and pharmacy claims data is assured through technology solutions and standard operating procedures designed to safeguard all patients’ data. In addition, ESI has made significant investments in technology that allow them to automate the enforcement of policies and procedures for access to health information.

ESI has established a Privacy Office to provide guidance on privacy matters, planning for compliance and review of existing and new programs. ESI’s Privacy Office also provides audit and certification capability and support to their Account Management department, in order to address their clients’ needs to meet their own privacy requirements.

The Privacy Office performs rigorous reviews of all new products and business activities, as well as any enhancements to ensure adherence to regulations and corporate policy. This includes determining appropriate uses and disclosures of data and the safeguards required. The Privacy Office performs random spot audits throughout business areas to ensure that SOPs and other protections are working to the expected standard.

The Privacy Office has defined ESI’s corporate policy on the use and access to confidential data and implemented training and awareness programs as follows:
Role Based Access to Confidential Information

- To support our Minimum Necessary Use policy, role based access to confidential information is employed in all areas and systems throughout ESI. Access to data is only given on a “need to know” basis in order to perform specific job functions.
- The Business Owner of the data, and in some cases, the Privacy Office, must approve access to confidential data specifically. Approval is only given on a business need to know basis.
- Mechanisms are in place to capture and track information about access that has occurred so that corrective actions or procedures can be taken if warranted.
- Strict authentication rules are applied to all of our audience channels to ensure that we only exchange information with callers that have the right to such information.

Training and Awareness

- ESI’s entire workforce is required to complete corporate HIPAA training. The training covers many aspects of privacy compliance, including reviews of ESI’s policies on the Use and Disclosure of Individual Health Information, ESI’s policy on Minimum Necessary, their clean desk policy and various scenarios related to the appropriateness of sharing confidential information.
- Based on the specific job functions that a department performs, department specific training was developed and is regularly performed. The areas that deployed department specific training include Account Management, Customer Service and our Correspondence areas.
- The Privacy Office regularly sends global e-mails to remind workforce members of their obligations to protect confidential information. In addition, a campaign to promote awareness utilizing physical reminders is conducted periodically in all facilities.

OVERALL CONCLUSION

ESI has industry standard systems and processes. A review of the PBM’s controls through a Questionnaire instrument and a review of claim documentation indicate that ESI has adequate system and process controls in place.

Please see the following table for a description of the procedures and criteria applied to this review.
Audit Category II: Express Scripts, Inc.

<table>
<thead>
<tr>
<th>Audit Objective</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 1. To review the pharmacy claims administration aspect of TRS-ActiveCare. The PBM’s contract with specifies certain timelines and accuracy standards for the PBM. | ESI completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of 350 claims was selected for each year. Supporting documentation for each sampled claim was reviewed to ensure:  
   - Claim was submitted within the specified time as defined by the plan.  
   - Pass thru discounts and contractual provisions were applied correctly.  
   - Prescriptions billed and paid were covered by the plan.  
   - Dispensing accuracy  
   - Benefit coordination, including coordination with Medicare, and subrogation were accurately determined if the claimant had other coverage available and recoveries were properly pursued when appropriate.  
   - Correct claimant or assignee received payment.  
   - Benefits were applied in accordance with plan requirements.  
   - Claims were accurately priced using the appropriate AWP, MAC, U&C or other pricing.  
   - Mathematical computations and the application of coinsurance, | Prescription copies  
   - Copies of the claim processing screens  
   - Spreadsheet that provided the drug name with AWP, MAC, and UCR pricing.  
   - Eligibility information  
   - ESI Master Agreement with TRS  
   - Internal reports regarding claims payment accuracy and customer service statistics provided with the Administrative Questionnaire. |  
| | | |  

Express Scripts, Inc (ESI). (ESI) is the Pharmacy Benefits Manager (PBM).
<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS-ActiveCare–Pharmacy Claims Processed by the Pharmacy Benefit Manager (PBM)</td>
<td>Express Scripts, Inc (ESI). (ESI) is the Pharmacy Benefits Manager (PBM).</td>
</tr>
<tr>
<td><strong>Audit Objectives</strong></td>
<td><strong>Audit Procedures</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Audit: out-of-pocket limits, and deductibles were accurate.</td>
</tr>
<tr>
<td></td>
<td>• Preauthorization was followed and documented, when appropriate.</td>
</tr>
<tr>
<td></td>
<td>• Claim payment response time met contractual provisions</td>
</tr>
<tr>
<td></td>
<td>• Claim was paid only once, i.e., the claim payment is not a duplicate payment.</td>
</tr>
<tr>
<td></td>
<td>Audit Objective 2: To verify the accuracy and appropriateness of the data reported by the PBM as it pertains to performance standards specified in its contract with TRS.</td>
</tr>
<tr>
<td></td>
<td>• Payment Accuracy</td>
</tr>
<tr>
<td></td>
<td>• Financial Accuracy</td>
</tr>
<tr>
<td></td>
<td>• Processing Accuracy</td>
</tr>
<tr>
<td></td>
<td>• Turnaround time</td>
</tr>
<tr>
<td></td>
<td>Audit Objective 3: To conduct a reasonableness test to verify that the total number of claims from which the samples were selected by the contractor are consistent with the total number of claims reported by the PBM to TRS in the annual report for each plan</td>
</tr>
<tr>
<td></td>
<td>The data totals were compared to the year-end financial reporting for each respective year prior to sample selection.</td>
</tr>
<tr>
<td></td>
<td>• ESI provided a copy of the year end financial reports that were sent to TRS</td>
</tr>
</tbody>
</table>
### Audit

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 4. To test the reasonableness of the system of internal claims audit and processing controls used by the PBM to ensure the validity of TRS-ActiveCare pharmacy claims and that these claims are processed and paid in accordance with the terms of the plan design. | Expanding on the tests described above in #1, each sampled claim was tested to ensure:  
- Prescription (if paper) is unaltered and contains sufficient information to process the claim.  
- Paper or electronic claim is correctly loaded to the claims system.  
- Patient is eligible.  
- Coordinated with other parties, if applicable.  
- Drug is covered by the plan of benefits.  
- Drug is correct for age and sex of claimant.  
- Copays/deductibles and coinsurance was calculated correctly.  
- Any plan design limitations is applied.  
- Any requirements for pre-certification or authorization are met. | Prescription copies  
Copies of the claim processing screens  
Spreadsheet that provided the drug name with AWP, MAC and UCR pricing.  
Eligibility information  
ESI Master Agreement with TRS  
ESI responded to an Administrative Questionnaire | | |
| 5. To identify the PBM claims processing problems or areas in need of further review or audit. | Conducted additional electronic studies on pattern errors/issues identified during the audit in order to more exactly quantify the impact, including:  
- Failure to apply correct copay on claims | ESI Master Agreement with TRS  
Information provided in the Administrative questionnaire | | |
## Audit

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. To verify that the PBM follows its procedures with respect to the identification of potential areas of claims abuse in the mail service pharmacy and that these procedures are adequate; e.g., fraudulent pharmacy claims and duplicate pharmacy claims.</td>
<td>ESI completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire included specific questions regarding system edits, provider profiling and other fraud and abuse controls. The sampled claims were examined for alterations and to ensure both provider and member were valid. The sampled claims were reviewed to ensure services were valid; ESI’s medical necessity criteria were satisfied; and the claim was paid only once.</td>
<td>- Review of high cost drugs for correct payment amount</td>
<td>- Copies of all mail order prescriptions were provided</td>
<td>- Screen prints</td>
</tr>
<tr>
<td>7. To verify that the PBM accurately checks that the proper co-payment is collected at the mail order pharmacy.</td>
<td>Comparison of system screen prints and Plan of Benefits based on formulary tier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. To verify, through a sampling methodology determined by the Contractor, that an adequate system is</td>
<td>Validating a sample of point-of-sale transactions against prescription documents, refills issued by retail pharmacies and prescriptions by fax to determine authenticity.</td>
<td>- ESI provided its internal audit procedures for fraud and abuse in the Administrative Questionnaire response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Objectives</td>
<td>Audit Procedures</td>
<td>Criteria for Procedures</td>
<td>Contract Provisions</td>
<td>Internal Controls</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>used by the PBM to identify potential areas of claims abuse and that these procedures are adequate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. This audit shall also include a review of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Initial receipt of prescription or refill requests via mail, Web site, fax or telephone.</td>
<td>Reviewed paper copy of each Mail Order Prescription</td>
<td>Received copy of mail order prescription</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Audit Category II: Express Scripts, Inc.

**Final Report**

### Vendor Providing Services

Express Scripts, Inc. (ESI). (ESI) is the Pharmacy Benefits Manager (PBM).

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b. Fraud prevention and detection measures.</strong></td>
<td>ESI Pharmacy Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Use of overrides and address changes.</strong></td>
<td>ESI Pharmacy Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>d. Accuracy and authenticity of received date.</strong></td>
<td>Verified from claim copies received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>e. Accuracy and legibility of imaged or microfilmed records.</strong></td>
<td>Verified from prescription copies and system screen prints</td>
<td></td>
<td>Prescription copies received from Mail order drugs</td>
<td></td>
</tr>
<tr>
<td><strong>f. Accuracy and effectiveness of backlog controls, processing in order of date</strong></td>
<td>ESI Pharmacy Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>received and collated processing of multiple prescriptions for the same person,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>which are submitted together and/or received by the PBM on the same date.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**g. Accuracy and security controls for the posting of co-pays received with</td>
<td>Review of drug prescribed and drug class with formulary and appropriate copay applied</td>
<td></td>
<td>TRS-ActiveCare Plan of Benefits</td>
<td></td>
</tr>
<tr>
<td>prescriptions.**</td>
<td></td>
<td></td>
<td>System screen prints</td>
<td></td>
</tr>
</tbody>
</table>

---

Prepared for

**Teacher Retirement System of Texas**

---

**Sagebrush Solutions**
<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| h. The mail order pharmacy turn-around time as measured from the date the prescription is received to the date the drug is mailed to the Plan participant. This standard is stated in the contract with the PBM. | TAT report was generated and reviewed. | • ESI internal control Non Protocol: 2 days  
• ESI internal control Protocol 2 days  
• Up to 10 days for paper claims | • Contract Non Protocol 3 days  
• Contract All others 5 days |  |
| i. PBM’s pricing accuracy as a function of PBM’s use of the most current average wholesale pricing (AWP) and CMS “MAC” pricing. | Verifiable thru provided screen prints | • ESI’s MAC pricing and AWP pricing screens |  |  |
| j. PBM’s claims processing and/or other problem areas uncovered as a result of the audit, which may warrant further detailed review or audit. | Reviewed top 10 High Cost Drugs for verification of pricing and possible precertification and mail order prescription copies for potential fraud | • AWP pricing and discount information |  |  |
### Audit Objectives

1. Verify that an adequate system of program edits and claims processing procedures are in place to monitor and discover fraud, erroneous payments, duplicated payments, etc., for individuals who file a large volume of claims which may total several thousand dollars while each individual claim may be relatively small and, therefore, may escape some review processes.

2. Verify PBM’s error and omissions policy of at least $1 million and professional liability coverage, both of which should cover any acts, or omissions of the PBM in connection with the services to be performed in accordance with its contract with TRS-ActiveCare.

### Audit Procedures

- **Audit:** ESI completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The questionnaire included specific questions regarding system edits, provider profiling and other fraud and abuse controls.

- **Vendor Providing Services:** ESI maintains such liability and evidence thereof will be furnished to TRS upon request.

### Criteria for Procedures

- **Audit:**
  - TRS-ActiveCare Plan of Benefits
  - ESI’s internal policies and procedures for claims adjudication
  - ESI’s internal policies for utilization review
  - ESI’s provider contracts and “Summary of Understanding” of provider contracts for network providers

- **Vendor Providing Services:**
  - Integrated Prescription Drug Program Master Agreement
<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audit Objectives</strong></td>
<td><strong>Audit Procedures</strong></td>
</tr>
<tr>
<td>TRS-ActiveCare–Pharmacy Claims Processed by the Pharmacy Benefit Manager (PBM)</td>
<td>ESI completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The questionnaire included specific questions regarding system edits, provider profiling and other fraud and abuse controls.</td>
</tr>
<tr>
<td>12. Verify that the total money the PBM pays to its pharmacies is identical to the monies the TRS-ActiveCare pays to the PBM via the bi-weekly invoices, and that the PBM seeks reimbursement from TRS-ActiveCare in the manner required by the contract between the PBM and TRS-ActiveCare.</td>
<td>Information reported and billed on the documents provided is reasonable in comparison to the claims paid amounts.</td>
</tr>
<tr>
<td>13. Verify that adequate training procedures are used by the PBM to ensure that recently hired personnel are adequately trained in claims processing.</td>
<td></td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td>2</td>
</tr>
<tr>
<td>CLAIM PROCESSING TIMELINESS</td>
<td>3</td>
</tr>
<tr>
<td>HIPAA</td>
<td>4</td>
</tr>
<tr>
<td>INTERNAL AUDIT PROGRAM</td>
<td>4</td>
</tr>
<tr>
<td>CLAIM PROCESSING CONTROLS</td>
<td>10</td>
</tr>
<tr>
<td>COMPLAINT AND APPEALS PROCESS</td>
<td>13</td>
</tr>
<tr>
<td>TRAINING</td>
<td>14</td>
</tr>
<tr>
<td>TRS-ACTIVECARE PROCESSING TIMELINESS</td>
<td>15</td>
</tr>
<tr>
<td>SUMMARY OF FINDINGS</td>
<td>16</td>
</tr>
</tbody>
</table>
Audit Category III: FirstCare

BACKGROUND

During Fiscal Years 2013 and 2014, the Teacher Retirement System of Texas (TRS) offered three Health Maintenance Organization (HMO) plans to TRS-ActiveCare participants. The HMO plans are contracted on a fully insured basis. FirstCare Southwest Health Alliances (FirstCare) plan of Austin, Texas serviced approximately 20,035 and 19,977 of the TRS-ActiveCare HMO members as of August 31, 2013 and 2014, respectively.

Sagebrush reviewed the medical claims administration procedures used by FirstCare. The review included FirstCare’s response to a Claims Administration Questionnaire covering topics included in the plan’s Evidence of Coverage (EOC) and its contract with the TRS. Topics included accuracy of payment, timeliness of payment, internal controls, coordination of benefits, system and process edits for fraud and abuse, complaint and appeal procedures, examiner training, and compliance with identification card timeliness standards.

Sagebrush conducted a walk-through Operational Review at FirstCare’s Austin, Texas location on December 12, 2014. Sagebrush confirmed controls and procedures as reported in the Administrative Questionnaire. Sagebrush also observed FirstCare process a set of fictitious claims, designed to test system controls and edits.

Claims processing, enrollment, and various administrative and finance functions are handled in Austin. Key personnel in the Austin office were interviewed during the site visit with regard to actual application of stated policies, procedures and controls. FirstCare used the Amisys 3000 Managed Care System (Amisys) for processing claims during the study period and migrated the TRS account to the HealthRules system effective September 1, 2014. Four regional offices are responsible for medical case management, sales, and enrollment in 25 Texas counties. Regional offices are located in Lubbock, Waco and Amarillo. Customer service and authorizations are based in Lubbock, Texas. We did not test claims samples to independently determine accuracy or timeliness as such tests were beyond the scope of this project.
CLAIM PROCESSING TIMELINESS

Turnaround time (TAT) is defined as the total number of days needed to process or deny a claim. The calculation covers the period from the date the claim is received to the day the claim payment is made, suspended or denied, plus one day.

Most claim administrators strive to process 85%-90% of all claims within 14 calendar days and 99% within 30 days.

FirstCare’s internal goal for TAT is compliant with State of Texas prompt payment statutes for fully insured plans. FirstCare measures TAT as the number of days from received date to paid date. FirstCare’s internal office goal is to pay 100% clean of electronic claims within 30 days and 100% of clean paper claims within 45 days. FirstCare reported that average turnaround time for HMO claims processed was 12.89 and 10.64 calendar days for calendar years 2013 and 2014 (through September), respectively.

TAT for both 2013 and 2014 meets FirstCare’s internal goals. The TAT is also within standard industry goals.
HIPAA

FirstCare has developed a HIPAA compliance program. All employees receive HIPAA training within 30 days of employment. Employees also receive on-going HIPAA training annually. The emphasis of the training is on privacy regulations. FirstCare has policies and procedures that are modeled from the Federal guidelines. FirstCare has a company Privacy Officer and Security Officer.

The HIPAA Notice of Privacy Practices is available on the company’s web site under the Important Information menu for members and employees. The Notice of Privacy Practices has an explanation of privacy rights and contact information.

INTERNAL AUDIT PROGRAM

FirstCare provided a description of its claims department quality and production program in its response to the Administration Questionnaire. We also interviewed quality personnel during the onsite visit to the FirstCare offices. FirstCare outlined the purpose, goals and procedures of their quality audit program.

A staff of full-time Quality Assurance Coordinators conduct quality audits and report to the Claims Director. Samples of 1% of all claims processed, including denied claims and auto-adjudicated claims, are selected weekly at random for the quality review.

In addition to random audits, the internal audit program includes the following procedures:

- All claims with paid amounts greater than $50,000 for professional claims and $100,000 for facility claims are reviewed prior to check issue.
- The Appeals Team forwards all errors identified through the appeals process to the Quality Team to identify root cause and follow up actions.
- Auditors must code each claim requiring adjustment with a reason code. A monthly report is generated by reason code for analysis.
- The claims processing system has been programmed with “triggers” or edits for particular types of claims subject to additional review.
- 100% of claims adjudicated by trainees are reviewed by the Quality Team.

Claims are checked for eligibility, provider payment rates, benefits, policies, compliance with legislation, and other data entry issues. The quality department reviews the audit summary and implements action plans and follow-up procedures to address all issues that impact quality.

Employees are eligible for incentive pay if performance is in an acceptable range.

Additionally, there is an internal audit program that incorporates review and evaluation of all aspects of the claim adjudication process. This is conducted by the recovery audit team who reports to the Director of Compliance. During the previous audit of FirstCare for fiscal years 2011 and 2012, the internal auditor reported to the Director of Pricing and Provider Management.
Audit Category III: FirstCare

and the Chief Operations Officer. Importantly, the internal audit function in both study periods was independent of the claims department.
**Internal Audit Results**

The FirstCare internal claim audit program measures financial accuracy, payment accuracy and procedural (non-payment) accuracy. Internal audit results indicate that FirstCare is meeting industry standards for financial, payment, and procedural accuracy.

<table>
<thead>
<tr>
<th></th>
<th>Financial Accuracy</th>
<th>Payment Accuracy</th>
<th>Procedural Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>FirstCare Actual</td>
<td>99.98%</td>
<td>99.73%</td>
<td>99.35%</td>
</tr>
<tr>
<td>Industry Standard</td>
<td>99.0%</td>
<td>95.0 – 97.0%</td>
<td>95.0%</td>
</tr>
<tr>
<td>Internal Standard</td>
<td>99.3%</td>
<td>97.0%</td>
<td>95.0%</td>
</tr>
</tbody>
</table>

**Financial Accuracy:** FirstCare defines financial accuracy as the total tested dollars paid minus the gross dollars in error, divided by the total tested dollars paid. The internal accuracy goal is 99.3%. The generally accepted industry standard for financial accuracy is 99%.

The reported financial accuracy rate for all internal audits was 99.98%. According to these results, FirstCare exceeds internal and industry standards.

**Payment Accuracy:** FirstCare defines payment accuracy as the number of tested claims paid correctly, divided by the number of tested claims paid. The internal accuracy goal is 97%. The generally accepted industry standard for payment accuracy is 95 - 97%.

The reported payment accuracy rate for all internal audits was 99.73%. According to these results, FirstCare exceeds internal and industry payment accuracy standards.

**Procedural Accuracy:** FirstCare defines procedural (non-payment) accuracy as the number of tested claims processed correctly, divided by the number of tested claims processed. The internal accuracy goal is 95%. The generally accepted industry standard for this category is 95%.

The reported non-payment accuracy rate for all internal audits was 99.35%. FirstCare exceeds internal and industry non-payment accuracy standards.
Audit Category III: FirstCare

Customer Service
FirstCare received 25,949 and 31,965 customer service calls in TRS fiscal years 2013 and 2014, respectively. TRS calls are not tracked separately.

Calls are received on a toll-free line, routed to the appropriate queue, and answered by a customer service representative (CSR). CSR’s answer approximately 60 calls per day. Customer service responds to all calls received from members, providers and employers. They have access to the same system information that is available to the claims processors. CSRs do not have system access to adjust payments, but they forward calls to the claims processing unit if necessary. All outside calls are routed through customer service.

The self-reported results indicate that FirstCare’s performance meets or exceeds industry standards for customer service in the average length of call, average speed to answer and abandonment rate for fiscal year 2014. In fiscal year 2014, FirstCare’s average speed to answer fell just outside industry standards.

<table>
<thead>
<tr>
<th></th>
<th>Average Speed to Answer</th>
<th>Average Length of Call</th>
<th>Abandonment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS FY 2013</td>
<td>28 seconds</td>
<td>324 seconds</td>
<td>3%</td>
</tr>
<tr>
<td>TRS FY 2014</td>
<td>32 seconds</td>
<td>380 seconds</td>
<td>3%</td>
</tr>
<tr>
<td>Industry Standard</td>
<td>30 seconds</td>
<td>180 seconds</td>
<td>3 to 5%</td>
</tr>
</tbody>
</table>

FirstCare placed outbound “welcome” calls to all TRS participants in September 2014. The purpose of the outreach was to answer benefit questions and enhance customer services. FirstCare plans to expand its outreach efforts to include:

- Welcome calls to chronically ill to introduce case management services;
- Surveys and feedback to improve the FirstCare wellness portal; and
- Increase awareness about FirstCare-sponsored fun runs and exercise programs.
Audit Category III: FirstCare

Overpayments

FirstCare has a written policy and procedure for identifying and recovering overpaid claims. A dedicated internal recovery unit is responsible for implementing the procedures. The unit tracks refunds in a database, requests refunds, investigates other insurance, posts refunds, sets up other insurance indicators, provides feedback to the processors and takes actions to prevent future overpayments.

Overpayments may be identified through the following means:

- **Corrected claims submission from provider**: When a provider submits corrected claims information, the appropriate original claim is adjusted to request a refund or to recover the overpayment from future provider payments.

- **Internal audit**: If the internal audit/quality control program identifies an overpayment, the excess payment is requested from the provider or recovered from future payments.

- **Refund sent by provider**: If the provider identifies an overpayment and sends a refund, an adjustment is made to the original claim to reflect the refund.

- **Other insurance**: If other insurance is identified, the recovery unit researches claim histories and will request refunds on other payments that were not coordinated.

- **Terminated Members**: FirstCare creates a weekly report to identify claims incurred after the termination date for retroactively terminated employees. The recovery unit identifies claims paid that were incurred after the termination date. FirstCare has a policy to pursue overpayments that result from a retroactive termination from the member, not the provider.

Overpayments must be identified and worked within 180 days of the payment date. As a convenience to the provider FirstCare will not seek recovery on overpayments that are older than 180 days. FirstCare tracks overpayments that are more than 180 days in the system but will not seek recovery. FirstCare does not request recovery for overpayments that are under $5.00 from any provider. Additionally, the overpayment amount must exceed $50.00 for recovery from Amarillo/Lubbock providers and $50.00 for Waco providers. Special handling is required for overpayments on claims paid to Covenant facilities, FirstCare’s parent company.

FirstCare sends a letter requesting the refund and explaining the overpayment. All overpayments and refunds are reflected in the Amisys claims history and closed in the refund database.
Coordination of Benefits

FirstCare has processors trained and responsible for coordination on benefits (COB). COB information is stored in the Amisys processing system. Medicare and commercial coverage is verified annually through supplemental information requests made to the members.

If COB is indicated in membership history, or an explanation of benefits (EOB) is attached to the claim, the claim will pend for investigation by a designated COB processor to verify the effective date and status of the other insurance.

Members are required to submit information on other insurance upon initial enrollment and when there is a change in coverage. FirstCare annually calls members who are Medicare eligible to verify coverage if their information is not updated. If FirstCare does not have information on other insurance at the time a claim is received, they will pend the payment, request the information, and continue to make attempts daily to get the other insurance information. FirstCare will not pay a claim until the other insurance information is received.

In the Operational Questionnaire, FirstCare reported TRS COB savings of $204,074 and $272,953 in TRS fiscal years 2013 and 2014, respectively.

In the previous audit period, FirstCare reported overall COB savings of $8,585,948 and $12,307,962 in fiscal years 2009 and 2010, respectively.

FirstCare clarified that the savings reported in the previous audit period represented savings for all participants administered by FirstCare. Reported savings for fiscal years 2013 and 2014 are specific to TRS participants.
CLAIM PROCESSING CONTROLS

Claim Processing

Mailroom & Data Entry: Paper claims and correspondence are received by FirstCare’s front end vendor, BancTec. The vendor scans and converts the claims to an electronic format using optical character recognition technology. BanqTec rejects claims and notifies the provider for the following:

- Missing fields;
- Errors in submission of anesthesia minutes;
- Not a FirstCare member; and
- Not a valid provider.

FirstCare verifies the quality of BancTec’s services through quarterly self-audits and an annual onsite audit conducted by FirstCare or its representative.

During the prior audit period, FirstCare received paper claims and correspondence in its mailroom and batched and scanned the items internally. Then, the scanned images of paper claims were sent via work queues to an overseas contractor to data enter the claim records. The contractor, Miracle Soft, was responsible for completing data entry within 24 hours of receipt.

Electronic Receipt: Claims may also be received electronically from FirstCare’s electronic data interface (EDI) vendor, Transcend. FirstCare receives approximately 90% of claims electronically. The rate of EDI receipt has increased to 90% from 85% over the prior audit period. The vendor rejects incomplete and inaccurate submissions, automatically notifying the provider of the rejection.

Adjudication: Next, the claims are sent for adjudication in the Amisys claims processing system. Claims that arrive electronically are also sent for adjudication. If the system does not reject the claim for additional information or review, the claim will be automatically adjudicated and an explanation of payment is generated and payment will be sent to the provider. If the claim is pended by the system for any reason, it is sent through a document flow queue to be manually processed by an examiner.

FirstCare has an internal goal to automatically adjudicate 80% of the claims. For the TRS-ActiveCare account, approximately 75% of the claims are currently automatically adjudicated. The auto-adjudication rate is a slight increase over the 73% rate from the prior audit period of fiscal years 2011 to 2012.

System Edits: The claims processing system has an edit to identify duplicate payments using key fields such as member, provider, procedure code, date of service, etc.

The system identifies overpayments that result from clinical edits, upcoding, multiple procedure cut-backs, etc.
Pending Questionable Claims: FirstCare has a policy to ‘pay and pursue’ questionable claims. If a claim is received with the minimum data required to reasonably calculate a payment, then FirstCare will process the claim. If the processor has a question on the services, the payment will not be pended. Claims requiring additional information are paid at 100% of the contracted rate and additional documentation to support the payment is requested. If the documentation is received and the claim is determined to be paid correctly, no additional action is taken. If the documentation is not received or does not support the services, the recovery unit requests a refund from the provider. FirstCare said that the providers cooperate with the additional documentation request because they know that any potential overpayments will be recovered from future payments.
Audit Category III: FirstCare

Fraud Program and Procedures

During the prior audit period, FirstCare followed internally developed anti-fraud plan. There are documented investigation processes and a hotline established to report potential fraud. There are also system controls in place to identify questionable claims. During this audit period, FirstCare had outsourced its fraud detection activities to CGI. FirstCare reports that CGI’s results did not meet the plan’s expectations. Seeking to increase the level of scrutiny placed on potentially fraudulent activity, FirstCare is in the process of making significant changes to its fraud program.

In January 2015, FirstCare hired an experienced candidate to lead its Special Investigations Unit (SIU). The Company has also implemented a new software service through the Texas Association of Health Plans to provide electronic fraud detection activities across data from multiple payers, including FirstCare.

FirstCare continues to refer large hospital bills to National Claim Audit for detailed reviews.

All FirstCare employees receive annual fraud training with additional training for selected areas. Employees are trained to identify waste, abuse and fraud, and the appropriate actions to take. FirstCare reports investigations and findings quarterly to the Health and Human Services Office of Inspector General.

Fictitious Claims Testing

During our onsite visit, we requested that FirstCare process a number of fictitious claims for the purpose of testing system and process controls for accuracy and fraud, waste and abuse. The following fictitious claims were submitted to the live claims processing system. The detailed results are shown in the table below. In each instance, the system correctly denied or edited put the claim for further manual review.

<table>
<thead>
<tr>
<th>Description of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid provider number</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Invalid member</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Unspecified injectable drug (J3490)</td>
<td>Claim pended for additional information</td>
</tr>
<tr>
<td>Unspecified supply (88000)</td>
<td>Claim pended for additional information</td>
</tr>
<tr>
<td>Duplicate claim</td>
<td>Claim denied</td>
</tr>
</tbody>
</table>

Conclusion

The fraud detection practices appear to be appropriate, including manual and systematic edits and checks.
COMPLAINT AND APPEALS PROCESS

FirstCare provided their appeal procedures as an attachment to the Administration Questionnaire. The information provided below is a summary of the details provided.

FirstCare will send an acknowledgment letter describing the complaint procedures and timeframes within five days of receiving a complaint.

A member may appeal the complaint orally or in writing. The appeal is then sent to an appeal panel composed of health plan staff, physicians, and enrollees. If specialty care is in dispute, the panel must also include a specialist in that field. The appeals process will come to a resolution within thirty days of receiving the notice of appeal or 24 hours of emergency hospitalization.

If the appeal is denied, the resolution letter includes the clinical basis for the decision and notice of the appellant’s right to seek review of the denial by an independent review organization (IRO).

The response letter to the member following an appeal panel hearing contains further appeal rights to the Texas Department of Insurance (TDI) if the member is not satisfied with FirstCare's decision. The letter also provides the telephone number as well as the mailing address for TDI.

Reported Grievances and Complaints

FirstCare reported 36 oral and written complaints in fiscal year 2013. For fiscal year 2014, 15 oral and written complaints for all members were received.

The Texas Department Insurance website reports 11 complaints regarding FirstCare as of December 31, 2013 and 10 complaints as of December 31, 2014.
Audit Category III: FirstCare

TRAINING

All new hires report to a claims trainer for 6 to 8 weeks covering all aspects of claims processing required for each position. The training starts with classroom study and overview followed by hands-on system training in a test environment. Once the trainee is released to the claims processing unit, the trainee’s work is subject to 100% review. If audit scores are acceptable, the percentage of claims reviewed is gradually decreased.

Topics included in the training are system processes, medical terminology, coding and claim forms, provider specialty guidelines, and processing guidelines (authorizations, COB, out of network, etc.)

Entry-level processors are required to have data entry skills. Claims processing experience is required for higher level positions. Experience with medical terminology and coding is preferred for entry level and required for higher level processors.

In addition to new hire training, all staff have on-going training to learn about new state and federal legislative changes and internal process changes. The adjudication manuals are available on-line, and are updated on an as needed basis.

We conclude that the training program for new examiners at FirstCare is appropriate for the size of the claims examiner department (42 examiners).
Audit Category III: FirstCare

TRS-ACTIVECARE PROCESSING TIMELINESS

Membership eligibility for ActiveCare members is based on data files received from BlueCross BlueShield of Texas (BCBSTX), the ActiveCare self-insured plan administrator. In 2014, BCBSTX enhanced the eligibility file transfer to include full eligibility files. Prior to the enhancement, on eligibility updates were transmitted. The enhancement reduces opportunity for programming errors.

FirstCare is required to send Identification (ID) Cards to all newly enrolled members and to current members, when a change is reported, within five (5) working days after the health plan receives the enrollment information.

FirstCare provided internal reports showing the number of ID cards issued each month and the number of those cards issued within five days for fiscal years 2013 and 2014. FirstCare reported that there were 23,830 and 20,493 cards mailed in fiscal years 2013 and 2014, respectively. FirstCare reported that 100% of the cards were mailed within the 5 days of the request for all months except August 2014.

For the month of August 2014, FirstCare reported that the statistics were not tracked because “Due to change in enrollment vendor by TRS, there were some errors /delays in the enrollment file which caused issues with tracking 5 day rule.” FirstCare provided internal reports tracking issuance of ID cards for fiscal year 2015 to date as evidence that the issues with the exchange of eligibility data and related issues with tracking the timeliness of issuance have been resolved.
Audit Category III: FirstCare

SUMMARY OF FINDINGS

FirstCare has industry standard systems and processes. The staffing of the customer service and claims adjudication functions appears to be adequate in both size and experience for the membership. A review of the Health Plan’s controls through a Questionnaire instrument, operational walk through, interviews with key personnel and processing of fictitious claims indicate that FirstCare has adequate system and process controls in place.

Please see the following table for a description of the procedures and criteria applied to this review.

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Health Maintenance Organizations (HMO)</th>
<th>Vendor Providing Services</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 1. To review for reasonableness the medical claims administration aspect of the specified HMO contracts and to verify the timelines and accuracy standards of claims processing for each HMO. The HMO’s compliance with its own standards shall be confirmed through this review. | FirstCare completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
  - Duplicate payments cannot be processed.  
  - Claims cannot be paid to fictitious providers.  
  - Claims cannot be paid to fictitious members.  
  - Claims for ineligible services cannot be processed.  
  - Claims for unlisted/non-existing | • TRS-ActiveCare Plan of Benefits  
• FirstCare internal policies and procedures for claims adjudication  
• FirstCare internal policies for utilization review  
• FirstCare provider contracts and “Summary of Understanding” of provider contracts for network providers  
• American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
• COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
• Medicare coordination rules | • Contractual performance guarantees:  
  o VI. K. 1. Must have a disaster recovery plan  
  o VI. c., Must have a comprehensive plan to detect and deter fraud | Internal performance goals:  
  - Financial Accuracy 99.3%  
  - Payment Accuracy 97.0%  
  - Non-Payment 95.0%  
Sections I through VII of FirstCare’s Questionnaire Response provided a detailed description of internal controls and processes.
## Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures&lt;sup&gt;i&lt;/sup&gt;</th>
<th>Criteria for Procedures&lt;sup&gt;ii&lt;/sup&gt;</th>
<th>Contract Provisions&lt;sup&gt;iii&lt;/sup&gt;</th>
<th>Internal Controls&lt;sup&gt;iv&lt;/sup&gt;</th>
</tr>
</thead>
</table>
|                  | procedures edit for further review. Per questionnaire and interviews with key personnel, FirstCare has a multi-level approach to the detection and prevention of fraud:  
  - Unit within claims dedicated to the detection of fraud within individual claims as well as the profiling of suspicious member and provider activity.  
  - FirstCare licenses Optum (formerly iCES) for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.  
  - FirstCare’s internal utilization review (UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay.  
  - Hospital bill review for | • Managed Care Handbook, Dr. Peter Kongstevedt. | | | |

---

<sup>i</sup> Audit Procedures

<sup>ii</sup> Criteria for Procedures

<sup>iii</sup> Contract Provisions

<sup>iv</sup> Internal Controls
Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures(^i)</th>
<th>Criteria for Procedures(^ii)</th>
<th>Contract Provisions(^iii)</th>
<th>Internal Controls(^iv)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>anomalies is outsourced to National Audit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Other system edits for high units and other indicators of abusive and/or potentially fraudulent activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The FirstCare Questionnaire response included the results of internal quality results, indicating a financial accuracy rate of 99.98%. This rate exceeds internal and industry goals for performance. This performance level is consistent with TRS reports of no service problems with the HMO.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FirstCare provided a disaster recovery plan and a description of their adequate fraud controls as a part of their response to the Administrative Questionnaire.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To review for reasonableness the system of internal claims</td>
<td>FirstCare completed an Administrative Questionnaire, providing information on systems,</td>
<td>• TRS-ActiveCare Plan of Benefits</td>
<td>Internal performance goals:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• FirstCare internal policies and procedures for claims</td>
<td>• Financial Accuracy 99.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Payment Accuracy</td>
<td></td>
</tr>
</tbody>
</table>

Prepared for
Teacher Retirement System of Texas
<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| Audit and processing controls used by the HMO to ensure the validity of HMO’s claims and that these claims are processed and paid in accordance with the terms of the HMO’s Summary Plan Description (SPD) and the HMO’s contract with the TRS-ActiveCare. The HMO’s compliance with its own standards shall be confirmed through this review. | policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
  - Duplicate payments cannot be processed.  
  - Claims cannot be paid to fictitious providers.  
  - Claims cannot be paid to fictitious members.  
  - Claims for ineligible services cannot be processed.  
  - Claims for unlisted/non-existing procedures edit for further review. | adjudication  
  - FirstCare internal policies for utilization review  
  - American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
  - COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
  - Medicare coordination rules  
  - Managed Care Handbook, Dr. Peter Kongstevedt |  
  - Non-Payment 95.0%  
  - 97.0%  
  - Sections I through VII of FirstCare’s Questionnaire Response provided a detailed description of internal controls and processes. |
| 3. To identify health claims processing problems or areas in need of further review or audit. | FirstCare completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims was submitted to the |  
  - FirstCare internal policies and procedures for claims adjudication  
  - FirstCare provider contracts and “Summary of Understanding” of provider contracts for network providers  
  - American Medical |
### Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>claim system to verify basic fraud and abuse controls.</td>
<td>FirstCare (HMO).</td>
<td>Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The FirstCare Questionnaire response included the results of internal quality results, indicating a financial accuracy rate of 99.98%. This rate exceeds internal and industry goals for performance. This performance level is consistent with TRS reports of no service problems with the HMO.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FirstCare outsources the review of hospital bills for anomalies to National Audit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No specific problems were identified for further review.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To review the reasonableness of the Customer Service processes, including handling of complaints, including those brought to the Texas</td>
<td>The Questionnaire included specific questions about the customer service process, including compliant, appeals and their resolution. Additionally, while onsite the auditor interviewed key personnel responsible for the customer service function.</td>
<td>• TRS-ActiveCare Plan of Benefits.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• There were no reported</td>
<td>• FirstCare internal policies and procedures for claims adjudication.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• FirstCare internal policies for utilization review</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Managed Care Handbook, Dr. Peter Kongstevedt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Section VI of FirstCare’s response to the Administrative Questionnaire provide detailed description of the plan’s Customer Service controls and reporting.</td>
<td></td>
</tr>
</tbody>
</table>
### Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| Department of Insurance. | complaints to the TRS or Texas Department of Insurance in fiscal years 2013 or 2014 regarding service to TRS from this HMO.  
• In fiscal year 2014, FirstCare received 1 complaints out of 30,741 total calls/contacts. | | | |
| 5. To review for reasonableness the timeliness of the issuance of identification cards. | FirstCare provided an ID Cards turnaround time report, for fiscal years 2013 and 2014. 100% of ID Cards were mailed within 5 working days for all months except August 2014. FirstCare was unable to track statistics for August 2014 due to issues in receiving eligibility data during a TRS transition to a new vendor. | • TRS-ActiveCare Plan of Benefits  
• FirstCare internal policies and procedures for claims adjudication  
• Managed Care Handbook, Dr. Peter Kongstevedt | | |
| 6. To verify that each HMO follows its procedures with respect to the identification of potential areas of claims abuse, i.e., fraudulent claims and duplicate | FirstCare completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire includes the level of COB savings in terms of dollars and as a | • COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
• Medicare coordination rules  
• Industry norms for COB recovery as a percentage of paid claims | | Sections I through VII of FirstCare’s Questionnaire Response provided a detailed description of internal controls and processes. |

Prepared for  
Teacher Retirement System of Texas
## Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>claims, overcharging by providers, unnecessary physician services, etc.</td>
<td>percentage of total paid dollars. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  - Duplicate payments cannot be processed.  - Claims cannot be paid to fictitious providers.  - Claims cannot be paid to fictitious members.  - Claims for ineligible services cannot be processed.  - Claims for unlisted/non-existing procedures edit for further review. FirstCare uses the following edits and systems to further ensure the reasonableness of payment:  - FirstCare licenses iCES for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.  - FirstCare’s internal utilization review</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Audit Category III: FirstCare

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures(^i)</th>
<th>Criteria for Procedures(^{ii})</th>
<th>Contract Provisions(^{iii})</th>
<th>Internal Controls(^{iv})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>(UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay. Also, the questionnaire contained questions regarding procedures to identify coordination/subrogation opportunities. FirstCare was asked to quantify the actual COB/subrogation savings to FirstCare.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FirstCare (HMO).

---

\(^i\) Need to know what audit procedures will be performed for each objective in order to provide reasonable assurance that the evidence is sufficient and appropriate to support the auditors’ findings and conclusions. These procedures will need to be formally put into our audit plan.

\(^{ii}\) Ideally, at the time the program is established, governing bodies would define what constitutes successful performance and how it should be measured. This seldom occurs in practice. Consequently, the auditor must develop performance criteria.

\(^{iii}\) Auditors should determine which laws, regulations, and provisions of contracts or grant agreements are significant within the context of the audit objectives and assess the risk that violations of those laws, regulations, and provisions of contracts or grant agreements could occur.

\(^{iv}\) Auditors should obtain an understanding of internal controls that are significant within the context of the audit objectives. For significant internal controls, auditors should assess whether internal control has been properly designed and implemented.
TABLE OF CONTENTS

BACKGROUND ........................................................................................................................................... 2
CLAIM PROCESSING TIMELINESS ........................................................................................................ 3
HIPAA .................................................................................................................................................... 3
INTERNAL AUDIT PROGRAM ................................................................................................................ 3
CLAIM PROCESSING CONTROLS ......................................................................................................... 7
COMPLAINT AND APPEALS PROCESS ............................................................................................. 8
TRAINING .............................................................................................................................................. 10
TRS-ACTIVECARE PROCESSING TIMELINESS .................................................................................. 10
SUMMARY OF FINDINGS ..................................................................................................................... 11
BACKGROUND

During Fiscal Years 2013 and 2014, the Teacher Retirement System of Texas (TRS) offered three Health Maintenance Organization (HMO) plans to TRS-ActiveCare participants. The HMO plans are contracted on a fully insured basis. Allegian Health Plans (Allegian) serviced approximately 1,990 and 2,960 of the TRS-ActiveCare HMO members as of fiscal years 2013 and 2014, respectively.

Sagebrush reviewed the medical claims administration procedures used by Allegian. The review included Allegian’s response to a Claims Administration Questionnaire covering topics included in the plan’s Evidence of Coverage (EOC) and its contract with the TRS. Topics included accuracy of payment, timeliness of payment, internal controls, coordination of benefits, system and process edits for fraud and abuse, complaint and appeal procedures, examiner training, and compliance with identification card timeliness standards.

Sagebrush conducted a walk-through Operational Review at Allegian’s Annapolis, Maryland location on January 9, 2015. Sagebrush confirmed controls and procedures as reported in the Administrative Questionnaire. Sagebrush also observed Allegian process a set of fictitious claims, designed to test system controls and edits.

During the prior audit period, Allegian was known as Valley Baptist Insurance Company. In 2011, Vanguard Health Systems acquired a majority interest in the Valley Baptist Health System. In June 2013, Tenant Healthcare Corporation acquired Vanguard. Health plan operations were transitioned to Conifer Health Solutions in Phoenix, Arizona, a Tenant affiliate, from FirstCare in Austin, Texas. On July 1, 2014, Valley Baptist Insurance Company changed its name to Allegian Health Plans, and operations were transitioned to Conifer’s office in Annapolis, Maryland where the claims processing system is tailored to commercial HMO plans.

Allegian’s claims processing, enrollment, customer service, and various administrative functions are now handled in the Conifer Annapolis office. Key personnel in the Annapolis office were interviewed during the site visit with regard to actual application of stated policies, procedures and controls. The LUMINX System is used for processing claims. Texas regional offices are responsible for sales and enrollment in four South Texas counties. We did not test claims samples to independently determine accuracy or timeliness as such tests were beyond the scope of this review.
**CLAIM PROCESSING TIMELINESS**

Turnaround time (TAT) is defined as the total number of days needed to process or deny a claim. The calculation covers the period from the date the claim is received to the day the claim payment is made, suspended or denied, plus one day.

Most claim administrators strive to process 85%-90% of all claims within 14 calendar days and 99% within 30 days.

Allegian’s internal goal for TAT is compliant with State of Texas prompt payment statutes for fully insured plans. Allegian measures TAT as the number of days from received date to paid date. Allegian’s internal office goal is to pay 100% clean of electronic claims within 30 days and 100% of clean paper claims within 45 days. Allegian reported that average turnaround time for all HMO claims processed during May 2014 was 9.20 calendar days. The average turnaround time for the portion of fiscal year 2014 when TRS was serviced by the Annapolis office (July – August 2014) was 9.15 calendar days.

The reported TAT meets Allegian’s internal goals. The TAT is also within standard industry goals.

**HIPAA**

Allegian has developed a HIPAA compliance program. New employees receive two to six weeks of classroom instruction that includes HIPAA training. The Plan conducts quarterly audits specifically designed to assess HIPAA compliance. Allegian has policies and procedures that are modeled from the Federal guidelines. Allegian has a company Privacy Official and Security Officer.

The HIPAA Notice of Privacy Practices is available on the company’s web site for members and employees. The Notice of Privacy Practices has an explanation of privacy rights and contact information.

**INTERNAL AUDIT PROGRAM**

Allegian provided a description of its claims department quality and production program in its response to the Administration Questionnaire. We also interviewed quality personnel during the onsite visit to the Allegian offices. Allegian outlined the purpose, goals and procedures of their internal audit program, and has a comprehensive internal audit program.

Allegian has full-time internal auditors. The quality department is independent of the claims and customer service departments. The internal auditor is responsible for the conduct of a comprehensive internal audit program that reviews all aspects of the claims adjudication and customer service processes.
Audit Category IV: Allegian

Samples of 2% of claims processed each day are selected at random for the quality review. Quality audits are conducted on additional, focused claims on an as-needed basis.

Claims are checked for eligibility, provider payment rates, benefits, policies, compliance with legislation, and other data entry issues. The quality department reviews the audit summary and implements action plans and follow-up procedures to address all issues that impact quality.

Junior claims examiners have a payment limit of $1,000. All claims over $1,000 are routed to senior examiners for processing.

Employees are eligible for incentive pay if performance is in an acceptable range.

Internal Audit Results

The Allegian internal claim audit program measures financial accuracy, payment accuracy and procedural (non-payment) accuracy. Internal audit results indicate that Allegian is meeting internal standards for financial and procedural accuracy but falls below internal standards for payment accuracy. Allegian Annapolis also falls below industry standards for financial accuracy.

In addition to overall accuracy statistics, Allegian provided samples of weekly internal audit reports. The reports showed a high degree (100% accuracy) for auto-adjudicated claims.

<table>
<thead>
<tr>
<th></th>
<th>Financial Accuracy</th>
<th>Payment Accuracy</th>
<th>Non-Payment (Procedural) Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegian Phoenix:</td>
<td>99.62%</td>
<td>96.96%</td>
<td>99.54%</td>
</tr>
<tr>
<td>August 2013 – June</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allegian Annapolis:</td>
<td>98.94%</td>
<td>99.97%</td>
<td>96.82</td>
</tr>
<tr>
<td>July – August 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Standard</td>
<td>99.0%</td>
<td>95.0 – 97.0%</td>
<td>95.0%</td>
</tr>
<tr>
<td>Internal Standard</td>
<td>99.0%</td>
<td>98.0%</td>
<td>95.0%</td>
</tr>
</tbody>
</table>

Financial Accuracy: Allegian defines financial accuracy as the total tested dollars paid minus the gross dollars in error, divided by the total tested dollars paid. The internal accuracy goal is 99.0%. The generally accepted industry standard for financial accuracy is 99%.

For the Phoenix service center, the reported financial accuracy rate for all internal audits was 99.62%, and a financial accuracy rate of 98.94% was reported for the Annapolis service center. According to these results, Allegian’s Phoenix office performed above industry and internal
Audit Category IV: Allegian

standards, and Allegian’s Annapolis office performance for financial accuracy falls slightly below both internal and industry standards.

Payment Accuracy: Allegian defines payment accuracy as the number of tested claims paid correctly, divided by the number of tested claims paid. The internal accuracy goal is 98%. The generally accepted industry standard for payment accuracy is 95 - 97%.

For the Phoenix service center, the reported payment accuracy rate for all internal audits was 96.96%, and a payment accuracy rate of 99.97% was reported for the Annapolis service center. According to these results, the performance of both offices meets or exceeds internal and industry payment accuracy standards.

Procedural Accuracy: Allegian defines procedural (non-payment) accuracy as the number of tested claims processed correctly, divided by the number of tested claims processed. The internal accuracy goal is 95%. The generally accepted industry standard for this category is 95%.

For the Phoenix service center, the reported procedural accuracy rate for all internal audits was 99.54%, and a payment accuracy rate of 96.82% was reported for the Annapolis service center. The performance for both the Phoenix and Annapolis offices exceeds internal and industry non-payment accuracy standards.

Recommendation: Annapolis’ internal reports show a high degree of accuracy in the population of auto-adjudicated claims – increasing the percentage of automation should enhance the overall performance of the service center. Also, conduct root cause analysis and improve training procedures to enhance the accuracy of manually processed claims.

Customer Service
Allegian received 3,686 total customer service calls in the Annapolis service center from July 1, coinciding with the implementation of the TRS account at this center, through October 31, 2014. TRS calls are not tracked separately by the Annapolis service center.

The TRS account was serviced in Phoenix, Arizona from April 2013 through July 2014, following a transition from the FirstCare service center in Austin. Allegian received 33,032 total calls from April through August 2013 and 52,733 calls from September 2013 through June 2014. TRS calls were not tracked separately by the Annapolis service center.

Calls are received on a toll-free line, routed to the appropriate queue, and answered by a customer service representative (CSR). CSR’s answer approximately 45 calls per day. They have access to the same system information that is available to the claims processors. CSRs do not have system access to adjust payments, but they forward calls to the claims processing unit if necessary.

The self-reported results indicate that Allegian’s performance meets or exceeds industry standards for customer service in the average length of call, average speed to answer and abandonment rate for all periods studied.
Audit Category IV: Allegian

<table>
<thead>
<tr>
<th></th>
<th>Average Speed to Answer</th>
<th>Average Length of Call</th>
<th>Abandonment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoenix: Apr - Aug 2013</td>
<td>17 seconds</td>
<td>193 seconds</td>
<td>2%</td>
</tr>
<tr>
<td>Phoenix: Sep 2013 – Jun 2014</td>
<td>13 seconds</td>
<td>244 seconds</td>
<td>1%</td>
</tr>
<tr>
<td>Annapolis: Jul – Oct 2014</td>
<td>27 seconds</td>
<td>252 seconds</td>
<td>2%</td>
</tr>
<tr>
<td>Industry Standard</td>
<td>30 seconds</td>
<td>180 seconds</td>
<td>3 to 5%</td>
</tr>
</tbody>
</table>

**Overpayments**

Allegian’s Annapolis quality department identifies and recovers overpayments. The department’s written policy requires that a refund request letter be sent to the provider and/or member requesting reimbursement of the overpayment. An initial letter is generated within 24 hours of discovery of the overpayment. A second letter is then systematically generated 30 calendar days later. A third letter is systematically generated 30 calendar days after the second letter, if the funds have not been collected. If information is not received within 30 calendar days after the third request is made, future funds may be withheld from the provider and/or the claim may be forwarded to legal counsel for collection.

**Coordination of Benefits**

All Allegian processors are trained and responsible for coordination on benefits (COB). COB information is stored in the LUMINEX processing system in Annapolis. Medicare and commercial coverage is verified annually through supplemental information requests made to the members. Members are required to submit COB information for dependents for life changing events and during annual enrollment. Files identified with changes or yearly update requirements are directed to a COB analyst who is responsible for validating information through telephone contact and/or inquiry letters.

A maximum of two COB verification letters are sent to the member, and the information is verified with the other carrier through telephone contact. Additionally, letters may be sent to the providers who performed services. Claims would be subsequently denied if no response is received.

In the Operational Questionnaire, Allegian reported TRS COB savings of less than 1% of paid claims.
CLAIM PROCESSING CONTROLS

Claim Processing

Mailroom: Allegian outsources its front-end operations to Emdeon. TRS Paper claims are mailed to a P.O. Box in Texas. Emdeon retrieves the paper claims from the P.O. Box daily and converts the paper claims to electronic claims through optical character recognition (OCR). The electronic claims are then uploaded by Allegian to the LUMINEX system for processing.

Occasionally, paper claims and correspondence are sent to the secure main mailroom at the Allegian office in Annapolis. Mail clerks at the health plan separate all of the health plan’s mail between claims and correspondence, and open and sort the claims by type: HCFA, UB92 and correspondence. Claims are scanned into the LUMINEX system in batches. The goal is to scan all paper claims the same day they arrive in the mailroom.

Any checks received are logged, photocopied and routed to the finance department to be worked from the image.

Data Entry: Scanned images of paper claims received in the Allegian offices are sent via work queues to in-house examiners to data enter the claim records.

Next, the claims are sent for adjudication in the LUMINEX claims processing system. Claims that arrive electronically are also sent for adjudication. If the system does not reject the claim for additional information or review, the claim will be automatically adjudicated and an explanation of payment is generated and payment will be sent to the provider. If the claim is pended by the system for any reason, it is sent through a document flow queue to be manually processed by an examiner.

Electronic Receipt: The company receives approximately 86% of TRS claims electronically.

Adjudication: Allegian has an internal goal to automatically adjudicate 70% of the claims received at the Annapolis service center. For the TRS-ActiveCare account, approximately 29% of the claims are currently automatically adjudicated in Annapolis. The auto-adjudication rate for TRS is expected to increase as the transition to the Annapolis service center is finalized.

System Edits: The claims processing system has an edit to identify duplicate claims using key fields such as member, provider, procedure code, date of service, etc. However, our onsite testing revealed that the system lacks edits to identify duplicate services within a claim (see Fictitious Claims Testing section of this report).

The system identifies overpayments that result from clinical edits, upcoding, multiple procedure cut-backs, etc.

Pending Questionable Claims: System edit messages are either tied to associated processing rules which pend a claim for analyst intervention or there are edits that require correction before moving forward with claim finalization.
Audit Category IV: Allegian

Fraud Program and Procedures

When notified of any fraudulent activity the provider file is locked and an alert code is entered. Member reimbursements and foreign claims are not auto adjudicated and are subject to manual review.

Allegian has documented fraud policies. The policies are organized into three sections: (1) provider credentialing; (2) payment suspension and notification to providers of potentially fraudulent activities; and (3) notification to proper authorities of identified fraudulent activities.

Fictitious Claims Testing

During our onsite visit, we requested that Allegian process a number of fictitious claims for the purpose of testing system and process controls for accuracy and fraud, waste and abuse. The following fictitious claims were submitted to the live claims processing system. The detailed results are shown in the table below. In all tests except one, the system correctly denied or edited put the claim for further manual review. The system lacked an edit to identify a duplicate service within a claim.

<table>
<thead>
<tr>
<th>Description of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid provider number</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Invalid member</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Unspecified injectable drug (J3490)</td>
<td>Claim pended for addition information</td>
</tr>
<tr>
<td>Invalid procedure (999999)</td>
<td>Service denied</td>
</tr>
<tr>
<td>Non-covered procedure (87906)</td>
<td>Service denied</td>
</tr>
<tr>
<td>Duplicate claim</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Duplicate service within a claim</td>
<td>No edit</td>
</tr>
</tbody>
</table>

Recommendation: Consider adding soft system edits to flag duplicate services within a claim for further review. The edit should not flag services that are commonly delivered multiple times per day.

Conclusion

The fraud detection practices appear to be appropriate for the Annapolis office size. Manual and systematic edits and checks are largely effective, although opportunity exists to enhance systematic duplicate edits.

COMPLAINT AND APPEALS PROCESS

Allegian provided their appeal procedures as an attachment to the Administration Questionnaire. The information provided below is a summary of the details provided.
Audit Category IV: Allegian

Allegian will send an acknowledgment letter describing the complaint procedures and timeframes if Allegian determines that the complaint cannot be resolved within five days of receipt.

A member may appeal the complaint orally or in writing. The appeal is recorded in the LUMINEX claims processing system to await resolution. The participant is sent a determination letter upon resolution of the matter.

The information provided did not document the process for resolving the complaint, such as the credentials of the person reviewing the various compliant types or the content of the resolution letter.

**Recommendation:** Create a formal written policy for the Annapolis office regarding compliant and appeal procedures. The procedures should include the position/credentials of the personnel reviewing the complaint by type and a sample(s) resolution letter. If the final determination is a denial, the resolution letter should include the clinical basis for the decision (if applicable) and notice of the appellant’s right to seek review of the denial by an independent review organization (IRO).

**Reported Grievances and Complaints**

Allegian reported the following number of total complaints. Volumes were small for both plan years. Allegian reported that the majority of issues presented were payment disputes with no significant trends identified.

<table>
<thead>
<tr>
<th>Plan Year</th>
<th>Grievances</th>
<th>Grievances Referred for Medical Review</th>
<th>Grievances Resulting in Additional Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>15</td>
<td>3</td>
<td>5 (PHX)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>10</td>
<td>2</td>
<td>1 (PHX)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>15</td>
<td>0</td>
<td>1 (ANAPOLIS)</td>
</tr>
</tbody>
</table>

The Texas Department Insurance website reports two and one total complaints regarding Allegian in calendar years 2013 and 2014, respectively.
Audit Category IV: Allegian

TRAINING

All new hires report to a claims trainer for two to six weeks covering all aspects of claims processing required for each position. The training starts with classroom study and overview followed by hands-on system training in a test environment. Once the trainee is released to the claims processing unit, the trainee’s work is subject to 100% review. Junior examiners may not process claims exceeding payments of $1,000. If audit scores are acceptable, the percentage of claims reviewed is gradually decreased.

Topics included in the training are system processes, medical terminology, coding and claim forms, provider specialty guidelines, and processing guidelines (authorizations, COB, out of network, etc.).

In addition to new hire training, all staff are notified about new state and federal legislative changes and internal process changes via memorandum, email and updates to manuals. The adjudication manuals are available on-line, and are updated on an as needed basis.

Human Resources is responsible for coordinating back ground checks on new hires utilizing an outside agency. Verification of information on applications including prior employment, education and criminal background checks is completed using an outside agency.

We conclude that the training program for new examiners at Allegian is appropriate for the size of the Annapolis claims examiner department.

TRS-ACTIVECARE PROCESSING TIMELINESS

Membership eligibility for ActiveCare members is based on data files received from BlueCross BlueShield of Texas (BCBSTX), the ActiveCare self-insured plan administrator.

Allegian is required to send Identification (ID) Cards to all newly enrolled members and to current members, when a change is reported, within five (5) working days after the health plan receives the enrollment information.

Allegian provided a report showing each card issued from May through August 2014. The report showed the date the card was requested and the date the card was sent. According to the report, 100% of the cards were mailed within the 5 days of the request.
SUMMARY OF FINDINGS

Allegian has industry standard systems and processes. The staffing of the customer service and claims adjudication functions appears to be adequate in both size and experience for the membership. A review of the Health Plan’s controls through a Questionnaire instrument, operational walk through, interviews with key personnel and processing of fictitious claims indicate that Allegian generally has adequate system and process controls in place. The auditor noted the following recommendations to the plan:

- Annapolis’ internal reports show a high degree of accuracy in the population of auto-adjudicated claims – increasing the percentage of automation should enhance the overall performance of the service center. Also, conduct root cause analysis and improve training procedures to enhance the accuracy of manually processed claims.

- Consider adding soft system edits to flag duplicate services within a claim for further review. The edit should not flag services that are commonly delivered multiple times per day.

- Create a formal written policy for the Annapolis office regarding complaint and appeal procedures. The procedures should include the position/credentials of the personnel reviewing the complaint by type and a sample(s) resolution letter. If the final determination is a denial, the resolution letter should include the clinical basis for the decision (if applicable) and notice of the appellant’s right to seek review of the denial by an independent review organization (IRO).

Please see the following table for a description of the procedures and criteria applied to this review.
## Audit Category IV: Allegian

|------------------|----------------------|-----------------------------|---------------------------|------------------------|
| 1. To review for reasonableness the medical claims administration aspect of the specified HMO contracts and to verify the timelines and accuracy standards of claims processing for each HMO. The HMO’s compliance with its own standards shall be confirmed through this review. | Allegian completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
- Duplicate payments for claims cannot be processed. However no edit existed for duplicate services within a claim.  
- Claims cannot be paid to fictitious providers.  
- Claims cannot be paid to fictitious members.  
- Claims for ineligible services cannot be processed.  
- Claims for unlisted/non-existing and non-covered procedures edit for further review.  
Per questionnaire and interviews with key personnel, Allegian has procedures for the detection | TRS-ActiveCare Plan of Benefits  
- Allegian internal policies and procedures for claims adjudication  
- Allegian internal policies for utilization review  
- Allegian provider contracts and “Summary of Understanding” of provider contracts for network providers  
- American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
- COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
- Medicare coordination rules  
- Managed Care Handbook, Dr. Peter Kongstevedt.  | Contractual performance guarantees:  
- VI. K. 1. Must have a disaster recovery plan  
- VI. c., Must have a comprehensive plan to detect and deter fraud  | Internal performance goals:  
- Financial Accuracy 99%  
- Payment Accuracy 98%  
- Non-Payment 95%  
Sections I through VII of Allegian’s Questionnaire Response provided a detailed description of internal controls and processes. |

[^1]: Health Maintenance Organizations (HMO)  
[^2]: Allegian (HMO).  
[^3]: Allegian (HMO).  
[^4]: Allegian (HMO).
# Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures i</th>
<th>Criteria for Procedures ii</th>
<th>Contract Provisions iii</th>
<th>Internal Controls iv</th>
</tr>
</thead>
</table>
| Health Maintenance Organizations (HMO) | Allegian (HMO). | and prevention of fraud. Allegian provided documentation of its policies for detecting and preventing fraud through credentialing; notification of suspension of payments to providers suspected of fraud; and procedures for notifying the proper authorizes of identified fraudulent activity. | - Allegian uses clinical editing software for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.  
- Allegian’s internal utilization review (UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay.  
- The Allegian Questionnaire response included the results of internal quality results, indicating financial accuracy rates of | |

---

Prepared for  
Teacher Retirement System of Texas  
13
## Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audit</strong></td>
<td><strong>Vendor Providing Services</strong></td>
</tr>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Allegian (HMO).</td>
</tr>
<tr>
<td>Audit Procedures(^i)</td>
<td>Criteria for Procedures(^ii)</td>
</tr>
</tbody>
</table>
| 99.62% for the Phoenix office and 98.94% for the Annapolis office. However, the Annapolis office performance falls below industry and internal goals.  
  - Allegian provided a disaster recovery plan and a description of their adequate fraud controls as a part of their response to the Administrative Questionnaire. | | | |
| 2. To review for reasonableness the system of internal claims audit and processing controls used by the HMO to ensure the validity of HMO’s claims and that these claims are processed and paid in accordance with the terms of the HMO’s Summary | Allegian completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
  - Duplicate payments for claims cannot be processed. However no edit existed for duplicate services within a claim. |  
  - TRS-ActiveCare Plan of Benefits  
  - Allegian internal policies and procedures for claims adjudication  
  - Allegian internal policies for utilization review  
  - American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
  - COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
  - Medicare coordination rules | Internal performance goals:  
  - Financial Accuracy 99.0%  
  - Payment Accuracy 98.0%  
  - Non-Payment 95.0%  
  
  Sections I through VII of Allegian’s Questionnaire Response provided a detailed description of internal controls and processes. |
### Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures¹</th>
<th>Criteria for Procedures²</th>
<th>Contract Provisions³</th>
<th>Internal Controls⁴</th>
</tr>
</thead>
</table>
| Plan Description (SPD) and the HMO’s contract with the TRS-ActiveCare. The HMO’s compliance with its own standards shall be confirmed through this review. | • Claims cannot be paid to fictitious providers.  
• Claims cannot be paid to fictitious members.  
• Claims for ineligible services cannot be processed.  
• Claims for unlisted/non-existing and non-covered procedures edit for further review. | • Managed Care Handbook, Dr. Peter Kongstevedt | | |
| 3. To identify health claims processing problems or areas in need of further review or audit. | Allegian completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims was submitted to the claim system to verify basic fraud and abuse controls.  
• The Allegian Questionnaire response included the results of internal quality results, indicating financial accuracy rates of 99.62% for the Phoenix office and 98.94% for the Annapolis office. However, the Annapolis office | | | |

---

Prepared for  
Teacher Retirement System of Texas
## Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures(^i)</th>
<th>Criteria for Procedures(^ii)</th>
<th>Contract Provisions(^iii)</th>
<th>Internal Controls(^iv)</th>
</tr>
</thead>
</table>
| 4. To review the reasonableness of the Customer Service processes, including handling of complaints, including those brought to the Texas Department of Insurance. | The Questionnaire included specific questions about the customer service process, including compliant, appeals and their resolution. Additionally, while onsite the auditor interviewed key personnel responsible for the customer service function.  
- The Texas Department Insurance website reports two and one total complaints regarding Allegian in calendar years 2013 and 2014, respectively.  
- In fiscal year 2014, Allegian received 15 total complaints in its Annapolis office. | • TRS-ActiveCare Plan of Benefits  
• Allegian internal policies and procedures for claims adjudication  
• Allegian internal policies for utilization review  
• Managed Care Handbook, Dr. Peter Kongstevedt | | Section VI of Allegian’s response to the Administrative Questionnaire provide detailed description of the plan’s Customer Service controls and reporting. |
| 5. To review for reasonableness the timeliness of the issuance of identification cards. | Allegian provided an ID Cards turnaround time report, for May through August 2014. 100% of ID Cards were mailed within 5 working days, meeting Allegian internal goal of 5 days. | • TRS-ActiveCare Plan of Benefits  
• Allegian internal policies and procedures for claims adjudication  
• Managed Care Handbook, Dr. Peter Kongstevedt | | |

---

Prepared for  
Teacher Retirement System of Texas

16
## Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 6. To verify that each HMO follows its procedures with respect to the identification of potential areas of claims abuse, i.e., fraudulent claims and duplicate claims, overcharging by providers, unnecessary physician services, etc. | Allegian completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire includes the level of COB savings in terms of dollars and as a percentage of total paid dollars. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
- Duplicate payments for claims cannot be processed. However no edit existed for duplicate services within a claim.  
- Claims cannot be paid to fictitious providers.  
- Claims cannot be paid to fictitious members.  
- Claims for ineligible services cannot be processed.  
- Claims for unlisted/non-existing and non-covered procedures edit for | • COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
• Medicare coordination rules  
• Industry norms for COB recovery as a percentage of paid claims | Sections I through VII of Allegian’s Questionnaire Response provided a detailed description of internal controls and processes. |
## Audit Category IV: Allegian

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Allegian (HMO).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audit Procedures&lt;sup&gt;i&lt;/sup&gt;</th>
<th>Criteria for Procedures&lt;sup&gt;ii&lt;/sup&gt;</th>
<th>Contract Provisions&lt;sup&gt;iii&lt;/sup&gt;</th>
<th>Internal Controls&lt;sup&gt;iv&lt;/sup&gt;</th>
</tr>
</thead>
</table>
| further review. Allegian uses the following edits and systems to further ensure the reasonableness of payment:  
  - Allegian uses clinical editing software for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.  
  - Allegian’s internal utilization review (UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay.  
Also, the questionnaire contained questions regarding procedures to identify coordination/subrogation opportunities. Allegian was asked to quantify the actual COB/subrogation savings to Allegian. | | | |

---

<sup>i</sup> Audit Procedures

<sup>ii</sup> Criteria for Procedures

<sup>iii</sup> Contract Provisions

<sup>iv</sup> Internal Controls
Audit Category IV: Allegian

1. Need to know what audit procedures will be performed for each objective in order to provide reasonable assurance that the evidence is sufficient and appropriate to support the auditors’ findings and conclusions. These procedures will need to be formally put into our audit plan.

2. Ideally, at the time the program is established, governing bodies would define what constitutes successful performance and how it should be measured. This seldom occurs in practice. Consequently, the auditor must develop performance criteria.

3. Auditors should determine which laws, regulations, and provisions of contracts or grant agreements are significant within the context of the audit objectives and assess the risk that violations of those laws, regulations, and provisions of contracts or grant agreements could occur.

4. Auditors should obtain an understanding of internal controls that are significant within the context of the audit objectives. For internal control that is significant within the context of the audit objectives, auditors should assess whether internal control has been properly designed and implemented.
TABLE OF CONTENTS

BACKGROUND ............................................................................................................................ 2
CLAIM PROCESSING TIMELINESS .......................................................................................... 3
HIPAA ............................................................................................................................................ 4
INTERNAL AUDIT PROGRAM .................................................................................................. 4
CUSTOMER SERVICE ............................................................................................................... 12
COMPLAINT AND APPEALS PROCESS ................................................................................. 12
TRAINING ................................................................................................................................... 13
MEMBERSHIP PROCESSING TIMELINESS ........................................................................... 14
SUMMARY OF FINDINGS ........................................................................................................ 15
BACKGROUND

During fiscal years 2013 through 2014, the Teacher Retirement System of Texas (TRS) offered three commercial Health Maintenance Organization (HMO) plans to participants. The HMO plans are contracted on a fully insured basis. Scott & White Health Plan of Temple, Texas serviced approximately 13,000 in fiscal year 2013 and 17,800 in fiscal year 2014 of the TRS-ActiveCare HMO members. Scott & White attributes the significant increase in membership from 2013 to 2014 to the addition of more providers to the Scott & White network and improved pricing.

Sagebrush reviewed the medical claims administration procedures used by Scott & White Health Plan. The review included Scott & White’s response to a Claims Administration Questionnaire covering topics included in the plan’s Evidence of Coverage (EOC) and its contract with the TRS. Topics included accuracy of payment, timeliness of payment, internal controls, coordination of benefits, system and process edits for fraud and abuse, complaint and appeal procedures, examiner training, and compliance with identification card timeliness standards. Additionally, we reviewed the SSAE 16-equivalent report on internal control operations prepared by Scott & White’s accounting firm.

A walk-through Operational Review was conducted at the Scott & White Temple, Texas location on December 10, 2014 to confirm controls and procedures as reported in the Administrative Questionnaire. Key personnel were interviewed during the site visit with regard to actual application of stated policies, procedures and controls. We did not test claims samples to independently determine accuracy or timeliness rates as such tests were beyond the scope of this project.

Since the review of the prior audit period, fiscal years 2011 through 2012, Scott & White has made changes in leadership and various processes related to claims payment and quality. Any specific changes affecting TRS service are noted in the report.
CLAIM PROCESSING TIMELINESS

Turnaround time (TAT) is defined as the total number of days needed to process or deny a claim. The calculation covers the period from the date the claim is received to the day the claim payment is made, suspended or denied, plus one day.

Most third-party claim administrators strive to process 85%-90% of all claims within 14 calendar days and 99% within 30 days. Scott & White’s internal office goal is to process 90% of clean claims within 10 working days. Turnaround time for paper claims is measured from receipt in Scott & White’s mailroom vendor’s office.

Scott & White reported an average turnaround time of approximately 3.4 days as of November 2014. The reported time is from claims receipt to adjudication but does not include the time from adjudication to payment. Payments are typically issued on a weekly basis. Even when allowing extra time from adjudication to payment, it appears that Scott & White is exceeding its internal goals, industry standards and statutory requirements for prompt payment.
Audit Category V: Scott & White

HIPAA

Scott & White has developed a HIPAA compliance program that is managed by the office of the general counsel. They have documentation on technology and security changes that are in place and new or enhanced policies and procedures to address privacy and processing issues.

INTERNAL AUDIT PROGRAM

Scott & White provided a well-documented quality control process as an attachment to the Administration Questionnaire, outlining the purpose, goals and procedures of their internal audit program. Scott & White has a comprehensive internal audit program that is appropriate in scope for the size of their operations.

A quality control specialist performs a monthly audit, by examiner, to review claims processing accuracy. A 2% sample of all claims processed is selected for each examiner. A 5% random sample of auto-adjudicated claims are selected for audit. The claims are reviewed for accuracy in potentially 135 fields, and overall accuracy is determined by weighing the number of fields audited by the number of services in each claim. The quality control specialist then prepares a monthly audit summary that documents audit results, recommendations, and patterns that may be emerging. The claims manager and assistant claims supervisor review the audit summary each month.

Additionally, audits are conducted on the claims process itself, system configuration of provider contracts, and system configuration of benefits.
Audit Category V: Scott & White

Internal Audit Results

Scott & White internal claim audit program measures financial accuracy, payment accuracy and non-payment accuracy. Scott & White conducts audits of 2% and 5% of all claims processed manually and automatically, respectively. Scott & White has increased its internal goals to 99.0% accuracy for all measures over the previous audit period goals of 97% - 98%. Resulting internal audit reports, indicate that Scott & White’s performance met industry and internal standards for financial and payment accuracy in calendar years 2013 and 2014. The plan also met industry and internal standards for non-payment accuracy for 2014. The plan’s non-payment accuracy for 2013 met industry standards, while not meeting internal standards.

<table>
<thead>
<tr>
<th></th>
<th>Financial Accuracy</th>
<th>Payment Accuracy</th>
<th>Non-Payment Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott &amp; White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calendar Year 2013</td>
<td>99.12%</td>
<td>99.40%</td>
<td>98.77%</td>
</tr>
<tr>
<td>Scott &amp; White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calendar Year 2014</td>
<td>99.32%</td>
<td>99.57%</td>
<td>99.05%</td>
</tr>
<tr>
<td>Industry Standard</td>
<td>99.0%</td>
<td>95.0 – 97.0%</td>
<td>95.0%</td>
</tr>
<tr>
<td>Internal Standard</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
</tr>
</tbody>
</table>

Financial Accuracy: Scott & White defines financial accuracy as the total tested dollars paid minus the gross dollars in error, divided by the total tested dollars paid. The internal accuracy goal was 99.0% in calendar years 2013 and 2014. The generally accepted industry standard for financial accuracy is 99%.

The reported financial accuracy rate for internal audits was 99.12% and 99.32%, for calendar years 2013 and 2014, respectively. According to these results, Scott & White financial accuracy meets internal and industry standards for both calendar years 2013 and 2014.

Payment Accuracy: Scott & White defines payment accuracy as the number of tested claims paid correctly, divided by the number of tested claims paid. The internal accuracy goal was 99.0% in calendar year 2014. The generally accepted industry standard for payment accuracy is 95 - 97%.

The reported payment accuracy rate for internal audits was 99.40% and 97.57% for calendar years 2013 and 2014, respectively. According to these results, Scott & White met industry payment accuracy standards in both calendar years 2013 and 2014.

Non-Payment Accuracy: Scott & White defines non-payment (procedural) accuracy as the number of tested claims processed correctly, divided by the number of tested claims processed. The internal accuracy goal was 99.0% in calendar years 2013 and 2014. The generally accepted industry standard for this category is 95%.
Audit Category V: Scott & White

The reported overall non-payment accuracy rate for internal audits was 98.77% and 99.05% for calendar years 2013 and 2014, respectively. According to these results, Scott & White met industry non-payment accuracy standards in calendar year 2014. However, the plan’s non-payment performance fell slightly below internal standards for calendar year 2013.

Customer Service

Scott & White received a total of 5,191 and 10,020 ActiveCare customer service calls in fiscal years 2013 and 2014, respectively. In September 2012, Scott & White implemented an enhanced interactive voice response (IVR) system that allowed for a dedicated unit for ActiveCare calls. This is the first audit period where Scott & White could track ActiveCare call statistics separately.

In our review of the call center we observed the on-line and supplementary resources that the representatives use to respond to questions. The Customer Service Representatives respond to all calls received from members, providers and employers. They have access to the same system information that is available to the claims processors. Customer service representatives do not have system access to adjust payments, but they forward calls to the claims processing unit if necessary. All outside calls are routed through Customer service.

The self-reported results indicate that Scott & White’s performance in 2013 was within industry standards. However, the 2014 statistics fell outside industry standards for average speed to answer and abandonment rate.

<table>
<thead>
<tr>
<th></th>
<th>Average Speed to Answer</th>
<th>Abandonment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott &amp; White Fiscal Year 2013 Average</td>
<td>21 seconds</td>
<td>1.06%</td>
</tr>
<tr>
<td>Scott &amp; White Fiscal Year 2014 Average</td>
<td>82 seconds</td>
<td>5.38%</td>
</tr>
<tr>
<td>Industry Standard</td>
<td>30 seconds</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Overpayments

Scott & White identifies overpayments through a number of methods using internal and third party resources to maximize overpayment identification and recovery. The overpayment recovery program observed at Scott & White is aggressive and well within industry standards. Overpayments may be identified through the following means:

- **Corrected claims submission from provider:** When a provider submits corrected claims information, the appropriate original claim is adjusted to reflect a refund or “recoup” from future provider payments.
Audit Category V: Scott & White

- **Internal audit**: If the internal audit/quality control program identifies an overpayment, the excess payment is “recouped from future provider payments.

- **Refund sent by provider**: If the provider identifies an overpayment and sends a refund, an adjustment is made to the original claim to reflect the refund.

- **Contracted third party overpayment services**: Scott & White contracts with three vendors for credit balance and bill audit recoveries. AIM and Accent conduct hospital credit balances recovery services. Scott & White also contracts with The Bratton Firm of Austin, Texas for subrogation recovery services. When an overpayment is identified and collected, the claims are adjusted to reflect the payments.

- **Contracted duplicate and subrogation services**: Scott & White contracts with HRI for duplicate payment and subrogation activities. HRI identifies and collects monies from subrogation activities and sends monthly refunds to Scott & White. All claims affected are adjusted to reflect the refund reimbursement.

All overpayments and refunds are reflected in the claims history. When possible, all identified overpayments are recouped from future payments to the provider. If an overpayment is identified with a provider that is not used frequently, a refund request will be submitted to the provider requesting a refund. Second and third request letters follow after thirty days. If after sixty days the provider does not submit the refund, the recovery is forwarded to a contracted collection agency.

**Coordination of Benefits**

Scott & White has a separate coordination of benefits (COB) unit that gathers COB information from members and handles specific questions related to COB scenarios. Scott & White updated its COB procedures in April 2012. Enhancements include sending COB questionnaires to new enrollees and annual questionnaires to existing subscribers.

As claims are processed, they edit against the membership files, which contain the COB information. If COB is indicated in membership history, or an explanation of benefits (EOB) is attached to the claim, the claim will pend for investigation by designated COB examiners.

COB information is maintained in the member eligibility file, tracking effective dates of other coverage. Scott & White also checks for other insurance through an annual member letter.

Scott & White also identifies potential COB through their affiliation with the Scott & White Hospital and Clinic. The clinic or hospital notifies the health plan when attorneys have called requesting information for subrogation activities.

Additionally, monthly reports are generated related to members with potential COB. Correspondence is sent to members turning sixty-five, requesting updated Medicare COB information. Patients with end-stage-renal-disease are also investigated to determine if other insurance may be primary.

*Prepared for*

Teacher Retirement System of Texas
CLAIM PROCESSING CONTROLS

Claim Processing

Mailroom: In February 2012, Scott & White outsourced the mailroom function to SDS, located in Eagan, Minnesota. Paper claims are now mailed directly to SDS from the providers. SDS is responsible for the imaging, optical character recognition and data entry of the paper claims. SDS sends the electronic claims to Axiom Systems, where the data is then transmitted to the Scott & White claims processing system, Amisys, through an electronic data interface (EDI) exchange.

Scott & White reports, and we observed, that a small number of claims are sometimes misdirected by providers to the mailroom at the Scott & White Health Plan. The mailroom personnel send the claims to SDS via Federal Express the same day that they are received.

The EDI feeds are subject to quality assurance processes both at SDS and Scott & White to ensure the accuracy of the transmitted data. Also, the image of the original paper claim submission is available for the claims examiners to review as needed.

The outsourcing of the mailroom is a process enhancement, offering specialization and efficiencies over the previous in-house process. Specifically, the new process resulted in an increase in auto-adjudication rates.

Electronic Receipt: Scott & White receives over 93% of the total claims volume directly through electronic data interface (EDI).

Adjudication: The electronic claims, whether originally received EDI or paper, are loaded to the Amisys claims system for processing. Approximately 90% of the claims auto-adjudicate with no manual intervention. If the Amysis system does not reject the claim for additional information or review, an explanation of payment is generated and payment will be sent to the provider once per week. If the claim is pended by the system for any reason, it is sent through a document flow queue to be worked by an examiner.

In addition to claim processing edits applied by the Amysis system, claims are also electronically reviewed by the McKesson ClaimCheck system and the iHealth system. These systems, often referred to as clinical editors, apply tests to identify services where payment should be reduced for multiple, bundled, incidental and mutually exclusive procedures among other industry payment rules. The ClaimCheck and iHealth clinical editors are two commonly used editors in the industry.
**Audit Category V: Scott & White**

**Fraud Program and Procedures**

Within Scott & White, practices to prevent internal fraud include internal quality control audits, separation of eligibility and claims processing, and system security at screen level by job function.

An internal audit team reviews reports generated by LexisNexis FW&A software, formerly EDI Watch, to identify sources of potential provider fraud. There are documented investigation processes and a hotline established to report potential fraud. There are also system controls in place to identify questionable claims. A cross-functional committee is responsible for reviewing fraud operations and directing internal audit activities, including protocols for investigating potential fraud cases.

Providers with questionable practices may be put on a 100% review by the Medical Director and monitored for billing appropriateness.

Access to the claims processing system is limited to the claims team and they are the only team that has access to process claims. They do not have access to process payables or change/add provider demographics. There are two staff members on the Configuration Team that perform all changes/additions to provider demographics. Finance is the only functional area with the security access to perform payables. This separation of duties is an example of controls to prevent employee claims fraud.

**Fictitious Claims Testing**

During our onsite visit, we requested that S&W process a number of fictitious claims for the purpose of testing system and process controls for accuracy and fraud, waste and abuse. The following fictitious claims were submitted to the live claims processing system. The detailed results are shown in the table below. In each instance, the system correctly denied or edited put the claim for further manual review.

<table>
<thead>
<tr>
<th>Description of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid provider number</td>
<td>Claim denied in this case, although a “dummy” provider number is used to generate checks to members. The “dummy” ID used for this purpose is pre-assigned in a separate function.</td>
</tr>
<tr>
<td>Invalid member</td>
<td>Claim denied</td>
</tr>
<tr>
<td>Unspecified injectable drug (J3490)</td>
<td>Claim pended for additional information</td>
</tr>
<tr>
<td>Unspecified supply (A9999)</td>
<td>Paid zero for this service</td>
</tr>
<tr>
<td>Non-covered service (87906)</td>
<td>Service denied</td>
</tr>
<tr>
<td>Duplicate service within a claim</td>
<td>Claim pended for additional review</td>
</tr>
<tr>
<td>Duplicate claim</td>
<td>Claim denied</td>
</tr>
</tbody>
</table>
Audit Category V: Scott & White

Conclusion

A best practice that we have observed is segregating duties of people with access to create provider records and people with access to release payments.

The other fraud detection practices appear to be appropriate, including manual and systematic edits and checks.
Audit Category V: Scott & White

CUSTOMER SERVICE

Scott & White uses full-time employees to staff the call center, even during peak call volume periods. During peak periods, Scott & White Health Plan relies on overtime and cross-functionally trained employees to take calls, rather than temporary workers. Customer service representatives (CSR) document calls in the Macess system. The CSRs answer all calls, both providers and members.

Since the prior audit period, Scott & White implemented an enhanced interactive voice response (IVR) system that facilitates the routing of calls to TRS specialists, upgraded its Avaya telephone system, and added Panviva, a new online support system for CSRs. With the upgrades, Scott & White is now able to queue TRS calls to specific agents with additional training on the TRS benefit plans. Panviva enhances CSR efficiencies, guiding the CSRs through calls with situation-specific process flows.

The unit has a report to benchmark members making multiple calls to the Health Plan. The unit is developing procedures to place outreach calls to multiple-contact members (3+ calls) to improve customer satisfaction and service.

Members can request a “personalized appointment”, meaning the member can make an appointment to come to the Health Plan to visit with a CSR in person.

The audio from the calls is captured using the Witness 360 system, allowing for audits and feedback. A minimum of seven calls per CSR are reviewed for quality each month.

During the prior audit, the Scott & White stated plans to implement the screen capture module of Witness 360, allowing reviews of the CSR’s knowledge and efficient use of the Macess system. The screen capture feature has not been implemented as of this audit.

COMPLAINT AND APPEALS PROCESS

Scott & White Health Plan provided their complaint and appeal procedures as an attachment to the Administration Questionnaire. The information provided below is a summary of the details provided.

Complaints may be received orally or in writing. Scott & White will send an acknowledgment letter, describing the complaint procedures and timeframes, within five days of receiving a complaint. Within thirty days of receiving non-emergency complaints, Scott & White will investigate and resolve the issue.

A member may appeal the complaint, orally or in writing, if they are not satisfied with the health plan’s resolution. The appeal is then sent to an appeal panel composed of health plan staff, physicians, and enrollees. If specialty care is in dispute, the panel must also include a specialist in that field. The appeals process will come to a resolution within thirty days of receiving the notice of appeal.

Prepared for
Teacher Retirement System of Texas
Scott & White also provided additional details regarding appeal of adverse determinations and independent review of adverse determinations.

The only change to the appeals process since the prior audit was to the handling of appeals involving contractual issues. Previously, all appeals were sent to the Medical Director for review. Now, contractual issues are referred to the Director of Dispute Resolution for review and resolution.

**TRAINING**

Scott & White has developed a training program with separate schedules for permanent and temporary claims processors. A trainer works closely with the quality control department to insure that new claims examiners meet processing standards.

Training is completed one-on-one with a trainer over a time period of up to six months. It appears that the claims examiners training schedule is modified, per examiner, depending on the progress that is made at each step of the schedule. Examiners are given an overview of the claims process during the first week of training. During the initial training period, examiners are subject to daily audit. Post-training, the examiners are audited monthly and offered continuing education.

Generally, Scott & White hires experienced examiners. However, in the event a novice is hired, the employee may attend Scott & White University classes to learn coding terminology and billing procedures.

We conclude that the training program for new examiners at Scott & White is appropriate for the size of the claims examiner department (15 examiners and 12 adjustments/appeals staff).
MEMBERSHIP PROCESSING TIMELINESS

Membership eligibility for public education employees is based on file updates received from BlueCross BlueShield of Texas (BCBSTX), the ActiveCare self-insured administrator. In 2012, the eligibility data feed from BCBSTX to Scott & White was enhanced to include all eligibility records with each exchange. Prior to the enhancement, BCBSTX only transmitted changes in eligibility. The enhanced file requires less programming and manipulation by Scott & White, reducing opportunities for programming errors.

Scott & White does not recover overpayments that result from retro-actively terminated members.

Scott & White is required to send Identification (ID) Cards to all newly enrolled members and to current members, when a change is reported, within five (5) working days after the health plan receives the enrollment information.

Scott & White provided an ID Cards turnaround time report for September 1, 2013 through August 31, 2014. The report detailed the number of ID Cards mailed each month. The report demonstrated that the plan mailed the TRS ID cards within 5 working days each month for transactions such as add member, add dependent or drop dependent. 100% of ID Cards were mailed within 5 working days.
SUMMARY OF FINDINGS

Scott & White Health Plan has industry standard systems and processes. The staffing of the customer service and claims adjudication functions appears to be adequate in both size and experience for the membership. A review of the Health Plan’s controls through a Questionnaire instrument, operational walk through, interviews with key personnel and processing of fictitious claims indicate that Scott & White Health Plan has adequate system and process controls in place.

Please see the following table for a description of the procedures and criteria applied to this review.
<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 1. To review for reasonableness the medical claims administration aspect of the specified HMO contracts and to verify the timelines and accuracy standards of claims processing for each HMO. The HMO’s compliance with its own standards shall be confirmed through this review. | S&W completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including: | • TRS-ActiveCare Plan of Benefits  
• S&W internal policies and procedures for claims adjudication  
• S&W internal policies for utilization review  
• S&W provider contracts and “Summary of Understanding” of provider contracts for network providers  
• American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
• COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
• Medicare coordination rules  
• Managed Care Handbook, Dr. Peter Kongstevedt. | • Contractual performance guarantees:  
  o VI. K. 1. Must have a disaster recovery plan  
  o VI. c., Must have a comprehensive plan to detect and deter fraud | Internal performance goals:  
• Financial Accuracy 99.0%  
• Payment Accuracy 99.0%  
• Non-Payment 99.0% |

Sections I through VII of S&W’s Questionnaire Response provided a detailed description of internal controls and processes.
## Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>claims as well as the profiling of suspicious member and provider activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• S&amp;W licenses ClaimCheck for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• S&amp;W’s internal utilization review (UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay. Mental health and substance abuse UR is provided by Health Integrated, Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Other system edits for high units and other indicators of abusive and/or potentially fraudulent activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The S&amp;W Questionnaire response included the results of internal quality results, indicating a financial accuracy rate of 99.12% in 2013 and 99.32% in 2014. This rate meets internal and industry goals for performance.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Scott &amp; White Health Plan (HMO).</td>
</tr>
<tr>
<td><strong>Audit Objectives</strong></td>
<td><strong>Audit Procedures</strong></td>
</tr>
<tr>
<td>This performance level is consistent with TRS reports of no service problems with the HMO.</td>
<td>S&amp;W completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:</td>
</tr>
<tr>
<td>• S&amp;W provided a disaster recovery plan and a description of their adequate fraud controls as a part of their response to the Administrative Questionnaire.</td>
<td>• Duplicate payments cannot be processed.</td>
</tr>
<tr>
<td>2. To review for reasonableness the system of internal claims audit and processing controls used by the HMO to ensure the validity of HMO’s claims and that these claims are processed and paid in accordance with the terms of the HMO’s Summary Plan Description (SPD) and the HMO’s contract with the TRS-ActiveCare. The HMO’s compliance with its own standards shall be confirmed through this review.</td>
<td>• Duplicate services within a claim are pended for further review.</td>
</tr>
<tr>
<td></td>
<td>• Claims cannot be paid to fictitious providers.</td>
</tr>
<tr>
<td></td>
<td>• Claims cannot be paid to fictitious members.</td>
</tr>
<tr>
<td></td>
<td>• Claims for ineligible/non-covered services cannot be processed.</td>
</tr>
<tr>
<td></td>
<td>• Claims for unlisted/non-</td>
</tr>
<tr>
<td></td>
<td>listed services cannot be processed.</td>
</tr>
</tbody>
</table>

Sections I through VII of S&W’s Questionnaire Response provided a detailed description of internal controls and processes.
## Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Scott &amp; White Health Plan (HMO).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 3. To identify health claims processing problems or areas in need of further review or audit. | S&W completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. A sample of fictitious claims was submitted to the claim system to verify basic fraud and abuse controls.  
- The S&W Questionnaire response included the results of internal quality results, indicating a financial accuracy rate of 99.12% in 2013 and 99.32% in 2014. This rate meets internal and industry goals for performance. This performance level is consistent with TRS reports of no service problems with the HMO.  
- S&W is currently working with an external auditor on a high cost drug audit. Results are not currently available but should be requested during the next TRS audit.  
- No specific problems were identified for further review. | S&W internal policies and procedures for claims adjudication  
- S&W provider contracts and “Summary of Understanding” of provider contracts for network providers  
- American Medical Association (AMA) rules for coding and multiple/incidental/mutually exclusive procedures  
- COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
- Medicare coordination rules  
- Managed Care Handbook, Dr. Peter Kongstevedt | | |
### Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Scott &amp; White Health Plan (HMO).</td>
</tr>
</tbody>
</table>

#### Audit Objectives

<table>
<thead>
<tr>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
</table>
| 4. To review the reasonableness of the Customer Service processes, including handling of complaints, including those brought to the Texas Department of Insurance. | **The Questionnaire included specific questions about the customer service process, including complaint, appeals and their resolution. Additionally, while onsite the auditor interviewed key personnel responsible for the customer service function.**  
- The Texas Department of Insurance reported 18 complaints for this health plan as of December 31, 2013 and eight as of December 31, 2014.  
- In fiscal year 2013, S&W received 85 complaints. 39 were referred for additional medical review. 38 of the 39 resulted in an additional payment to the provider.  
- In fiscal year 2014, S&W received 65 complaints. 39 of the 65 were referred for additional medical review. 26 of the 39 resulted in an additional payment to the provider.  
- The number of total complaints per TRS participant is small and has decreased over the prior audit period. | **TRS-ActiveCare Plan of Benefits**  
- **S&W internal policies and procedures for claims adjudication**  
- **S&W internal policies for utilization review**  
- **Managed Care Handbook, Dr. Peter Kongstevedt** | Section VI of S&W’s response to the Administrative Questionnaire provide detailed description of the plan’s Customer Service controls and reporting. |
| 5. To review for reasonableness the Scott & White provided an ID Cards turnaround time report, | **TRS-ActiveCare Plan of Benefits** |
### Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Maintenance Organizations (HMO)</strong></td>
<td>Scott &amp; White Health Plan (HMO).</td>
</tr>
<tr>
<td><strong>Audit Objectives</strong></td>
<td><strong>Audit Procedures</strong></td>
</tr>
</tbody>
</table>
| timeliness of the issuance of identification cards. | for fiscal years 2013 and 2014. 100% of ID Cards were mailed within 5 working days, meeting Scott & White internal goal of 5 days. | - S&W internal policies and procedures for claims adjudication  
- Managed Care Handbook, Dr. Peter Kongstevedt | | |
| 6. To verify that each HMO follows its procedures with respect to the identification of potential areas of claims abuse, i.e., fraudulent claims and duplicate claims, overcharging by providers, unnecessary physician services, etc. | S&W completed an Administrative Questionnaire, providing information on systems, policies and procedures, and specific system and process controls. The Questionnaire includes the level of COB savings in terms of dollars and as a percentage of total paid dollars. A sample of fictitious claims were submitted to the claim system to verify basic fraud and abuse controls, including:  
- Duplicate payments cannot be processed.  
- Duplicate services within a claim are pended for further review.  
- Claims cannot be paid to fictitious providers.  
- Claims cannot be paid to fictitious members.  
- Claims for ineligible/non-covered services cannot be processed.  
- Claims for unlisted/non-existing procedures edit | - COB guidelines published by the National Association of Insurance Commissioners (NAIC)  
- Medicare coordination rules  
- Industry norms for COB recovery as a percentage of paid claims | | |

Sections I through VII of S&W’s Questionnaire Response provided a detailed description of internal controls and processes.  
S&W does not track COB recovery as a percentage of paid claims.

---

Prepared for  
**Teacher Retirement System of Texas**
Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit Objectives</th>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>for further review. S&amp;W uses the following edits and systems to further ensure the reasonableness of payment:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Injectable drugs are edited for further review if the units billed exceed the limit for the J Code and pricing is denoted in the provider contract.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• S&amp;W licenses ClaimCheck for the purpose of identifying unbundling, mutually exclusive/incidental and multiple procedures on a pre-payment basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• S&amp;W’s internal utilization review (UR) department pre-certifies and provides concurrent review for TRS medical and surgical stays to ensure appropriate treatment and length of stay. Mental health and substance abuse UR is provided by Health Integrated, Inc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Also, the questionnaire contained questions regarding procedures to identify coordination/subrogation opportunities. S&amp;W was asked to quantify the actual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Audit Category V: Scott & White

<table>
<thead>
<tr>
<th>Audit Objective</th>
<th>Vendor Providing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance Organizations (HMO)</td>
<td>Scott &amp; White Health Plan (HMO)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audit Procedures</th>
<th>Criteria for Procedures</th>
<th>Contract Provisions</th>
<th>Internal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>COB/subrogation savings to S&amp;W HP. Savings as a percent of paid dollars were comparable to that of other plans in the industry.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TAB 4
# Audit of Information Technology Controls at Investment Service Providers

**September 16, 2015**  
TRS Internal Audit Department

## Business Objectives

| Ensure that service providers of critical Investment Management Division (IMD) systems adequately protect confidential IMD data |
| Ensure that service providers of critical IMD systems have established processes to ensure that systems are authorized, complete, accurate, and available |
| Ensure that service providers of critical IMD systems have governance and oversight processes appropriately established |

## Business Risks

| Inappropriate or unauthorized logical or physical access |
| Insecure storage or transmission of confidential data |
| Unauthorized, incomplete, or unintended system changes |
| Unavailability of critical data required by business |
| Disruption from disasters or emergencies |
| Inability to resume operations timely |
| Inadequate sub-vendor selection, monitoring, and oversight |
| Information technology (IT) is not aligned with business strategy |
| Lack of third line of defense for monitoring & reporting |

## Management Controls

### Management Controls Assessed

| Approval and granting of new user access |
| Access termination |
| User access reviews |
| Logical access security |
| Physical access security |
| System development or upgrade methodology |
| Separate environments |
| Segregation of duties |
| Operational event configurations & monitoring |
| Version control: Development, Test, Production environments |
| Operational event alerting and review |
| Backup and restoration |
| Sub-vendor selection due diligence, ongoing vendor monitoring |
| Management and Board oversight/governance |
| Independent audit function |

### Results

- Management controls are designed effectively to achieve business objective.
- Management controls are designed effectively to achieve business objective.
- However, we noted two opportunities to enhance controls.

### Recommended Actions

- None
- None
- Refine IMD Contract Management checklist and log for data security
- Request and review Service Organization Control (SOC) 2 report

### Management Responses

- N/A
- N/A
- IMD and IT Department agree with the recommendations and thus will implement recommended actions.

---

Legend of Results:  
- **Red** - Significant to TRS  
- **Orange** - Significant to Business Objectives  
- **Yellow** - Other Reportable Issue  
- **Green** - Positive Finding or No Issue

Project #: 15-301
September 16, 2015

Audit Committee, Board of Trustees
Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the audit of Information Technology Controls at Third-Party Investment Service Providers, as included in the Fiscal Year 2015 Audit Plan.

- The audit objective was to determine whether internal controls are designed at select two third-party service providers hosting critical Investment Management Division systems to meet management’s business objectives. We did not test the effectiveness of many controls due to the limited nature of this engagement.

In addition to assessing the design of controls at the third-party service providers, this project was initiated to help develop an ongoing oversight tool that could be used by the Investment Management Division (IMD) and the Information Technology (IT) Department to monitor the service providers’ IT system controls. As part of this project, Internal Audit engaged an external service provider (Protiviti, Inc.) to obtain additional expertise in the area of information technology controls.

Business objectives of the Investment Management Division (IMD) related to the IT systems of the select two third-party service providers are:

- To ensure that service providers hosting critical IMD systems adequately protect confidential IMD data
- To ensure that service providers hosting critical IMD systems have established adequate processes to ensure that systems are authorized, complete, accurate, and available.
- To ensure that service providers hosting critical IMD systems have governance and oversight processes appropriately established.

Based on our audit results, we determined that management controls (including IT systems controls) had been designed at the selected third-party service providers hosting critical IMD IT systems to achieve business objectives. We did not identify any significant issues. However, we did recommend that: (a) IMD refine the IMD Contract Management checklist and log to ensure that TRS has engaged IT service providers on TRS data security terms prior to signing a new or amended contract agreement; and (b) TRS request that key third-party service providers produce a Service Organization Control (SOC) 2 report to provide TRS with independent assurance that IT security controls are in place and operating effectively.
Additionally, as part of the audit, we delivered a third-party service provider oversight tool that can be used by IMD and IT Department to monitor key service providers’ IT system controls to determine whether their systems maintain confidentiality, integrity, and availability of TRS data.

Results of our procedures are presented in more detail in the Results and Recommendations section (page 8). The objective, scope, methodology, and conclusion of our audit are described in Appendix A (page 12).

BACKGROUND

IMD is supported by third-party service providers who also provide the IT systems supporting critical business functions. In particular, IMD and Information Technology Department work together with the two investment service providers selected for our audit to ensure that these service providers are able to maintain confidentiality, integrity, and availability of critical systems. Each year, TRS pays approximately $20 million to these two service providers to obtain ongoing critical investment and related services.

The IT Controls at Third-Party Investment Service Providers Audit covered manual and automated processes related to the two service providers selected for our audit that host and support critical Investment Systems for IMD. The scope of the audit focused on the service provider’s ability to maintain the confidentiality, integrity, and availability of critical TRS data.

Due to the proprietary and confidential nature of the IT systems provided and maintained by two service providers, our audit focused on the design of controls. Our scope did not include assessment of the effectiveness of these controls and thus we did not test any transactions processed by the two service providers’ systems. However, we did verify that some of these controls were covered as part of the third-party’s review of the service provider’s systems (i.e., Service Organization Control reviews).

To assess the design of IT controls at two service providers, we identified and used general control standards widely used in the industry for the following areas:

- IT governance
- System access and security
- Change management
- Vendor management
- Computer operations

Industry sources of IT general control standards include the Control Objectives for Information and Related Technology (COBIT) framework by Information Systems Audit and Control Association (ISACA), International Organization for Standardization (ISO) 27001 and ISO 27002, and guidance from the Federal Financial Institutions Examination Council (FFIEC). We also included certain general controls included in the TRS Information Security Manual.
# BUSINESS OBJECTIVES, RISKS, AND CONTROLS

For the audit of IT controls at Investment Management Division’s (IMD) two third-party service providers selected, we obtained information about the following three business objectives, as well as the related risks and controls that service providers’ management has established to mitigate these risks:

<table>
<thead>
<tr>
<th>Business Objective (BO)</th>
<th>Inherent Risks (without considering controls)</th>
<th>Management Controls</th>
<th>Procedures to Assess Design of Management Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>(BO1) To ensure that vendors hosting critical Investment Management Division (IMD) systems adequately protect confidential IMD data.</td>
<td>(R01) Systems, data, and applications may be compromised by unauthorized or inappropriate access. (R02) Access that is no longer needed for a user is not disabled or terminated in a timely manner. (R03) Access levels granted to a particular user are excessive or too restrictive based on job function. (R06) Confidential data may be inappropriately or insecurely transmitted.</td>
<td>(BO1-C01) New user access to vendor systems must be approved by the user's manager to help ensure all access granted is based on job responsibilities and free from unmitigated segregation of duties (SOD) conflicts. (Mitigates risk R01) (BO1-C02) Vendor's new employees and contractors must pass a FBI Criminal background check prior to being granted logical or physical access. (Mitigates risk R01) (BO1-C03) User Administration access to create/modify/delete 1) user accounts, 2) user roles or templates, and/or 3) user access permissions at the vendor is restricted to a minimum number of IT administrators who do not have end user responsibilities to the applications they administer. (Mitigates risks R01 and R03) (BO1-C04) Vendor's IT management periodically reviews privileged user activity logs to ensure that administrators do not perform inappropriate activity within the applications they administer. (Mitigates risks R01 and R03) (BO1-C05) User access to vendor systems is removed no later than the last day of employment for terminated employees or the last day in the prior role for employees who no longer require access due to changes in their job responsibilities. (Mitigates risks R01 and R02) (BO1-C06) User access is reviewed at least annually by vendor's management to ensure all access granted at a point in time is 1) appropriately restricted based on job responsibilities and 2) free from unmitigated segregation of duties (SOD) conflicts. (Mitigates risks R01 and R02) (BO1-C07) Vendor user account passwords must be reset upon initial login and account and password configurations must match the current</td>
<td>(BO1-T01, BO1-T04, and BO1-T05) Verify that systems, data, and applications have appropriate logical or physical access requested, approved, and granted by designated personnel, and verify that access that is no longer needed for a user is disabled or terminated in a timely manner. (Assessment of controls BO1-C01, BO1-C02, BO1-C03, BO1-C05, BO1-C07, and BO1-C08) (BO1-T02 and BO1-T03) Verify that access levels are appropriately granted to a particular user based on required job responsibilities. (Assessment of controls BO1-C04 and BO1-C06) (BO1-T07, BO1-T08, BO1-T09) Verify that data is classified according to risk, and confidential or sensitive data is required to be appropriately and securely transmitted. (Assessment of controls BO1-C11, BO1-C12, and BO1-C13)</td>
</tr>
<tr>
<td>Business Objective (BO)</td>
<td>Inherent Risks (without considering controls)</td>
<td>Management Controls</td>
<td>Procedures to Assess Design of Management Controls</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>TRS policy, where systematically possible, including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Length (minimum of 8 characters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Expiration (42 days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Password complexity enabled (e.g. uppercase, lowercase, special characters, or numbers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Password history of 3 prior passwords</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Account lockout threshold (3-10 attempts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Account lockout duration of 30 minutes or unlocked by admin (Mitigates risk R01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO1-C08) Vendor's users are assigned unique user IDs that are not shared. (Mitigates risks R01 and R03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO1-C11) Vendor's IT management has configured the IT environment with Intrusion Detection/Prevention Systems (IDS/IPS), Firewall, Data Loss Prevention (DLP), and Anti-Virus solutions to help prevent or detect unauthorized or malicious activities. (Mitigates risk R01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO1-C12) The vendor encrypts confidential customer data at the file and transmission level, according to defined data encryption standards, whenever sent outside the organization. (Mitigates risk R06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO1-C13) Remote/mobile access to vendor’s internal systems is performed through VPN sessions which are encrypted, configured to require authentication, and configured to timeout after 30 minutes of inactivity. (Mitigates risks R01 and R06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO1-T06) Verify that only authorized individuals gain physical access to the data center and approved visitors must be escorted at all times. Also verify that appropriate security measures are in place at the data center to prevent potential loss of power, improper heating/cooling, fires, or flooding from environmental disasters or emergencies. (Assessment of controls BO1-C09 and BO1-C10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R04) Unauthorized individuals gain physical access to the data center.</td>
<td>(BO1-C09) Physical access to the vendor’s data center is restricted to appropriate IT personnel through a locked door requiring magnetic ID badge to gain access to help ensure IT assets are properly secured. (Mitigates risk R04)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R05) Loss of power, improper heating/cooling, fires, or flooding from environmental disasters or emergencies.</td>
<td>(BO1-C10) The vendor’s data center is equipped with appropriate safeguards including a fire suppression system, uninterrupted power supply (UPS), HVAC systems, and raised floors to help ensure that IT assets in the data center are protected from environmental threats. (Mitigates risk R05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(BO2) To ensure that vendors hosting critical IMD systems have established adequate processes to ensure</td>
<td>(BO2-C01) Vendor’s IT management acquires and develops systems according to a formally established SDLC methodology: Planning, Analysis, Design, Development, Testing,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R07) Program changes that do not support business objectives and/or critical business processes, including</td>
<td>(BO2-T01, BO2-T03, and BO2-T04) Verify that only authorized, complete, and intentional program changes supporting business objectives and/or critical business processes are</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Objective (BO)</td>
<td>Inherent Risks (without considering controls)</td>
<td>Management Controls</td>
<td>Procedures to Assess Design of Management Controls</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>those that are unauthorized, incomplete or unintended, may be introduced into the Production environment. (R08)</td>
<td>Critical program changes may not be implemented within the timeframe required by business users in order to meet the business objective. (R09)</td>
<td>Implementation, Post-Implementation Validation. (Mitigates risks R07, R08, R09, and R10)</td>
<td>introduced into the Production environment. (Assessment of controls BO2-C01, BO2-C03, BO2-C04, and BO2-C05)</td>
</tr>
<tr>
<td>Program changes may be lost or over-written if multiple developers are working on a single piece of code at the same time. (R10)</td>
<td>Emergency program changes may be implemented within the Production environment that bypass key program change controls. (R07)</td>
<td>(BO2-C02) Vendor's IT management has configured at least three separate IT environments (Development, Quality Assurance, and Production) for all systems for the proper creation, testing, and promotion of program changes to help ensure the production environment is free from programming errors and/or fraud. (Mitigates risk R07)</td>
<td>(BO2-T02) Verify that version control systems are place to prevent program changes from being lost or over-written in the event that multiple developers are working on a single piece of code at the same time. (Assessment of controls BO2-C02 and BO2-C09)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BO2-C03) Access to create/update programs/applications in the vendor's Development environment is restricted to Developers who do not have access to create/update programs/application in the Production environment. (Mitigates risk R07)</td>
<td>(BO2-T05) Verify that critical program changes are implemented within the timeframe required by business users in order to meet the business objective. (Assessment of controls BO2-C06, BO2-C07, and BO2-C08)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BO2-C04) Access to update programs/applications in the vendor's Production environment is restricted to Production Support personnel who do not have access to Development environments where program changes are created. (Mitigates risk R07)</td>
<td>(BO2-T06) Verify that emergency program changes cannot be implemented within the Production environment prior to receiving the required approvals from a Change Approval Board and additional approval from Senior Management personnel. Also verify that emergency program change documentation is required to be documented within the following business day. (Assessment of control BO2-C10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BO2-C05) Appropriate users perform testing of all program changes to vendor systems before they are moved to production. (Mitigates risk R07)</td>
<td></td>
</tr>
<tr>
<td>Business Objective (BO)</td>
<td>Inherent Risks (without considering controls)</td>
<td>Management Controls</td>
<td>Procedures to Assess Design of Management Controls</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------</td>
<td>---------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>(BO3) To ensure that vendors hosting critical IMD systems have governance and oversight processes appropriately established.</td>
<td>(R11) Critical data will not be available as required by the business. (Mitigates risk R11)</td>
<td>(BO2-C10) Emergency changes to vendor's critical applications and IT infrastructure are appropriately approved by vendor's management prior to implementation in production. Standard change documentation and approvals must be completed in a timely manner following implementation. (Mitigates risks R07 and R10)</td>
<td>(BO2-T07) Verify that operational event monitoring and alerting tools are configured to prevent performance, availability, and security incidents from being undetected. (Assessment of controls BO2-C11 and BO2-C12)</td>
</tr>
<tr>
<td></td>
<td>(R12) Unmonitored networks/systems may cause performance, availability, and security incidents to go undetected. (Mitigates risks R11, R13, and R14)</td>
<td>(BO2-C11) Vendor's IT management has deployed automated systems that manage job scheduling, event monitoring, network and server availability, and server utilization throughout the network infrastructure to ensure that incidents are properly identified for resolution. (Mitigates risk R11)</td>
<td>(BO2-T08) Verify that critical data is required to be appropriately backed up based on business requirements. Also verify that various data restore tests are initiated by business users and are performed throughout the year to ensure critical systems’ data is not lost due to an error in the restoration process. (Assessment of controls BO2-C13 and BO2-C14)</td>
</tr>
<tr>
<td></td>
<td>(R13) Critical data is not adequately backed up based on business requirements.</td>
<td>(BO2-C12) Vendor's IT management has defined, reviewed and annually approves a policy to ensure that operational events that are not part of standard operation (incidents, problems and errors) are recorded, analyzed, reported and resolved or escalated within one business day. (Mitigates risk R12)</td>
<td>(BO2-T09) Verify that mission critical business functions are included as part of the formalized Business Continuity Management/Disaster Recovery processes to help ensure operations resume timely after an event or disaster. (Assessment of controls BO2-C15 and BO2-C16)</td>
</tr>
<tr>
<td></td>
<td>(R14) Critical systems' data is lost due to the restore process not working.</td>
<td>(BO2-C13) Vendors have configured mission critical customer data to be automatically backed up through daily incremental backups and weekly full backups. (Mitigates risks R11 and R13)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(R15) Mission critical business functions may not be able to continue operations timely after a disaster.</td>
<td>(BO2-C14) The vendor's backup restoration process is tested at least annually. (Mitigates risks R11, R13, and R14)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BO2-C15) The vendor's enterprise-wide business continuity management and disaster recovery (BCP/DR) plan is reviewed on at least an annual basis. (Mitigates risk R15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BO2-C16) The vendor's enterprise-wide business continuity management and disaster recovery plan is tested on at least an annual basis. (Mitigates risks R11 and R15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BO3) To ensure that vendors hosting critical IMD systems have governance and oversight processes appropriately established.</td>
<td>(BO3-C01) Vendor's IT management has established, reviewed and annually approves procedures to evaluate and manage potential and new third party vendors. (Mitigates risk R16) (Mitigates risks R11, R13, and R14)</td>
<td>(BO3-T01) Verify that appropriate vendor selection and due diligence processes are established to prevent exposing the company to financial risk. Also verify that adequate monitoring and oversight of vendors have been established to prevent potential operational issues or non-compliance. (Assessment of controls BO3-C01, BO3-C02, and BO3-C03)</td>
</tr>
<tr>
<td></td>
<td>(R16) Inadequate vendor selection and due diligence processes expose the company to financial risk. (Mitigates risks R16, R11, and R13)</td>
<td>(BO3-C02) Vendor's IT management monitors key third party sub-vendors to ensure that they are maintaining an adequate control environment to meet business requirements via review of each vendor's performance, compliance, and financial risk.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(R17) Inadequate monitoring and oversight of vendors could result in operational issues or non-compliance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRS Internal Audit**

September 16, 2015  Audit of IT Controls at Third-Party Investment Service Providers  Page 6
<table>
<thead>
<tr>
<th>Business Objective (BO)</th>
<th>Inherent Risks (without considering controls)</th>
<th>Management Controls</th>
<th>Procedures to Assess Design of Management Controls</th>
</tr>
</thead>
</table>
| (R18)                   | Third-party service providers maintaining or supporting critical applications are not performing according to the established contract or agreement. | sub-vendor’s SSAE 16. (Mitigates risk R17)  
(BO3-C03) Vendor's IT management reviews that required controls documented in the User/Client Control Consideration section of the relevant sub-vendor SSAE 16's are in place within the IT environment. (Mitigates risk R18)  
(BO3-C09) TRS vendor contracts or service level agreements (SLAs) include TRS's documented vendor contract standards/requirements related to Privacy and Data Security. (Mitigates risk R18) | (BO3-T06) Inspect and compare TRS's vendor contracts or service level agreements (SLAs) to TRS's documented vendor contract standards / requirements related to privacy and data security. (Assessment of control BO3-C09) |
| (R19)                   | IT is not aligned with the business strategy. | (BO3-C04) Vendor's IT management has identified the required core competencies and developed recruitment, retention, and training programs to ensure that the organization has the skills to utilize IT effectively to achieve the stated objectives. (Mitigates risk R19) | (BO3-T02) Verify that vendor's IT is appropriately aligned with the business strategy. (Assessment of control BO3-C04) |
| (R20)                   | Appropriate roles and responsibilities are not clearly defined.  
(R21) Resource performance metrics are not clearly defined. | (BO3-C05) The vendor's Board approves the organization's ongoing IT and security process and institutes appropriate governance for the IT and security functions, by assigning clear and appropriate roles and responsibilities to the board of directors, management, and employees. (Mitigates risk R20)  
(BO3-C06) On a quarterly basis, the vendor's Board reviews IT management's process performance and service delivery to help ensure the vendor's IT department is delivering value in supporting the enterprise's strategy and objectives. (Mitigates risk R21) | (BO3-T03) Verify that appropriate roles and responsibilities are clearly defined. Also verify that resource performance metrics are clearly defined. (Assessment of controls BO3-C05 and BO3-C06) |
| (R22)                   | A risk plan has not been defined or is inadequate. | (BO3-C07) On an annual basis, vendor's IT management performs a risk assessment as a part of the enterprise-wide risk assessment to help ensure ongoing IT risk exposures are fully identified and properly mitigated. (Mitigates risk R22) | (BO3-T04) Verify that an appropriate risk management plan has been formally defined. (Assessment of control BO3-C07) |
| (R23)                   | Resources and business impact are not monitored to ensure IT projects deliver results that support business objectives. | (BO3-C08) An Internal Audit function at the vendor exists as a third line of defense to provide independent monitoring and reporting of vendor's IT management's practices, policies, and controls. (Mitigates risk R23) | (BO3-T05) Verify that resources and business impact are monitored to ensure IT projects deliver results that support business objectives. (Assessment of control BO3-C08) |
RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

Based on audit results, we determined that management controls had been designed at the key service providers hosting critical IMD IT systems to achieve business objectives. No significant issues were identified. The positive audit results as well as opportunities for management to enhance controls related to the select service providers hosting critical IMD IT systems are described below.

POSITIVE RESULTS

A. Access and Security Controls

- Upon passing an FBI Criminal background check, new user access to vendor systems must be approved by the user's manager to help ensure all access granted by a designated administrator is based on job responsibilities and free from unmitigated segregation of duties (SOD) conflicts.
- User access to vendor systems is removed no later than the last day of employment for terminated employees or the last day in the prior role for employees who no longer require access due to changes in their job responsibilities.
- User access is reviewed at least annually by vendor's management to ensure all access granted at a point in time is 1) appropriately restricted based on job responsibilities and 2) free from unmitigated segregation of duties (SOD) conflicts.
- Physical access to the vendor's data center, equipped with appropriate environmental safeguards, is restricted to appropriate IT personnel through a locked door requiring magnetic ID badge to gain access to help ensure IT assets are properly secured.
- Vendor's IT management has configured the IT environment with Intrusion Detection/Prevention Systems (IDS/IPS), Firewall, Data Loss Prevention (DLP), and Anti-Virus solutions to help prevent or detect unauthorized or malicious activities.

B. Change Management and Computer Operations Controls

- Vendor's IT management has configured at least three separate IT environments (Development, Quality Assurance, and Production) for the proper creation, testing, and promotion of program changes.
- Access to create/update programs/applications in the vendor's Development environment is restricted to Developers who do not have access to create/update programs/application in the Production environment, and access to the Production environment is restricted to Production Support personnel.
- Vendor's IT management approves the movement and timing of scheduled program changes into production, notifies key stakeholders and impacted parties on the timing and impact of planned changes, and tracks all authorized program change requests to ensure they are complete and implemented timely to production.
• Vendor's IT management has deployed automated systems that manage job scheduling, event monitoring, network and server availability, and server utilization throughout the network infrastructure to ensure that incidents are properly identified for resolution.

C. Vendor Management and IT Governance Controls

• Vendor's IT management has established, reviewed and annually approves procedures to evaluate and manage potential and new third party sub-vendors.
• Vendor's IT management monitors key third party sub-vendors to ensure that they are maintaining an adequate control environment to meet business requirements via review of each sub-vendor’s SSAE 16.
• The vendor's Board approves the organization's ongoing IT and security process and institutes appropriate governance for the IT and security functions, by assigning clear and appropriate roles and responsibilities to the board of directors, management, and employees.
• On a quarterly basis, the vendor's Board reviews IT management's process performance and service delivery to help ensure the vendor's IT department is delivering value in supporting the enterprise's strategy and objectives.
• An Internal Audit function at the vendor exists as a third line of defense to provide independent monitoring and reporting of vendor's IT management's practices, policies, and controls.

SIGNIFICANT RESULTS¹

No significant issues and recommendations were identified.

OTHER REPORTABLE RESULTS

1. Refine IMD Contract Management checklist to ensure that TRS has engaged IT service providers on TRS data security terms prior to signing a new or amended contract.

To mitigate the risks resulting from potential data and security breaches, TRS has developed standardized data security terms for use in new contracts and existing contracts. The standard privacy and data security provision included in recent contracts requires that services providers use reasonable security practices to make services secure and prevent unauthorized access to or use of TRS’ computer networks, computer systems, or information and that service providers shall not release any information provided by TRS or to which services providers are provided access. The provision further requires that if the security or any TRS data is compromised or breached by the service provider or if service provider’s systems are compromised by a third party, the service provider will notify TRS immediately. The contract with one of the service providers did not include the new data security provision because the contract was executed before TRS adopted the standard data security terms.

Requiring data security as part of the contract may not prevent potential data breach incidents in the future. However, including this requirement could help investment service providers

¹ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.
be more accountable by paying closer attention to this type of risk as well as providing legal recourse in case of data or security breaches.

**Recommendation**

We recommend that IMD refine the IMD Contract Management checklist and log to ensure that TRS has engaged IT service providers on all relevant, material and applicable TRS data security terms prior to signing a new or amended contract agreement.

**Management Responses**

Management concurs with the recommendation. IMD will refine Contract Management checklist and log in order to ensure that TRS has engaged IT service providers on all relevant, material and applicable TRS data security terms and conditions. If there is an exception made on a contract, reasons for those exceptions will be documented. The target implementation date is October 1, 2015.

2. **Request that key third-party service providers produce a SOC 2 report to provide IMD with independent assurance that controls are in place and operating effectively**

Service Organization Control (SOC 1, SOC 2, or SOC 3) reports are a comprehensive framework put forth by the American Institute of Certified Public Accountants (AICPA) geared towards reporting on controls at service organizations. The SOC framework is a specific set of reporting initiatives aimed at helping to clarify, distill, and bring about much needed transparency for reporting on controls at service organizations.

We confirmed that one of the two third-party service providers only provides SOC 1 reports (including a separate SOC 1 report on IT general controls) while the second service provider only provides a SOC 3 report. As explained in the text box, SOC 1 reports are primarily limited to financial reporting systems while SOC 3 reports do not provide sufficiently detailed information confirming whether or not specific controls have been operating effectively at the selected service providers. One of the two IT vendors is currently working toward producing a SOC 2 report instead of a SOC 3 report.

SOC 2 reports could help IMD with their due diligence, governance, risk management, compliance and information security efforts for relevant third party service providers. It provides assurance to clients such as TRS that the vendor has adequate control systems in place to safeguard client’s data and information.

**Types of SOC reports**

**SOC 1** – A SOC 1 is a report on controls at a service organization that may be relevant to use entities’ internal control over financial reporting.

**SOC 2** – A SOC 2 report is based on the predefined Trust Services Principles. The purpose of a SOC 2 report is to evaluate an organization’s information systems relevant to security, availability, processing integrity, confidentiality and privacy.

**SOC 3** – A SOC 3 report, like SOC 2, is based on the Trust Services Principles. The difference is that this report does not detail the testing performed.
Recommendation

We recommend that TRS request that key third-party service providers produce a SOC 2 report, if a SOC 1 report on IT general controls is unavailable, to provide TRS with independent assurance that controls are in place and operating effectively. Once obtained, TRS should review information in the report and determine whether key processes they are relying upon are occurring as intended.

Management Responses

Management agrees with the recommendation. IMD will refine Contract Management checklist and log to ensure that TRS request a SOC 2 report from IT service providers. IT Department will review the report to ensure adherence to applicable TRS information technology policies. The target implementation date is January 31, 2016.

* * * * *

We appreciate IMD and Enterprise IT management and staff for their assistance, courtesy, and professionalism extended to us during this audit. We also appreciate cooperation and support provided by staff members from the select two third-party service providers.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Hugh Ohn, CIA, CPA, CFA, FRM
Director of Investment Audit Services

Nick Ballard, CPA, CFA
Senior Investment Auditor
APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted this performance audit in accordance with generally accepted government auditing standards contained in the Government Auditing Standards issued by the Comptroller General of the United States and the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

TRS management (both IMD and IT Department) is responsible for monitoring IT controls provided by third-party service providers while service provider management is responsible for providing and maintaining internal control of IT systems. Our responsibility is to express an opinion based on our audit.

AUDIT OBJECTIVE

The audit objective was to determine whether internal controls are designed at select two third-party service providers hosting critical IMD systems to meet management’s business objectives. We did not test the effectiveness of many controls due to the limited nature of this engagement.

Business objectives of the Investment Management Division (IMD) related to the IT systems provided by the select two third-party service providers are:

- To ensure that service providers hosting critical Investment Management Division (IMD) systems adequately protect confidential IMD data.
- To ensure that service providers hosting critical IMD systems have established adequate processes to ensure that systems are authorized, complete, accurate, and available.
- To ensure that service providers hosting critical IMD systems have governance and oversight processes appropriately established.

The secondary objective of the project was to help IMD and Enterprise IT Department develop an ongoing third-party service provider oversight tool that could be used to monitor the service providers’ IT system controls.
SCOPE

The scope of the audit included general controls of two key IT vendors with regard to Access and Security, Change Management, Computer Operations, Vendor Management, and IT Governance during the period from February 1, 2014 through January 31, 2015.

The audit scope included the design of the IT controls at select two third-party service providers hosting critical IMD systems as well as limited review of IMD and Information Technology Department’s contracts with these two vendors.

Our audit did not include testing the effectiveness of the controls established in the two vendors’ systems regarding their capabilities to maintain confidentiality, integrity and availability. However, we verified that these controls are covered as part of the third-party’s review of the vendor’s systems (i.e., SOC report reviews).

METHODOLOGY

Our methodology included obtaining information on IMD management’s business objectives and risks, and focused on key processes and monitoring controls that the select two service providers’ management has established to address significant risks. To meet the audit objectives, we specifically performed the following procedures (through inspection of vendor’s SSAE-16 SOC 1 reports, inspection of vendor’s SSAE-16 SOC 3 report, inspection of information security procedures/policies, additional observations, and/or inquiries with vendors’ management). We verified or observed the following:

- Systems, data, and applications seem to have appropriate logical or physical access requested, approved, and granted by designated personnel.
- Access that is no longer needed for a user is disabled or terminated in a timely manner.
- Access levels seem to be appropriately granted to a particular user based on required job responsibilities.
- Only authorized individuals gain physical access to the data center and approved visitors must be escorted at all times.
- Appropriate security measures were in place at the data center to prevent potential loss of power, improper heating/cooling, fires, or flooding from environmental disasters or emergencies.
- Data is classified according to risk, and confidential or sensitive data is required to be appropriately and securely transmitted.
- Only authorized, complete, and intentional program changes supporting business objectives and/or critical business processes seem to be introduced into the Production environment.
- Critical program changes seem to be implemented within the timeframe required by business users in order to meet the business objective.
- Version control systems seem to be in place to prevent program changes from being lost or over-written in the event that multiple developers are working on a single piece of code at the same time.
- Emergency program changes cannot be implemented within the Production environment prior to receiving the required approvals from a Change Approval Board and additional approval from Senior Management personnel.
• Emergency program change documentation is required to be documented within the following business day.
• Operational event monitoring and alerting tools seem to be configured to prevent performance, availability, and security incidents from being undetected.
• Critical data is required to be appropriately backed up based on business requirements.
• Various data restore tests are initiated by business users and are performed throughout the year to ensure critical systems’ data is not lost due to an error in the restoration process.
• Mission critical business functions are included as part of the formalized Business Continuity Management/Disaster Recovery processes to help ensure operations resume timely after an event or disaster.
• Appropriate vendor selection and due diligence processes seem to be established to prevent exposing the company to financial risk.
• Adequate monitoring and oversight of vendors seem to be established to prevent potential operational issues or non-compliance.
• Vendor contracts or service level agreements (SLAs) did not include TRS's documented vendor contract standards/requirements related to Privacy and Data Security.
• IT seems to be appropriately aligned with the business strategy.
• Appropriate roles and responsibilities are clearly defined.
• Resource performance metrics are clearly defined.
• An appropriate risk management plan seems to be formally defined.
• Resources and business impact seem to be monitored to ensure IT projects deliver results that support business objectives.
• Physical and environmental controls at the vendors’ data center.

CONCLUSION

Based on our audit work, we determined that management controls are designed at the select two investment service providers hosting critical IMD IT systems to achieve business objectives. No significant issues were identified. However, we did recommend that IMD refine IMD Contract Management checklist and log to ensure that TRS has engaged IT service providers on TRS data security terms prior to signing a new or amended contract agreement. We also recommended that TRS request that key IT service providers produce a SOC 2 report, if a SOC 1 report on IT general controls is unavailable, to provide TRS with independent assurance that controls are in place and operating effectively.

Additionally, as part of the audit, we delivered a service provider oversight tool that can be used by IMD and Enterprise IT to monitor key vendors’ IT system controls to determine whether their systems maintain confidentiality, integrity, and availability of TRS data.
TAB 4B
### Business Objectives

<table>
<thead>
<tr>
<th>Real Assets Portfolio:</th>
<th>Risk Group:</th>
<th>Investment Accounting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate long-term rate of return in excess of policy benchmark and provide portfolio diversification</td>
<td>Monitor and manage investment risk for the Trust, including risks related to Real Assets portfolio</td>
<td>Ensure that private markets investments are reported at fair value in accordance with industry standards</td>
</tr>
</tbody>
</table>

### Business Risks

- Selecting unqualified managers
- Investments not fitting strategy
- Key person risk
- Strategy or style drift
- Fraud or mismanagement

- Not capturing relevant risks
- Risks not measured or incorrectly measured
- No reporting of risk violations
- No timely resolution on risk alerts or violations

- Investment values not reported at fair value
- TRS’ or partnership’s valuation policy not consistent with industry standards
- Failure to take action on valuation deficiencies noted

### Management Controls

- Premier list of managers
- Staff and consultants’ due diligence
- Internal Investment Committee (IIC) approval
- Semi-annual portfolio review

- Risk types and risk limits included in Investment Policy Statement
- Risk data provided by a third party
- Monthly risk report
- Risk report to the Risk Management Committee

- Monitoring of partnership values
- TRS Securities Valuation Guidelines
- Audit of partnership financials required
- Tracking of audited financial reports

### Controls Tested

- Premier list
- Due diligence
- IIC approval
- Staff’s continuous monitoring

- Risk limits calculated by a third party
- Reporting of risk metrics to IMD management and the Board
- Reporting of each deal’s impact on risk budget

- Reconciliation of partnership values
- TRS Securities Guidelines
- Tracking of audited partnership financial reports

### Results

- Management controls are operating effectively to achieve business objective

### Recommended Actions

- None

### Management Responses

- N/A
The purpose of this memo is to report the interim results of Internal Audit’s tests of Investment Management Division (IMD) controls for the second half of fiscal year 2015. The results of these tests are combined with prior results to express the overall opinion on IMD controls based on the tests performed in the past three years. This overall opinion is included in section 4.C of the Audit Committee Book. For the second half of fiscal year 2015, we tested controls related to the Real Assets portfolio which is managed by the External Private Markets (EPM) group of the IMD. We also tested controls of the Risk Group of the IMD which is responsible for analyzing and reporting risks related to the Trust assets, including the Real Assets portfolio. In addition, we tested controls of the Investment Accounting team which oversees the values of the Real Assets portfolio.

OVERVIEW

Characteristics of Real Assets (RA) Investments

Real assets represents physical or tangible assets that have value due to their substance or properties. Real assets include real estate, commodities, oil, precious metals, agricultural land, power and utility distribution systems, oil and gas pipelines, ports, rails, and timber. Since Texas statutes prohibit TRS from directly owning real assets or physical commodities, TRS invests primarily in limited partnership investment vehicles to gain exposure to this asset class. The partnerships are managed by a General Partner (GP) which specializes in buying, selling, or owning real assets. Ultimately, the underlying real assets owned by the partnerships are sold in the public market or to other buyers, thus realizing a return on each investment.

Investments in real assets funds share similar characteristics as private equity (PE) investments, such as illiquidity and lack of transparency as well as potential for higher returns and diversification. Furthermore, real assets investments exhibit additional characteristics such as higher maintenance and storage costs. In addition to providing diversification benefits, these investments are well-suited for inflationary economic environments as real assets investments tend to outperform other asset classes during these periods.
TRS Real Assets Portfolio

According to the TRS Investment Policy Statement (IPS), the primary long-term objective of the Real Assets Portfolio is to contribute favorably to diversification of the Total Fund through exposure to real assets’ low or negative correlation to the Public Markets portfolios. The portfolio also strives to provide competitive returns through capital appreciation.

The IPS specifies that the current target asset allocation for the Real Assets portfolio is 16% of the Total Fund with a minimum range of 11% and a maximum range of 21%. The performance benchmark for the Real Assets portfolio is the NCREIF (National Council of Real Estate Investment Fiduciaries) ODCE (Open-End Diversified Core Equity), lagged one quarter.

To meet the portfolio objectives, the TRS Real Assets portfolio has diversified investments in a broad cross section of the following attributes: strategy, geography, property types, size of investment, vintage year, and the number of funds or investment managers represented in the portfolio. For example, TRS Real Assets portfolio pursue the following five strategies:

- **Core**: Institutional quality, best-located and best-leased assets in the market in each of the traditional property types (office, multifamily, retail, industrial)
- **Value-Add**: Return-enhancing strategies executed at the property level designed to enhance value through execution of one or more of the following strategies: lease-up, rehabilitation, or repositioning
- **Opportunistic**: Broad range of risk and return via opportunity funds, specialized investments, and mezzanine debt or equity with the majority of strategies involving some level of development or distress
- **Real Assets Special Situations (RASS)**: Publicly traded shares of listed Real Estate Investment Trusts (REITs) and real estate operating companies (REOCs) or other real asset related entities, public or private real asset debt, energy pipelines Master Limited Partnerships (MLPs)
- **Other Real Assets**: Infrastructure, oil and gas, commodities, agricultural real estate, timber, and other opportunistic investment providing value enhancement with relatively low expected volatility

The Real Assets team of the External Private Markets (EPM) group within the IMD manages the Real Assets portfolio. This team, led by the Senior Managing Director of the EPM and Senior Director of Real Assets, consists of investment managers, associates, and analysts. These Real Assets team members are responsible for conducting initial due diligence (before making capital commitments to Real Assets funds) as well as performing continuous monitoring of Real Assets funds in which TRS invested. The team is also assisted by outside advisors and consultants.

As of June 30, 2015, the TRS Real Assets portfolio (including principal investments but excluding Strategic Partners or Emerging Managers) committed capital to 144 funds (with 55 managers) and the total amount of capital commitment was approximately $25.0 billion. The net asset value of the portfolio was approximately $15.4 billion which represents approximately 11.7% of the Total Fund. According to State Street Bank’s PureView investment performance report, one-year and five-year returns of the TRS Real Assets portfolio (including Real Assets
funds with Strategic Partners and Emerging Managers) were 13.15% and 13.59%, respectively, outperforming its benchmark by 75 basis points and 14 basis points, respectively.

**Risk Analysis and Reporting**

The Risk Group within the IMD is responsible for monitoring, managing, and reporting investments-related risks for the Trust. Article 10 of the Investment Policy Statement identifies different types of risks relevant to management of Trust assets, including market risk, currency risk, credit risk, liquidity risk and operational risk. Additionally, the Investment Policy Statement requires that the IMD monitor various risk measures, including asset allocation limits, downside risk, and tracking error, and report them to the Board of Trustees on a semi-annual basis.

The Risk Group provides various types of support for the Real Assets portfolio. First, as part of investment analysis on the proposed Real Assets deal, the Risk Group performs investment return analysis under different market conditions or scenarios. Second, before each deal is approved by the Internal Investment Committee (IIC), the Risk Group analyzes and presents the impact of the proposed deal on the risk budget, in term of Value at Risk (VaR) and tracking error changes. Third, the Risk Group monitors and reports whether certain asset class prices (including Real Assets) are approaching bubble territory. Finally, in compliance with the requirement of the Investment Policy Statement, the Risk Group reports risk metrics to the Risk Management Committee of the Board of Trustees on a semi-annual basis.

**Accounting and Reporting of TRS Real Assets Investments**

As TRS’ book of record, the custodian (State Street Bank) performs accounting and financial reporting of the Real Asset portfolio. Based on quarterly financial reports submitted by general partners (GP) as well as the records of fund transfers between GPs and TRS, State Street Bank prepares monthly financial reports on fair values of TRS’ partnership interest in the Real Assets portfolio. State Street Bank is also responsible for measuring and reporting performance of TRS investments, including the Real Asset portfolio.

The Investment Accounting team, reporting directly to the Chief Financial Officer (CFO) outside the IMD, reviews and oversees the fair values of Real Assets investments prepared by State Street Bank. Specifically, the team is responsible for verifying that the values of TRS’ investments in Real Assets partnerships (as a limited partner) are complete and accurate according to TRS Valuation Guidelines, which is accomplished by comparing quarterly financial statements reported from GPs to State Street Bank’s reports, tracking and comparing cumulative funding amounts to the total commitments, and reviewing the partnerships’ audited financial statements on an annual basis. The Investment Accounting team is also responsible for ensuring that wire transfers of funds related to private markets investments (including Real Assets) are complete and made as requested by the IMD.
FINDINGS AND RECOMMENDED ACTIONS

Overall, we determined that management controls at the IMD are operating effectively to achieve the business objective of the Real Assets portfolio. Examples of the positive results we noted during our sample testing of Real Assets investments and transactions included the following:

- Investment staff’s initial due diligence was thorough, covering all important areas (such as key person provision and valuation policies)
- Investment staff’s due diligence results supported what was recommended to the Internal Investment Committee
- All Real Assets deals were with managers in the Premier List and scrutinized prior to the approval by the Internal Investment Committee
- Semi-annual portfolio reviews were conducted to analyze manager performance, fund performance, and the underlying portfolio holdings of the fund
- Risk impact analysis was included in real assets investment recommendations presented to the Internal Investment Committee
- Total funded amount of each fund was within the committed capital
- Monthly and quarterly reconciliations of values per General Partner records, Investment Accounting’s records, and State Street Bank’s records were performed for all investments tested
- Quarterly financial statements and annual audited reports from General Partners were tracked and updated
- For dissolved funds, final audited statements were received from General Partners and the amounts of funds returned to TRS were supported by these statements
- Access to record management and portfolio performance monitoring information technology (IT) systems was limited to appropriate personnel

No significant issues or control deficiencies were identified. However, we noted similar issues we identified in our testing of the Private Equity portfolio during the first half of the fiscal year, which are related to inconsistent documentation of staff’s due diligence and monitoring activities. After we reported this issue in March, 2015, IMD management implemented our recommendation by issuing Due Diligence and Monitoring Guidelines in June 2015. These new Guidelines provide clear documentation and monitoring expectations for External Private Markets staff. For these reasons, we are not recommending any further action on this issue.

In our previous memo dated March 11, 2015, we recommended that Investment Accounting provide clear guidelines for acceptable accounting and valuation standards for Private Equity investments. Since Investment Accounting has implemented part of this recommendation and is in the process of implementing the remaining parts before the revised target implementation date of March 1, 2016, we are not repeating this recommendation in this memo.
TAB 4C
OVERALL OPINION OF IMD INTERNAL CONTROLS
September 16, 2015
TRS Internal Audit Department

**Business Objectives**
To maintain an effective internal control environment in support of the TRS mission of prudently investing and managing Trust assets

**Business Risks**
According to the Committee of Sponsoring Organizations of the Treadway Commission’s (COSO) *Internal Control – Integrated Framework*, risks related to five internal control components are:
- **Control environment** is not maintained or remains weak
- **Risk assessment** is not conducted to identify or mitigate internal or external risks
- **Control activities** do not ensure effective and efficient operations, reliable financial reporting, or compliance with applicable laws, regulations, and policies
- **Information and communication** is inaccurate, not timely, or ineffective
- **Monitoring activities** are not being performed

**Internal Controls**
Examples of internal controls established for each control component are:
- **Control environment** - Ethics policy; Board approval of investment policy; Delegated investing authority; Internal Investment Committee (IIC); Annual employee evaluation (i.e., 360° Evaluation)
- **Risk assessment** – Asset allocation limits; Risk measures (including tracking error); Risk impact on proposed deals; Asset bubble monitoring; Consideration of regulatory changes
- **Control activities** – Segregation of duties; Approval of transactions; Reconciliation of trades; Due diligence checklists; IIC approval of private markets investments; IT access controls
- **Information and communication** – Investment performance reports; Investment risk reports; Quarterly/Annual financial reports on partnerships; Transparency reports
- **Monitoring activities** – Asset and risk exposure report; Investment performance monitoring; Cumulative Sum (CUSUM) signals; Recertification process; Participation in Limited Partner Advisory Board meetings; Semi-annual portfolio review; Daily/weekly compliance reports

**Controls Tested**
In the past three fiscal years (2013-2015) IMD’s internal controls were tested in a total of 29 internal and external projects, including internal audits and quarterly investment compliance tests, and the audits completed by the State Auditor’s Office (SAO).

**Results**
In our opinion, internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet IMD’s business objectives. No significant control deficiencies were identified during our audits or quarterly compliance tests in the past three fiscal years.

**Positive Findings**
- Risk information included in the reports to the Board of Trustees and management
- IIC approval of proposed deals
- Process for due diligence (for both External Public Markets and External Private Markets)
- Consultants’ prudence letters
- Approval and reconciliation of trades (for both cash securities trades and derivatives trades)
- Input checks on derivatives models
- Qualitative award of the incentive pay supported by 360° annual evaluation
- Wire transfer controls, including authorization, review, callbacks, and reconciliation

Legend of Results:
- **Red** - Unsatisfactory
- **Orange** - Major Improvement Needed
- **Yellow** - Some Improvement Needed
- **Green** - Effective

Project #: 15-301
EXECUTIVE SUMMARY

We have completed the Overall Opinion of Investment Management Division (IMD) Internal Controls as included in the Fiscal Year 2015 Audit Plan. IMD’s business objectives include maintaining an effective internal control environment in support of TRS’ mission of prudently investing and managing trust assets.

The purpose of this report is to provide overall opinion on whether internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet IMD’s business objectives. This opinion is based on the results of the past three fiscal years’ (2013 through 2015) audits and quarterly compliance tests of IMD’s groups, portfolios, operations, and activities.

In our opinion, internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet the business objectives. Results of a total of 29 audits and quarterly compliance tests in the past three fiscal years did not identify any significant control deficiencies. Some opportunities to enhance controls were identified and management has implemented or is in the process of implementing all of the prior recommendations. The table in Appendix B (page 7) lists the IMD areas where Internal Audit or external service providers tested controls during the previous three fiscal years. Results and Recommendations section (page 2) provides information about Internal Audit’s positive findings as well as information on prior recommendations.

Our evaluation of internal controls at IMD was based on the internal control framework (“The COSO Internal Control – Integrated Framework”) updated by COSO\(^1\) in 2013. The table in Appendix C (page 8) provides information on five internal control components, 17 COSO principles, and examples of controls applicable to IMD.

The audit objective, scope, methodology and conclusion are described in Appendix A (page 5).

---

\(^1\) COSO stands for the Committee of Sponsoring Organizations of the Treadway Commission. COSO is a joint initiative of five private sector organizations dedicated to develop frameworks and guidance on enterprise risk management, internal control and fraud deterrence. The five participating organizations are the American Accounting Association, American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), the Association of Accountants and Financial Professional in Business (IMA) and the Institute of Internal Auditors (IIA).
RESULTS AND RECOMMENDATIONS

During fiscal years 2013 through 2015, a total of 29 internal and external projects of IMD were completed, including quarterly investment compliance tests and the audits completed by the State Auditor’s Office (SAO).

The following table shows the breakdown of the number of projects (i.e., audits and quarterly compliance tests) by Internal Audit and external parties in the past three fiscal years:

<table>
<thead>
<tr>
<th>Project Name (Project Number)</th>
<th>FY 15</th>
<th>FY 14</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-Annual Testing of Investment Controls of Private Equity and Real Assets (15-301)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit of Information Technology Controls at Third-Party Investment Service Providers (15-301)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly Investment Testing Investment Policy Statement (IPS), Securities Lending Policy (SLP), Ethics Policies, Wire Transfer Procedures, and Incentive Comp Calculations (15-302)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly Test Results of Investment Controls of (14-301)</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures (14-302, 13-304)</td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Audit of Emerging Manager Program (13-305)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Audit of Derivatives (13-303)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Contractual Allowances in Asset Management Contracts (13-302)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Audit of the Teacher Retirement System’s Financial Statements, Fiscal Years 2012, 2013, and 2014 (State Auditor’s Office)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Incentive Compensation at the Teacher Retirement System, the Employees Retirement System, and the Permanent School Fund, Plan Year 2012, 2013, and 2014 (State Auditor’s Office)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A Follow-up Audit Report on Ethics Policies for Trustee Investing Practices at the Employees Retirement System, the Teacher Retirement System, and the University of Texas Investment Management Company (State Auditor’s Office)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sub-total =</td>
<td>7</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Grand Total =</td>
<td></td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>
OVERALL RESULTS

Based on the results of the past three fiscal years’ (2013 through 2015) audits and quarterly investment compliance tests, we determined that internal controls are operating effectively to achieve IMD’s business objectives. No significant control deficiencies were identified as a result of these test results.

POSITIVE RESULTS

The audits for the past three fiscal years included many positive audit results. Examples of specific positive results are:

- Risks defined by the Investment Policy Statement (IPS) are included in a semi-annual investment risk report to the Board and in other regular reports to management (FY 15 Quarterly Agreed Upon Procedures Testing)
- Monitoring of Bubble Risks is reported monthly to the Management Committee of the Investment Management Division and Risk Budget Impact Analysis is included in all new investments presented to the Internal Investment Committee (FY 15 IMD Control Tests, Second Half of Year)
- All approved Private and Public Markets investments were approved by the Internal Investment Committee (Quarterly Investment Compliance Tests, FY 15)
- Consultant’s prudence letters were obtained before all External Private and External Public Markets deals were presented to the Internal Investment Committee for approval (FY 14 IMD Control Tests, Q3 and Quarterly Investment Compliance Tests, FY 15)
- Proposed asset allocations as well as the information presented to the Board of Trustees as part of the Strategic Asset Liability Study were well supported and documented (FY 14 IMD Control Tests, Q4)
- The process for due diligence of External Managers in TRS External Public Markets (EPU) is first rate. Controls we tested are appropriate and operating effectively (Lenox Park LLC as part of FY 14 IMD Control Tests, Q3)
- TRS investment trades were properly approved and timely reconciled for both cash securities trades and derivatives trades (FY 14 IMD Control Test, Q3)
- TRS has exercised prudence in selecting a fund-of-funds manager and evaluators to source, perform due diligence, and in some cases allocate to emerging managers (FY 13 Audit of Emerging Manager Program)
- Users of the derivatives model perform checks to ensure that input data is loaded into the model correctly and completely (FY 13 Audit of Derivatives)
- Qualitative award of the incentive compensation plan was supported by the results of 360° annual evaluation (State Auditor’s Office Audit of Incentive Compensation at TRS, Plan Years 2011, 2012, and 2013)
- Controls related to the complete and accurate execution of wire transfers were operating effectively. These controls include Investment Accounting’s review of wire requests, signoff of requests by authorized individuals, and the ongoing reconciliation of completed wire transfers with the custodian (Quarterly Investment Compliance Tests, FY 13, FY 14, and FY 15)
SIGNIFICANT RESULTS²

No significant issues and recommendations were identified.

OTHER REPORTABLE RESULTS

Some of the internal and external audit reports included recommendations to enhance internal controls. Management has implemented or is in the process of implementing all of these prior recommendations. Information about the recommendations and the implementation statuses for the past three fiscal years is included in Appendix D (page 11).

* * * * *

We appreciate IMD management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We especially appreciate audit coordination and facilitation provided by the Investment Operations management and staff.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Nick Ballard, CFA, CPA
Senior Investment Auditor

Hugh Ohn, CFA, CPA, CIA, FRM
Director of Investment Audit Services

Rodrigo Dominguez
Internal Audit Intern

² A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.
APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted the audits in accordance with generally accepted government auditing standards contained in the Government Auditing Standards issued by the Comptroller General of the United States and the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT OBJECTIVE

The audit objective was to determine whether internal controls 3 are in place and are working effectively to achieve the business objectives of the Investment Management Division (IMD) of the Teacher Retirement System of Texas (TRS.)

SCOPE

The scope of the audits was limited to policies, processes and internal controls established within IMD during fiscal years 2013 through 2015.

The audit scope did not include TRS policies, processes, or internal controls not applicable to IMD or established by other TRS departments.

METHODOLOGY

Internal Audit examined the management control framework, the risk assessment strategy, policies, procedures and practices, information used for decision making, and reporting as applicable to IMD. The COSO’s Internal Control – Integrated Framework was used as our criteria to identify different types of internal controls established at IMD and to assess whether these controls are effective. Effective controls mean that the controls exist and are operating as designed.

Our audit methodology included obtaining information on management’s business objectives and risks, and focused on key processes and monitoring controls that management has established to address significant risks within IMD.

3 According to the COSO, internal control is defined as a process, effective by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.
To meet the audit objectives, we specifically performed the following procedures:

- Performed risk assessments to identify high risk areas within IMD to allocate audit resources
- Developed audit plans to determine audit coverage of IMD for fiscal years’ 2013 through 2015
- Gained an understanding of business objectives, risks, business processes, and internal controls related to the scope of the relevant audit
- Reviewed investments-related policies and procedures
- Interviewed TRS executives, IMD management and staff, and external parties involved in the business processes
- Surveyed other pension funds to obtain information about investment risk measures, risk limits and monitoring practices
- Tested sample of investment transactions and established internal controls using life of a trade methodology focusing on initial due diligence, investment monitoring, and investment exit
- Evaluated the effectiveness of Information Technology (IT) general controls, including access to systems and files
- Assessed the design of IT controls at two third-party service providers hosting critical IMD information systems

CONCLUSION

In our opinion, internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet IMD’s business objectives. This opinion is based on results of the past three fiscal years’ (2013 through 2015) audits and quarterly investment compliance tests of IMD groups, portfolios, operations, and activities.
## APPENDIX B

### IMD Areas of Internal Controls Tested in Past Three Fiscal Years

<table>
<thead>
<tr>
<th>COSO Component</th>
<th>FY 15</th>
<th>FY 14</th>
<th>FY 13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Environment</strong></td>
<td>All Quarters</td>
<td>2(^{nd}) Quarter</td>
<td>All Quarters</td>
</tr>
<tr>
<td><strong>Risk Assessment</strong></td>
<td>Second Half</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control Activities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities Lending</td>
<td></td>
<td>1(^{st}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Commission Sharing Arrangements</td>
<td></td>
<td>1(^{st}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Internal Public Markets (IPM)</td>
<td></td>
<td>2(^{nd}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Trade Management</td>
<td></td>
<td>2(^{nd}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Cash Securities</td>
<td></td>
<td>3(^{rd}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Investment Performance</td>
<td></td>
<td>3(^{rd}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Energy and Natural Resources</td>
<td></td>
<td>4(^{th}) Quarter</td>
<td></td>
</tr>
<tr>
<td>External Public Markets (EPU), including Hedge Funds *</td>
<td></td>
<td>3(^{rd}) Quarter</td>
<td></td>
</tr>
<tr>
<td>Strategic and Tactical Asset Allocation (including Derivatives)</td>
<td></td>
<td>4(^{th}) Quarter</td>
<td>2(^{nd}) Quarter</td>
</tr>
<tr>
<td>Private Equity *</td>
<td></td>
<td>First Half</td>
<td></td>
</tr>
<tr>
<td>Real Assets *</td>
<td></td>
<td>Second Half</td>
<td></td>
</tr>
<tr>
<td><strong>Information and Communication:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Financial Statements</td>
<td></td>
<td>4(^{th}) Quarter</td>
<td>4(^{th}) Quarter</td>
</tr>
<tr>
<td>Board and Management Reports</td>
<td></td>
<td>All Quarters</td>
<td>All Quarters</td>
</tr>
<tr>
<td>Information Systems (Design of Controls at Two IMD IT Service Providers)</td>
<td>Second Half</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly Compliance Tests</td>
<td></td>
<td>All Quarters</td>
<td>All Quarters</td>
</tr>
<tr>
<td>State Street Compliance Monitoring</td>
<td></td>
<td>All Quarters</td>
<td>All Quarters</td>
</tr>
<tr>
<td>Investment Accounting</td>
<td></td>
<td>First and Second Half</td>
<td></td>
</tr>
</tbody>
</table>

*: Emerging managers are included in these portfolios.
## APPENDIX C

### IMD Internal Controls Mapped to COSO Principles

<table>
<thead>
<tr>
<th>COSO Component</th>
<th>COSO Principle</th>
<th>Examples of IMD Controls Tested</th>
</tr>
</thead>
</table>
| **Control Environment**  | The organization demonstrates a commitment to integrity and ethical values | • Ethics policies  
• TRS Fraud and Ethics Hotline  
• Conflict of interest disclosure, including placement agent disclosure |
|  | The board of trustees demonstrates independence from management and exercises oversight of the development and performance of internal control | • Board approval of investment-related policies  
• Board oversight of investment decisions  
• Obtaining external reviews, including consultants’ and auditors’ reviews |
|  | Management establishes - with board oversight - structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives | • IMD organization chart  
• Delegated investing authority  
• Internal Investment Committee (IIC)  
• Service level agreement with external service providers |
|  | The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives | • IMD career path  
• Continuing education requirement  
• Incentive Compensation Plan |
| **Risk Assessment**  | The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives | • Annual goal-setting and evaluation  
• 360 evaluation |
|  | The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives | • Target investment returns established  
• Asset allocation targets with allowable ranges |
|  | The organization identifies risks to achieve its objectives across the entity and analyzes risks to determine how they should be managed | • Different types of risks identified in the Investment Policy Statement  
• Various risk measures, including Value at Risk (VAR) and Tracking error (Limits on acceptable tracking error) established  
• Use of performance-to-risk measurements such as Sharpe Ratio |
|  | The organization considers the potential for fraud in assessing risks to the achievement of objectives | • TRS Trading Policy  
• TRS Fraud and Ethics Hotline |
|  | The organization identifies and assesses changes that could significantly impact the system of internal control | • Assessment of changing economy  
• Identification of market dislocation  
• Bubble monitoring  
• Consideration of regulatory changes and their impact on IMD |
<table>
<thead>
<tr>
<th>COSO Component</th>
<th>COSO Principle</th>
<th>Examples of IMD Controls Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Activities</td>
<td>(The actions established through policies and procedures that help ensure that management’s directives to mitigate risk to the achievement of objectives are carried out)</td>
<td>• Segregation of duties</td>
</tr>
<tr>
<td></td>
<td>The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels</td>
<td>• Approval of transactions</td>
</tr>
<tr>
<td></td>
<td>The organization selects and develops general control activities over technology to support the achievement of objectives</td>
<td>• Reconciliation of trades</td>
</tr>
<tr>
<td></td>
<td>The organization deploys control activities through policies that establish what is expected and procedures that put policies into action</td>
<td>• Minimum credit rating of counterparties</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Due diligence checklists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IIC approval of investments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Premier List</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Restrictions on information technology (IT) system access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Control tests on vendor-supported IT systems</td>
</tr>
<tr>
<td>Information and</td>
<td>The organization obtains or generates and uses relevant, quality information to support the functioning of internal control</td>
<td>• Investment-related policies, including Investment Policy Statement, Securities Lending Policy, Soft Dollar Policy and Proxy Voting Policy</td>
</tr>
<tr>
<td>Communication</td>
<td>(The continual, iterative process of providing, sharing, obtaining, and using relevant and quality information from internal and external sources)</td>
<td>• Operating procedures</td>
</tr>
<tr>
<td></td>
<td>The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control</td>
<td>• Process maps</td>
</tr>
<tr>
<td></td>
<td>The organization communicates with external parties regarding matters affecting the functioning of internal control</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Investment Management Committee meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monthly staff meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transparency reports to the Board of Trustees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Investment reports to legislative oversight bodies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participation in Cost Effectiveness Measurement (CEM) studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Communication to external managers (External Public Markets, External Private Markets) about changes in policy that affect controls</td>
</tr>
<tr>
<td>COSO Component</td>
<td>COSO Principle</td>
<td>Examples of IMD Controls Tested</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Monitoring Activities (Ongoing evaluations, separate evaluation, or some combination of the two that are used to ascertain whether each of the five components of internal control is present and functioning) | The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning | • Weekly asset and risk exposure report  
• Semi-annual risk reports to the Risk Management Committee of the Board  
• CUSUM (Cumulative Sum) signals  
• Daily and weekly compliance monitoring  
• Investment performance monitoring  
• Participation in Limited Partner Advisory Board meetings (External Private Markets)  
• Tracking of general partner financial reports (Investment Accounting)  
• Premier List Updates  
• Semi-annual portfolio review (External Private Markets)  
• Recertification process required for CUSUM signal generated (External Public Markets)  
• Daily and weekly investment compliance reports  
• Follow-up activities on compliance alerts  
• Compliance violation memo to the Board |
|                     | The organization evaluates and communicates internal control deficiencies timely to those parties responsible for taking corrective action, including senior management and the board of trustees, as appropriate |                                                                                                                                                                                                                                 |
## APPENDIX D

### Recommendations and Implementation Status for Audits and Compliance Testing Performed in Fiscal Years 2013, 2014, and 2015

<table>
<thead>
<tr>
<th>Report Number and Report Title</th>
<th>Recommendation</th>
<th>Implementation Status</th>
<th>Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-301 Audit of Information Technology Controls at Third-Party Investment Service Providers</td>
<td>Refine IMD Contract Management checklist to ensure that TRS has engaged IT service providers on TRS data security terms prior to signing a new or amended contract</td>
<td>In progress</td>
<td>10/1/2015 (planned)</td>
</tr>
<tr>
<td></td>
<td>Request that key IT system providers produce a SOC 2 report to provide IMD with independent assurance that controls are in place and operating effectively</td>
<td>In progress</td>
<td>1/31/2016 (planned)</td>
</tr>
<tr>
<td>15-301 First Half of Semi Annual Test of Results of Investment Controls of Private Equity</td>
<td>Continue efforts to increase general partners’ transparency on fees and expenses</td>
<td>In progress</td>
<td>12/2015 (planned)</td>
</tr>
<tr>
<td></td>
<td>Clarify policies to document private equity staff’s due diligence and monitoring activities</td>
<td>Implemented</td>
<td>8/2015</td>
</tr>
<tr>
<td></td>
<td>Provide clear guidelines for acceptable accounting and valuation standards for private equity investments</td>
<td>In progress</td>
<td>3/2016 (planned)</td>
</tr>
</tbody>
</table>
| 15-501 Audit of Records Management | Records Management staff should:  
- Perform routine enterprise-wide records retention schedule assessments to identify problems such as non-compliance or areas where focused training or consultation is needed  
- Ensure that management and staff receive the adequate records management training that includes well-defined guidelines for users of electronic record systems.  
TRS should require terminating employees and contract workers to formally certify/verify they do not have any TRS records. | In progress | 10/31/2015 (planned) |
<table>
<thead>
<tr>
<th>Report Number and Report Title</th>
<th>Recommendation</th>
<th>Implementation Status</th>
<th>Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-301 Fourth Quarter Test Results of Investment Controls</td>
<td>Tailor manager and investment certification questionnaires to address ENR-specific topics</td>
<td>Implemented</td>
<td>Q2 FY 2015</td>
</tr>
<tr>
<td></td>
<td>Consider leveraging consultants to a greater extent to supplement limited internal resources</td>
<td>Implemented</td>
<td>Q4 FY 2015</td>
</tr>
<tr>
<td>14-301 First Quarter Interim Test Results of Investment Controls</td>
<td>Include reasonableness checks on securities lending income as part of Investment Accounting’s monitoring activities</td>
<td>Implemented</td>
<td>2/2014</td>
</tr>
<tr>
<td></td>
<td>Consider other funding options to address long-term CSA revenue shortfall projections</td>
<td>Implemented</td>
<td>5/2014</td>
</tr>
<tr>
<td>14-302 First Quarter - Quarterly Test Results of Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended September 30, 2013</td>
<td>Test Result - IMD management identified and disclosed that one new investment in an Emerging Manager fund exceeded authorized limits</td>
<td>Implemented</td>
<td>11/2013</td>
</tr>
<tr>
<td>14-302 Second Quarter - Quarterly Test Results of Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended December 31, 2013</td>
<td>Two external managers purchased a stock newly added to the Sudan Restricted Companies List</td>
<td>Implemented</td>
<td>1/2014</td>
</tr>
<tr>
<td>13-303 Audit of Derivatives</td>
<td>Establish a formal checklist procedure to help ensure consistent usage of the TAA Model</td>
<td>Implemented</td>
<td>4/2013</td>
</tr>
<tr>
<td></td>
<td>Derivative model files should be password-protected</td>
<td>Implemented</td>
<td>4/2013</td>
</tr>
<tr>
<td></td>
<td>Further restrict network folder level access to Derivative model files</td>
<td>Implemented</td>
<td>4/2013</td>
</tr>
<tr>
<td>13-304 First Quarter - Quarterly Test Results of Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended September 30, 2012</td>
<td>Test Result - All reporting requirements met, except one investment was approved by the IIC before being reported to the Board</td>
<td>Implemented</td>
<td>9/2012</td>
</tr>
<tr>
<td>Report Number and Report Title</td>
<td>Recommendation</td>
<td>Implementation Status</td>
<td>Implementation Date</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>13-304 Second Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended December 31, 2012</td>
<td>Test Result – Callback for one wire transfer for $90,000 did not occur</td>
<td>Implemented</td>
<td>12/2012</td>
</tr>
<tr>
<td>13-304 Fourth Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended June 30, 2013</td>
<td>Test Result - Information about the projected closing date for one hedge fund investment was mislabeled as “Not Applicable” when it should have been the expected funding date of July 31, 2013</td>
<td>Implemented</td>
<td>6/2013</td>
</tr>
<tr>
<td></td>
<td>Test Result - The Absolute Return asset allocation was -0.06%, which was below the 0% minimum range</td>
<td>Implemented</td>
<td>6/2013</td>
</tr>
<tr>
<td>13-305 Audit of Emerging Manager Program</td>
<td>Closely monitor the fund-of-funds manager’s portfolio as well as the firm’s situation</td>
<td>Implemented</td>
<td>11/2013</td>
</tr>
<tr>
<td></td>
<td>Improve fund-of-funds manager and evaluator’s responsiveness to prospective emerging managers by clearly communicating TRS’ expectations and ensuring timely and satisfactory closure on referrals</td>
<td>Implemented</td>
<td>11/2013</td>
</tr>
<tr>
<td></td>
<td>Revise the Investment Policy Statement (IPS) to be consistent with the fund commitment plan</td>
<td>Implemented</td>
<td>11/2013</td>
</tr>
</tbody>
</table>
TAB 4D
QUARTERLY INVESTMENT COMPLIANCE TESTING
INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), PERFORMANCE INCENTIVE PAY PLAN (PIP), WIRE TRANSFER PROCEDURES, AND EMPLOYEE ETHICS POLICY
CALENDAR QUARTER ENDED JUNE 30, 2015, EXCEPT AS NOTED

1. **Board Reports**
   - All required information is reported to the TRS Board of Trustees

2. **Investment Selection and Approval**
   - Investments made are within delegated limits and established selection criteria

3. **Other (IPS, SLP, PIP, wire transfers, other reporting)**
   - Risk limits are followed for other investment programs and activities

4. **Ethics Policies**
   - Ethics policy requirements are not performed or filed

**Business Objectives**

- Board is not informed of key investment decisions and critical information

**Business Risks**

- All required reports are made to the Board

**Management Assertions**

- All required reports are made to the Board

**Agreed-Upon Procedures**

- Compare Board reports to IPS requirements
- Trace external investment information included in Board reports (including investment name, strategy, size, and other details) to supporting documentation
- Vouch Internal Investment Committee (IIC) approved investments to supporting documentation
- Verify approval limits of new investments
- Obtain evidence that Placement Agent Questionnaires (PAQ’s) were received prior to investment funding

**Test Results**

- All reporting requirements tested are met
- All supporting documentation exists
- All investments tested are in compliance with approval limits
- All other requirements of the IPS, SLP, PIP, wire transfer procedures, etc. tested are met

**Management Responses**

- None
- None
- None
- None

Legend of Test Results:
- **Red** - Significant to TRS
- **Orange** - Significant to Business Objectives
- **Yellow** - Other Reportable Exception
- **Green** - Positive Test Result/ No Exception

September 17, 2015
Project #15-302
September 17, 2015

Carolina de Onis, TRS General Counsel

We have completed the **Quarterly Investment Testing** of compliance with the requirements of the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Employee Ethics Policy, Board of Trustees Ethics Policy, and procedures for wire transfers as included in the *Fiscal Year 2015 Audit Plan*.

We performed the procedures that were agreed to by the TRS Legal Services division. These procedures include tests that supplement the current compliance monitoring procedures performed by State Street and the Chief Compliance Officer.

This agreed-upon procedures engagement was performed in accordance with generally accepted government auditing standards contained in the *Government Auditing Standards* issued by the Comptroller General of the United States.

The sufficiency of the agreed-upon procedures performed is solely the responsibility of the specified users of the report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our testing procedures and results are included in **Appendix A**.

**Internal Control Structure**

We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas tested.

Had we performed additional procedures, or had we made an examination of the system of internal control, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified below and does not extend to the internal control structure.

This report is intended solely for information and use by TRS management, the Board of Trustees, and oversight agencies, and is not intended to be and should not be used by anyone other than those specified parties. However, this report is a matter of public record and its distribution is not limited.
We express our appreciation to management and key personnel of the Investment Management Division and Investment Accounting for their cooperation and professionalism shown to us during this quarterly testing.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Hugh Ohn, CFA, CPA, CIA, FRM
Director of Investment Audit Services

Nick Ballard, CFA, CPA
Senior Investment Auditor

Rodrigo Dominguez
Internal Audit Intern
### APPENDIX A

**AGREED-UPON PROCEDURES AND RESULTS**

<table>
<thead>
<tr>
<th>STEP #</th>
<th>OBJ. #</th>
<th>TEST PURPOSE</th>
<th>TEST DESCRIPTION</th>
<th>TEST RESULT</th>
<th>MANAGEMENT RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>IPS Article 1.7 - Obtain evidence that all requirements were reported to Board of Trustees. Quarterly reporting requirements include investment performance, asset class exposures, and external investments under consideration. Semi-annual reports include outstanding derivatives, leverage, and liquidity positions, and risk limits.</td>
<td>Obtain copies of all reports required to be reported to Board of Trustees and compare to reporting requirements per Investment Policy Statement (IPS).</td>
<td>Reports required to be reported to Board of Trustees complied with IPS.</td>
<td>No response required</td>
</tr>
</tbody>
</table>
| 2      | 2      | IPS Article 1.8f – Obtain evidence that TRS complied with Chapters 806 and 807 of the Government Code relating to prohibitions on investments in Sudan and Iran, respectively. | • Ensure that responsible staff have updated Sudan/Iran restricted lists  
• Determine that TRS complied with the following requirements:  
  a) To notify the Comptroller’s Office and the Pension Review Board regarding holdings of restricted company securities.  
  b) To divest holdings  
  c) To file annual report of Sudan/Iran investment activity to the Legislature and the Attorney General. | • Investment Compliance staff updated Sudan/Iran restricted lists.  
• TRS complied with divestment requirements.  
• TRS complied with the annual report requirements. | No response required |
<p>| 3      | 2      | IPS Article 3.3f – Obtain evidence of existence of Investment Management Divisions (IMD) prudent underwriting objectives | Select sample of Private Market investments approved during testing period, obtain evidence of existence of advisor's report stating investment opportunity meets prudent | For selected private markets approved investments for the quarter, verified that the prudence letter from the advisor was included in the Internal Investment Committee (IIC) materials. | No response required |</p>
<table>
<thead>
<tr>
<th>STEP #</th>
<th>OBJ. #</th>
<th>TEST PURPOSE</th>
<th>TEST DESCRIPTION</th>
<th>TEST RESULT</th>
<th>MANAGEMENT RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>for advisor’s due diligence.</td>
<td>underwriting standards and merits inclusion within respective portfolios.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>IPS Article 7 – Obtain evidence that new investments in emerging managers meet requirements.</td>
<td>Test sample of approved investments to ensure: a) Each is independent private investment management firm with less than $2 billion. b) Each has a performance track record as a firm of less than 5 years, or both. c) TRS commitment did not exceed 40% of fund size.</td>
<td>Investments in emerging managers tested met qualification requirements and TRS commitments were within specified limits.</td>
<td>No response required</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>IPS Article 12 - Obtain evidence of existence of placement agent questionnaire for each new investment selected for testing and test for inclusion in summary report to the Board.</td>
<td>• For each investment selected for testing, obtain evidence that IMD obtained responses to the questionnaire. • Determine that IMD compiled responses to the questionnaires and reported all results to the Board at least semi-annually.</td>
<td>Each investment tested had a completed questionnaire. Summary information from all questionnaires was included in the report to the Board.</td>
<td>No response required.</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>IPS Appendix B – Obtain evidence that investments approved are within policy limits.</td>
<td>• Select sample of approved investments and obtain tear sheet for each, and ensure the approved amounts are within authorized limits a) Initial allocation – .50% b) Additional or follow-on – 1% c) Total Manager Limits – 3% d) Total limit each manager organization – 6% • Obtain documentation from IMD staff that supports the calculations of the authorized limits. • Inquire if any “Special Investment Opportunities” were made for the quarter.</td>
<td>For the sample selected for testing, no manager or partner organization exceeded the authorized limits and documentation existed for IMD staff calculations of authorized limits. There were no Special Investment Opportunities made during the quarter.</td>
<td>No response required</td>
</tr>
<tr>
<td>STEP #</td>
<td>OBJ. #</td>
<td>TEST PURPOSE</td>
<td>TEST DESCRIPTION</td>
<td>TEST RESULT</td>
<td>MANAGEMENT RESPONSE</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------------</td>
<td>------------------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Quarterly Disclosures – Obtain evidence that all known compliance violations have been reported.</td>
<td>d) Send request for disclosure to IMD management, Legal Investment staff, and CIO requesting disclosure of any known compliance violations during the testing period.</td>
<td>Obtained all disclosures from IMD management, Legal Investment staff, and CIO of any known compliance violations during testing period. No compliance violations were disclosed.</td>
<td>No response required</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Wire Transfers – Obtain evidence that TRS Investment Accounting’s record of processed investment funding was complete.</td>
<td>Obtain TRS Investment Accounting investment funding log and reconcile to State Street outgoing wires log to determine if the funding log is complete.</td>
<td>The Investment Accounting funding log reconciled to the State Street Outgoing wires log for the period tested.</td>
<td>No response required</td>
</tr>
</tbody>
</table>
| 9      | 3      | Securities Lending Policy – Verify IMD review of securities lending program and performance lender. | - Obtain copies of all reports required to be reviewed by IMD and observe monthly securities lending program reviews.  
- Obtain evidence that securities lending agent provided a list of potential borrowers and corresponding dollar loan limits at least yearly; that the cash collateral portfolio investments complied with diversification requirements; and that no investments were made in structured notes. | Securities lending program was reviewed by IMD management during the quarter tested.  
  a) The securities lending agent provided a list of potential borrowers, dated November 4, 2014, to TRS.  
  b) Obtained compliance report covering provisions tested, dated June, 29, 2015. The report indicated that the securities lending program collateral pool investments were in compliance with the diversification requirement policy provisions.  
  The monthly program review reports for the quarter tested showed that no investments were made in structured notes. Custodian bank personnel confirmed during the July, 2015 monthly portfolio review that no investments were made in structured notes. | No response required |
<table>
<thead>
<tr>
<th>STEP #</th>
<th>OBJ. #</th>
<th>TEST PURPOSE</th>
<th>TEST DESCRIPTION</th>
<th>TEST RESULT</th>
<th>MANAGEMENT RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>4</td>
<td>Employee Ethics Policy – Obtain evidence that Key Employees filed enhanced disclosure statements with the Executive Director; new employees filed ethics compliance statements timely; and TRS employees participated in annual ethics training.</td>
<td>c) No investments are allowed in structured notes.</td>
<td>a) For each employee selected, an enhanced disclosure statement was submitted timely. b) For each employee selected, a completed ethics compliance statement was submitted timely. c) Obtained evidence that annual ethics training was conducted for fiscal year 2015.</td>
<td>No response required</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>Board of Trustees Ethics Policy - Obtain evidence that TRS Trustees disclose to the Executive Director financial information as required by state law.</td>
<td>Obtain evidence that TRS Trustees submitted financial disclosures for calendar year 2014 to the Executive Director.</td>
<td>All trustees filed financial disclosures for calendar year 2014, by April, 2015.</td>
<td>No response required</td>
</tr>
<tr>
<td>STEP #</td>
<td>OBJ. #</td>
<td>TEST PURPOSE</td>
<td>TEST DESCRIPTION</td>
<td>TEST RESULT</td>
<td>MANAGEMENT RESPONSE</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>Performance Incentive Pay Plan – Verify that investment performance results used in quarterly Internal Public Markets (IPM) portfolio matches data from TRS financial applications and custodian bank and that the excess return calculations for individual portfolio managers and sector analysts are correct.</td>
<td>Trace quarterly Internal Public Markets individual component calculation spreadsheet to TRS financial performance application data and TRS custodian bank data. Test whether employee assignments were approved by Senior Director in TRS Internal Public Markets prior to quarter start by obtaining approval email from Senior Director in TRS Internal Public Markets to Investment Operations Performance Analyst. If any assignment changes are included in the approval, compare the approved changes to the assignments in the quarterly Internal Public Markets individual component calculation spreadsheet. Test whether formulas in the quarterly Internal Public Markets individual component calculation spreadsheet are correct by recalculating investment return totals by portfolio manager and sector manager, and comparing total investment returns to returns provided by the TRS Custodian Bank.</td>
<td>There were no data, employee assignment, or formula errors identified in the quarterly Internal Public Markets individual component calculation spreadsheet. Excess return calculations for individual portfolio managers and sector analysts for the IPM portfolio were correct for the quarter ended March 31, 2015.</td>
<td>No response required</td>
</tr>
</tbody>
</table>

Note: Testing procedures for the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Employee Ethics Policy, Board of Trustees Ethics Policy, and wire transfers are for the activity for the quarter ending June 30, 2015 and quarterly disclosures are for the four months ended July 31, 2015.
TAB 4E
**Business Objectives**

To deliver retirement and related benefits authorized by law for members and their beneficiaries.

**Fraud / Errors**

Benefit payments could be incorrect or fraudulent in these areas:
- Benefit payments to recent retirees
- Benefit payments with an expiration date

**Eligibility**

TRS members could retire with full normal-age retirement benefits without meeting the normal-age retirement eligibility requirements for their membership tier

**Manual Voucher Payments**

Manual voucher payments could be processed incorrectly or without proper authorization

**Business Risks**

N/A

**Management Assertions**

All benefit payments are valid

All retirees who received benefit payments are eligible

All manually processed voucher payments are valid

**Agreed-upon Procedures**

Match benefit payments to supporting documents in two areas:
1. Recent retiree benefit recalculations
2. Benefit payment expiration dates

3. Recalculate the normal-age retirement eligibility for all recent normal-age service retirements during the testing period

4. Match 60 randomly selected manually processed voucher payments to supporting documentation

**Test Results**

No Exceptions

No Exceptions

No Exceptions

**Management Responses**

N/A

N/A

N/A

Legend of Results:
- **Red** - Significant to TRS
- **Orange** - Significant to Business Objectives
- **Yellow** - Other Reportable Exception
- **Green** - Positive Test Result/No Exception

September 16, 2015
Project # 15-101
September 16, 2015

Don Green, Chief Financial Officer
Barbie Pearson, Chief Benefit Officer
Katrina Daniel, Chief Health Care Officer

We have completed the project, Semi-Annual Testing of Benefit Payments, for the period January 2015 through June 2015, as included in the Fiscal Year 2015 Audit Plan.

We performed the procedures listed below that were agreed to by management of Benefit Services, Health and Insurance Benefits, and the Financial Division. These procedures included four data-mining tests designed to identify anomalies in benefit payments during the current testing period and possible deviations from management’s benefit processing controls.

For this testing period, the tests performed included testing gross payment amounts made to recent retirees, manual benefit payments, normal-age retirement criteria, and expiry date testing for five or 10 year guaranteed period payments, disability retirement payment calculations for retirees with less than 10 years of service, and expiration dates greater than 50 years. There were no exceptions identified as a result of the test procedures performed. The detailed procedures and results of our testing are explained in Appendix A.

This agreed-upon procedures engagement was performed in accordance with generally accepted government auditing standards contained in the Government Auditing Standards issued by the Comptroller General of the United States.

The sufficiency of the agreed-upon procedures performed is solely the responsibility of the specified users of the report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Internal Control Structure

We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas tested.

Had we performed additional procedures, or had we made an examination of the system of internal control, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified above and does not extend to the internal control structure.
This report is intended solely for information and use by TRS management, the Board of Trustees, and oversight agencies, and is not intended to be and should not be used by anyone other than those specified parties. However, this report is a matter of public record and its distribution is not limited.

* * * * *

We express our appreciation to management and key personnel of Information Technology, Benefit Services, Health and Insurance Benefits, and the Financial Division for their cooperation and professionalism shown to us during the testing.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Dorvin Handrick, CISA, CDP
IT Audit Manager

Toma Miller, CIA, CGAP
Senior Auditor

Jan Engler, CIA, CISA, CFE
Internal Audit Manager
APPENDIX A

AGREED UPON PROCEDURES AND RESULTS

1. **Test Purpose:** Identify gross annuity payments to recent retirees (December 2014 or later retirements) from January to June 2015 that are not calculated accurately.

**Test Description:** Query the *January to June 2015 Benefit Payments Data File* for all gross annuity payments that were related to recent member retirements since December 2014 and randomly select three service retirement sample items and two disability retirement sample items from each month for a total of 30 sample items. Recalculate the gross payment amount by recalculating the annuitant’s standard annuity payment based on the member’s number of years of service and the average salary amount at the time of retirement and adjusting the payment amount by the applicable option, Partial Lump Sum Option (PLSO), or early age reduction factors. Agree the recalculations to the supporting documentation in the TRS *Imaging System* and identify any gross payment discrepancies greater than five dollars.

**Test Result:** All 30 gross annuity payments to recent retirees from January to June 2015 were recalculated and traced to supporting documentation. No exceptions were identified.

2. **Test Purpose:** Identify expiration dates to stop the annuity payments timely that are not properly recorded in the system.

**Test Description:** Determine the expiration date accuracy for a sample of annuity payments from January to June 2015 for the three groups described below. Agree the recorded expiration date to the auditor’s calculation based on the imaged documents maintained in the TRS *Imaging System*. Each test is described as follows:

a. **Expiration date of guaranteed-period annuity options retirement**
   
i.) For guaranteed-period (5-year and 10-year) annuity options where TRS is paying the beneficiary because the retiree was deceased before the guaranteed period ended, obtain all records with an expiration date that is greater than the retirement date plus the guaranteed period. Agree these records to supporting documentation indicating the expiration date.

   ii.) Obtain all records where the payment status is active but there is no expiration date. Trace these records to the supporting documentation.

b. **Expiration date of disability retirement with less than 10 years of service**
   
A disability retiree with less than 10 years of service should receive a standard benefit amount of $150 per month for the shortest period of the retiree’s disability period, the retiree’s life, or the total number of creditable service months.
i.) Obtain all records with a retiree death date but payment status is still active. Trace to the supporting documentation.

ii.) Obtain all records that the gross payment amount is not the standard amount of $150 and report differences.

iii.) Obtain all records where the expiration date has expired but the payment status is still active. Trace to the supporting documentation.

iv.) Obtain all records where the member was not the payee. Trace to the supporting documentation.

v.) Obtain all records where the expiration date is greater than the retirement date plus years of member service. Select five random samples from each monthly data file to test by adding the number of creditable service months, based on the imaged documents in the TRS Imaging System, to the retirement date and comparing that number with the expiration date in the retirement system. Agree sample items to supporting documentation.

c. Expiration date is longer than 50 years from the date of current payment record.

Obtain items from all payment records with an expiration date that is more than 50 years from each data file from January to June 2015 that have not been previously tested. Recalculate and agree the recorded expiration date to the supporting documentation.

Test Results:

a. Expiration date of guaranteed-period annuity options retirement

i. No exceptions were identified where the expiration date was greater than the retirement date plus the guaranteed period.

ii. All 42 unique sample items of records, with an active payment status but no expiration date, were traced to the supporting documentation. No exceptions were identified.

b. Expiration date of disability retirement with less than 10 years of service

No exceptions were identified.

c. Expiration date is beyond 50 years from current payment records

The recalculated expiration date for the four records identified agreed to the recorded expiration date in the supporting documentation. No exceptions were identified.
3. **Test Purpose:** Identify recent retirees who retired with normal-age service retirement benefits from January to June 2015 who did not meet the normal-age retirement eligibility requirements based on their membership tier.

**Test Description:** Query the *January to June 2015 Benefit Payments Data File* for all payments that were related to normal-age service retirements since December 2014. Exclude all proportionate retirements, early age retirements, and disability retirements. Calculate the annuitant’s retirement age based on the year and month of the member’s retirement date and birth date in the annuity system records. Determine the annuitant’s membership tier by the TRS start date of their current membership, their “grandfathered” status, and by their amount of TRS service credit as of August 31, 2014. Recalculate the annuitant’s normal-age retirement eligibility according to the eligibility requirements for their membership tier. Determine eligibility based on the following requirements:

- For all Tiers - Minimum retirement age of 65 with at least five years of service.
- For Tiers 1 and 2 – Meets Rule of 80 (member’s age plus years of service credit total at least 80) with at least five years of service
- For Tiers 3 and 4 - Minimum retirement age of 60 and meets Rule of 80 with at least five years of service
- For Tiers 5 and 6 - Minimum retirement age of 62 and meets Rule of 80 with at least five years of service

**Test Result:** All recent retirees receiving normal-age service retirement benefits met the eligibility requirements for their membership tier. No exceptions were identified.

4. **Test Purpose:** Identify manual voucher payments that are not properly authorized and supported.

**Test Description:** Select a random sample of 10 manual voucher payments per month from the *January to June 2015 Benefit Payments Data File*. Trace and agree these manual voucher payments to the supporting documents maintained in the TRS Imaging System.

**Test Results:** Out of the 60 manual voucher payments randomly selected to test, there were six premium refunds, seven annuity pop-ups, 13 qualified domestic relations order (QDRO) related payments, 13 payments re-issued due to returned payments, seven retiree requests to re-issue payment, seven payments re-issued due to retiree/beneficiary death, and seven other related manual payments. All payments were traced and agreed to the supporting documents. No exceptions were identified.
TAB 4F
RECORDS MANAGEMENT AUDIT
September 16, 2015
TRS Internal Audit Department

Business Objectives
Manage the creation, use, maintenance, retention, preservation, and destruction of records to improve efficiency of recordkeeping, ensure access to public information, and reduce cost

Operational Risk – lack of organizational understanding of adequate records management processes
Compliance Risk – non-compliance with policies and laws
Efficiency Risk – lack of standardized processes results in excess time and resources spent
Fraud Risk – inadequate oversight and monitoring to deter fraud

Technology Risk – dependency upon technology for accessing, managing, and protecting TRS records
Completeness Risk – records retention schedules incomplete
Reputational Risk – damage, penalties, and increased oversight as a result of non-compliance

Business Risks
- Operational Risk
- Technology Risk
- Compliance Risk
- Efficiency Risk
- Fraud Risk
- Completeness Risk
- Reputational Risk

Management Controls
- Executive support including defined roles and responsibilities
- Risk Oversight Committee (ROC) monitoring
- TRS Records Management Policy and Records Retention Schedules
- Records management staff expertise
- Documented annual records disposal process
- Annual records management refresher training for employees

Controls Tested
- Executive support including defined roles and responsibilities
- TRS Records Management Policy and Records Retention Schedules
- Documented annual records disposal process

Results
- TRS has a mature records management function and experienced department leadership and staff who now report to the Chief Administrative Officer to enhance visibility and records focus
- TRS electronic and hardcopy records are not always properly retained or timely purged according to approved records retention schedules and users are largely unsure of their role and responsibilities for creating, maintaining or disposing of these records, including email records.
- TRS’ Records Management Officer (RMO) needs increased executive support, enterprise-wide visibility, and coordination with related functions
- A long-term, comprehensive plan that includes succession planning is needed to ensure improved and consistent compliance with records management policy and state laws
- TRS’ records management policy needs to be revised to align with operating procedures

Recommended Actions
Using a formal assessment process, TRS should develop a strategic agency solution for records management that aligns with state laws, guidelines and internal policies, creates more centralized processes, provides ongoing assessments and staff training at all levels, and includes succession planning to address TRS’ records management needs now and in the future.

Management Responses
Management agrees and has begun developing a long-term project plan that includes conducting departmental assessments to evaluate agency recordkeeping practices, needs for improvements, records management understanding, provide effective education and awareness activities, and monitor compliance. In addition, the RMO will assemble a TRS workgroup in revising the current records management policy, and will establish more effective working relationships with related functions to ensure that records related issues are addressed on an ongoing basis.

Legend of Results:
Red - Significant to TRS
Orange - Significant to Business Objectives
Yellow - Other Reportable Issue
Green - Positive Finding or No Issue

Project #: 15-501
EXECUTIVE SUMMARY

We have completed the audit of Records Management, as included in the Fiscal Year 2015 Audit Plan.

The Records Management business objective is to manage the creation, use, maintenance, retention, preservation, and destruction of records to improve efficiency of recordkeeping, ensure access to public information, and reduce cost.

The audit objective was to determine whether TRS records management practices align with state requirements and guidelines, TRS internal policy and procedures, and generally accepted recordkeeping principles and best practices.

As of this year, the TRS Records Management department reports to the Chief Administrative Officer allowing for enhanced visibility and a more comprehensive, enterprise-wide records management focus. In addition, the department has made ongoing operational process improvements such as:

- Working with Information Technology (IT) to develop and implement an effective and efficient process for deleting departing TRS employee or contract worker e-records

- Routinely tracking and reporting on cumulated records purge measurements and quarterly department e-records volumes

- Using enterprise records manager software to electronically maintain department records retention schedules and related forms including the Manager Purge Approval form that now includes feedback to managers of their department’s records purge compliance levels

However, the audit determined that while TRS has a mature records management function and experienced Records Management department leadership and staff, records management practices do not always align with state requirements and guidelines, TRS internal policy and procedures, and generally accepted recordkeeping principles and best practices.

We identified one significant issue that could reduce the department’s ability to achieve its business objective. Testing found that oversight and monitoring of program understanding does not occur by Records Management staff.
Individual TRS management and staff reported that they are unsure of roles and responsibilities regarding the creation, maintenance, and disposition of records, hardcopy or electronic. Staff also stated that current guidelines are unclear for determining whether an email is a record. In addition, testing identified records that were maintained past the retention period while others were discarded prior to the retention period. Some electronic records could not be located during testing and others were filed in multiple locations.

Results of our procedures are presented in more detail in the Results and Recommendations section (pages 6-12). The audit objective, scope, methodology and conclusion are described in Appendix A (pages 13-14). A Picture of Effective Information Governance document is provided in Appendix B (page 15). The Generally Accepted Recordkeeping Principles (GARP), which are industry standards for records management, are provided in Appendix C (page 16).
BACKGROUND

The records management program helps ensure that an organization meets its legal and regulatory requirements. It sees that information is managed consistently throughout its lifecycle, i.e. it is created, organized, secured, maintained, used, and disposed of in a way that effectively supports the activity of that organization and complies with any governance or information management standards it may have.

Created in 2000, the TRS records management program was based on three parts of records management – departmental Records Retention Schedules, storage of boxed paper files, and an annual purge of records. These elements were tracked in home-built Access databases with one Full-time Equivalent (FTE) staff member. In 2011, the Forms Management function was added with a partial FTE in Data Management.

TRS’ initial records retention schedule was approved in 2003. The Records Management Program and Retention Policy was issued in 2007. It addresses the responsibilities of management and staff to ensure that records are maintained and disposed of in accordance with the law and generally accepted recordkeeping principles (GARP) – see Appendix C (page 16).

The management of records extends to all media – hardcopy and electronic documents, electronic folders including e-mail and calendars, as well as other applications that are used to manage records.

Since 2012, the Records Management program has received reports tracking the volume in electronic mailboxes, personal and departmental network drives. The metrics for the first two are posted on its intranet page. The statistics include the number of emails stored (item count) and the total volume in the system (gigabytes – GB) as shown in the two graphs below. The statistics are summarized by the agency as a whole and are broken down by individual departments, and by individual staff member within each department. Records Management staff have used these reports to encourage departments to include e-records in the annual purge.

Source: TRS Records Management Department Intranet Page (unaudited)
Records Management tracks the agency total for both media (paper and electronic) disposed of in the annual purge. After peaking when the retention schedule was first implemented, the volume of paper records disposed of has remained steady. The volume of electronic records disposed of has increased since 2010 as additional attention has been placed on it. However, its disposition rate has not kept pace with the growth of e-records.

Source: TRS Records Management Department (unaudited)

The overall responsibility for TRS records management lies with TRS’ Executive Director. The Records Management Officer (RMO) reports to the Chief Administrative Officer.

The State of Texas mandates that state agencies establish and maintain a records management program on a continuing and active basis, appoint a records management officer, and disseminate information to employees about the management of state records. These directives are found in Government Code 441 Subchapter L and the Texas Administrative Code Title 13 Chapter 6. The Texas State Library and Archives Commission (TSLAC) assists state agencies in fulfilling their responsibilities in managing records. Each agency must maintain a records retention schedule that is approved and recertified periodically by the TSLAC. Any amendments must also be approved by the TSLAC.

TSLAC has prepared a state retention schedule covering records series common to all state agencies and specifying minimum retention periods. TRS’ twenty-three department and division records retention schedules contain the relevant records series from the state retention schedule plus record series that are unique to TRS. Each department develops and maintains their records retention schedule based on the individual business needs. Each department has at least one Records Liaison that works with the RMO to help ensure their records retention schedule is maintained and that the enterprise-wide annual records purge is conducted in accordance with the policy and state law.

Source: TRS Records Management Department (unaudited)
BUSINESS OBJECTIVES, RISKS, AND CONTROLS

For the audit of Records Management, we obtained information about the following business objective, as well as the related risks and the controls management established to mitigate these risks:

<table>
<thead>
<tr>
<th>Business Objective</th>
<th>Manage the creation, use, maintenance, retention, preservation, and destruction of records to improve efficiency of recordkeeping, ensure access to public information, and reduce cost</th>
</tr>
</thead>
</table>
| **Business Risks**  | • **Operational Risk** – lack of organizational understanding or alignment of what is adequate records management; what to retain, how to retain it, and for how long  
                         • **Efficiency Risk** – lack of standardized processes results in excess time and resources spent identifying documents during day-to-day operations, annual purge process, and open records or litigation requests  
                         • **Completeness Risk** – records retention schedules may not accurately reflect all records maintained by the agency  
                         • **Compliance Risk** – limited staff training could lead to non-compliance with state laws, Texas State Library and Archives guidelines, and TRS policy and records retention schedules  
                         • **Reputational Risk** – agency could suffer reputational damage, penalties, and increased oversight as a result of non-compliance by TRS or third parties that generate and store TRS records and information  
                         • **Technology Risk** – since a majority of information is produced and stored electronically, the agency is dependent upon technology for accessing, managing, and protecting TRS records  
                         • **Fraud Risk** – Records management process could not provide adequate oversight and monitoring to deter fraud |
| **Management Controls** | • Executive support and defined roles and responsibilities  
                           • Risk monitoring via Risk Oversight Committee  
                           • TRS Policies and Records Retention Schedules  
                           • Records management subject matter expertise on staff  
                           • Departmental records liaisons  
                           • Documented annual purge process  
                           • Annual refresher training for employees |
| **Controls Tested**   | Controls related to operational risk, efficiency risk, completeness risk, and compliance risk were within the audit scope and were evaluated using a records management program gap analysis and records retention schedule testing in TRS’s two core functional areas, Benefit Services Division and Investments Management Division. |
RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

As of this year, the TRS Records Management department reports to the Chief Administrative Officer allowing for enhanced visibility and a more comprehensive, enterprise-wide records management focus. In addition, the department has made ongoing operational process improvements such as developing an effective process for disposing of e-records of departing employees and contract workers, tracking and reporting on records purge measurements and departmental e-records volumes, and using enterprise records manager software to maintain department records retention schedules and related forms.

However, while TRS has a mature records management function and experienced Records Management department leadership and staff, we determined that records management practices do not always align with state requirements and guidelines, TRS internal policies and procedures, and generally accepted recordkeeping principles and best practices.

We identified one significant issue that could reduce the department’s ability to achieve its business objective. Testing found that oversight and monitoring of program understanding does not occur by Records Management staff. Individual TRS management and staff reported that they are unsure of roles and responsibilities regarding the creation, maintenance, and disposition of records, hardcopy or electronic. Staff also stated that current guidelines are unclear for determining whether an email is a record. In addition, testing identified records that were maintained past the retention period while others were discarded prior to the retention period. Some electronic records could not be located during testing and others were filed in multiple locations.

POSITIVE RESULTS

Records Management (RM) department is repositioned within TRS and RM staff have developed and implemented new methods for improving records management operations

As of this year, the TRS Records Management department now reports to the Chief Administrative Officer allowing for enhanced visibility and a more comprehensive, enterprise-wide records management focus. In addition, the department has made ongoing operational process improvements such as:

- Working with Information Technology (IT) to develop and implement an effective process for deleting departing TRS employee or contract worker e-records. In August 2014, the process was converted to a SharePoint workflow that is activated when TRS Human Resources department initiates the ticket for a departing employee or contractor.

- Routinely tracking and reporting on cumulated records purge measurements and quarterly department e-records volumes. These monitoring reports are posted on the RM department website and are now provided to the TRS Risk Oversight Committee (ROC) for enterprise-wide risk monitoring purposes.
• Using enterprise records manager software to electronically maintain department records retention schedules, boxed and vault records inventory schedules, and Manager Purge Approval forms that now include feedback to managers of their department’s purge compliance levels.

SIGNIFICANT RESULTS¹

1. Instances of non-compliance with established record retention periods show more training, well-defined guidance, and routine monitoring is needed to address TRS’ records management needs now and in the future.

We tested a sample of entries on the Records Retention Schedules (RRS) for TRS’s two core functional areas, the Benefit Services and Investments Management Divisions. Collectively, we tested 65 record series items selected from the individual department RRS and found various types of errors for the 40 records that were not in compliance with the schedules. The types and number of errors identified during testing are described in more detail below:

<table>
<thead>
<tr>
<th>Records Retention Schedule Series Error Type:</th>
<th>Number of Errors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Retained past scheduled purge date</td>
<td>7</td>
</tr>
<tr>
<td>b) Maintained in a different location</td>
<td>8</td>
</tr>
<tr>
<td>c) Retained record type does not match schedule</td>
<td>2</td>
</tr>
<tr>
<td>d) Record retention period does not match schedule</td>
<td>7</td>
</tr>
<tr>
<td>e) Records not found or unsure of current location</td>
<td>13</td>
</tr>
<tr>
<td>f) Record series no longer relevant or not used</td>
<td>2</td>
</tr>
<tr>
<td>g) Records discarded prior to purge date²</td>
<td>1</td>
</tr>
<tr>
<td>Total:</td>
<td>40</td>
</tr>
<tr>
<td>Sample Size:</td>
<td>65</td>
</tr>
</tbody>
</table>

Maintaining records past the assigned retention date or disposing of records prior to the assigned disposal date, creates a legal risk for TRS of having records it should not have or not having records it should have for open records request and e-discovery purposes. State law requires that training is provided for users of electronic records systems, including electronic mail systems, in the operation, care, and handling of information, equipment, software, and media used in the systems.³ TRS does not currently provide this type of training for its users.

Testing found that oversight and monitoring of program understanding does not occur by Records Management staff. Individual TRS management and staff reported that they are unsure of roles and responsibilities regarding the creation, maintenance, and disposition of records, hardcopy or electronic. Staff also stated that current guidelines are unclear for determining whether an email is a record. A lack of understanding of records management requirements increases the risk that terminating employees and contract workers will intentionally or unintentional take TRS records when they terminate employment.

¹ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.
² Two years of hardcopy records (2007-2008) were discarded prior to the purge date by a terminating employee.
³ Texas Administrative Code 6.91 – 6.97
Recommendations

A. Records Management staff should perform routine enterprise-wide records retention schedule assessments to identify problems such as non-compliance or areas where focused training or consultation is needed.

B. Records Management staff should ensure that management and staff receive adequate records management training that includes well-defined guidelines for users of electronic record systems, including electronic mail and calendar systems. Records Management staff’s increased records management awareness efforts should be visible throughout TRS.

C. TRS should require terminating employees and contract workers to formally certify that they do not have any TRS records.

Management Responses

Management agrees with the recommendations and proposes the following actions:

A. Records Management will prepare a plan by October 31, 2015 to conduct assessments in each department in the agency. The assessment will be a comprehensive review of all recordkeeping practices including retention schedules, records kept in relation to the requirements stated in the Records Management Program and Retention Policy, repositories used for e-records, and filing structures. It is anticipated that the assessment can be completed in 2.5 to 3 years, depending on resources available.

B. Records Management will develop a plan by October 31, 2015 to conduct the following training and awareness activities. The training will be conducted in Fiscal Year (FY) 2016 through FY 2018. A determination will be made at the end of that time on the needs for ongoing training and awareness efforts.

- Records Management Awareness – A general awareness program directed to all staff to educate them on records management issues
- Email training – In conjunction with the email policy, develop a training program directed at all staff to educate them on how to manage email to ensure needed records are retained and stored properly, and unneeded ones are disposed of.
- Management training – In conjunction with the departmental assessments, conduct training for management on their recordkeeping responsibilities and the mechanics of developing and maintaining repositories for e-records.
- Executive training – Conduct executive level training covering the concepts of information governance and the GARP maturity model.

C. Records Management will work with the Human Resources department to modify the employee exit checklist to include a certification that terminating employees do not have any TRS records by December 31, 2015.
OTHER REPORTABLE RESULTS

2. The Records Management Officer (RMO) has less than optimal visibility, information sharing, and coordination among related TRS departments and key functions.

State laws require the agency head to identify and take adequate steps to protect confidential and vital state records. TRS has multiple departments that are tasked with protecting TRS’ confidential, sensitive, and vital records. However, the RMO is not consistently included in records-related matters, information sharing, or specifically made aware of developments or changes in TRS’ records protection measures, monitoring activities, and testing plans or results.

Many TRS departments share a records management component because of the work they routinely perform such as Information Security, Information Technology (IT) Services, TEAM\(^5\), Legal Services, Purchasing, Human Resources, Enterprise Risk Management (ERM), Staff Services, and the TRS HIPAA\(^6\) Privacy Officer when it comes to regulatory, compliance, and third-party vendor and litigation concerns, as well as records protection, retention requirements, ensuring availability when needed, and disaster recovery.

In addition, Records Management is one of the 28 top risks listed on TRS’ Stoplight Report that is routinely monitored by the TRS Board of Trustees and the Risk Oversight Committee (ROC).

Recommendation

The Records Management Officer (RMO) should increase visibility, information sharing, and coordination among related TRS departments and key functions such as Information Security, Information Technology (IT) Services, TEAM\(^7\), Legal Services, Human Resources, Enterprise Risk Management (ERM), and the TRS HIPAA\(^8\) Coordinator.

Management Responses

Management agrees with this recommendation. In conjunction with the departmental assessments and the Records Management awareness program, discussed above, Records Management will coordinate with appropriate departments to see that issues related to vital records, confidential records, business continuity and risk management, legal holds, and related issues are addressed. Through the workgroup described below, Records Management will establish ongoing working relationships with these areas to see that records-related issues are addressed on an ongoing basis. The workgroup will be established by October 31, 2015.

---

\(^4\) Texas Government Code, Section 441.183(4)
\(^5\) TRS Enterprise Application Modernization
\(^6\) Health Insurance Portability and Accountability Act
\(^7\) TRS Enterprise Application Modernization
\(^8\) Health Insurance Portability and Accountability Act
3. TRS lacks a long-term, comprehensive, strategic agency solution for records management that aligns with state law and includes succession planning and more centralized processes to address TRS’ records management needs now and in the future

State law requires the agency head to establish and maintain a records management program on a continuing and active basis and to appoint a Records Management Officer (RMO) that reports directly to the executive director or an individual with a title functionally equivalent to deputy executive director. While TRS has maintained a records management program on a continuing basis for more than a decade, the program and the RMO resided within the Benefit Services division rather than at a higher enterprise-wide level.

Earlier this year, the records management program was realigned within the agency and now reports directly to TRS’ Chief Administrative Officer. Even though the new reporting structure does not fully align with state law since the RMO does not report directly to the executive director or the deputy director, management indicated that by moving the program under the Chief Administrative Officer, their intent is to provide enterprise-wide visibility for the records management program and increased executive management support.

While Internal Audit believes the restructuring was a significant advancement for the records management program, we found the following operational factors that could still impede the program’s success:

- Lack of succession planning – The records management program currently consists of two full-time employees (RMO and Records Analyst) who have many years of records management experience and institutional knowledge. Both individuals are either eligible or nearing retirement eligibility at TRS. A formal succession plan is not in place to identify, hire, or train new capable personnel to fill the potential knowledge and leadership gaps.

- Decentralized and undocumented processes and procedures – Processes and procedures are not yet fully documented to help ensure adequate knowledge transfer and operational continuity. In addition, many processes and procedures are largely decentralized and departmentalized across the agency so that adequate enterprise-wide records oversight and monitoring has been difficult.

Recommendations

A. Executive management should formally document the decision that the TRS Records Management Officer position report to the Chief Administrative Officer rather than directly to the executive director or to the deputy director level as currently required by state statute.

B. Executive management should formally assess the records management program’s current and future resource needs, including succession planning, compared to its anticipated role and responsibilities within the agency. The assessment should include TRS strategic planning techniques and incorporate information governance concepts to help provide a sustaining framework for the records management process in the long term.

---

9 Texas Government Code, Section 441.183(1) and 441.184(a), respectively.
Management Responses

Management agrees with the recommendations and will:

A. Draft a memorandum by October 31, 2015 documenting the Executive Director’s decision and rationale for having the Records Management Officer report to the Chief Administrative Officer.

B. Records Management, in conjunction with the Chief Administrative Officer, will:
   - Develop a scope document by November 30, 2015 outlining the Records Management program’s role in managing agency records including retention, disposition, vital records, confidential records, legal holds, forms management, and information governance.
   - Develop a succession plan by October 31, 2015 that will provide adequate staff resources with the appropriate professional credentials and competencies to sustain the Records Management program over time. As part of this effort, Records Management will work with the Human Resources department on a classification study to determine the appropriate skills, knowledge, abilities, and compensation required to effectively execute the Records Management program’s mission.

4. TRS’s records management policy is within its review timeframe but policy contents do not reflect current operating procedures

State law requires that the agency head create and maintain records containing adequate and proper documentation of the organization, functions, policies, decisions, procedures, and essential transactions of the agency . . . . 10 Essential to fulfilling this requirement is the TRS Records Management Program and Retention Policy. This policy has a five-year review cycle and is not due for management review again until April 2017. However, the policy is outdated now and should be reviewed and updated where needed.

For example, the current policy includes a deadline of May 1, 2014 for the implementation of enterprise-wide departmental file plans but only two departments have implemented file plans to date. Reviewing and updating the policy now provides an opportunity for management to develop a more comprehensive policy and any necessary supporting operating procedures that can serve as useful criteria during the planned departmental records management assessments.

Recommendation

Management should consider creating a policy review workgroup from various segments of the agency to review and update the current TRS Records Management Program and Retention Policy. Records Management should develop written operating procedures where needed to support the revised policy.

10 Texas Government Code, Section 441.183(2)
Management Responses

Management agrees with the recommendation and will assemble a working group by October 31, 2015 composed of representatives of the major working divisions (Benefit Services, Investment Management Division, and Finance/Administration) plus Legal Services, Information Technology, Strategic Initiatives (Risk Management) and Internal Audit to review and update the Records Management policy. This will include addressing the scope issues identified above. Records Management will, on an ongoing basis, document its operating procedures in conjunction with the Records Management policy.

* * * * *

We appreciate Records Management department management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate support provided by Executive Management, Benefit Services Division, Investment Management Division, and Information Technology.

Amy Barrett, CIA, CPA, CISA  Jan Engler, CIA, CISA, CFE
Chief Audit Executive  Audit Services Manager

Toni Miller, CIA, CGAP  
Senior Auditor
APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted this performance audit in accordance with generally accepted government auditing standards contained in the Government Auditing Standards issued by the Comptroller General of the United States and the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT OBJECTIVE

The audit objective was to determine whether TRS records management practices align with state requirements and guidelines, TRS internal policies and procedures, and generally accepted recordkeeping principles and best practices.

The Records Management business objective is to manage the creation, use, maintenance, retention, preservation, and destruction of records to improve efficiency of recordkeeping, ensure access to public information, and reduce cost.

SCOPE

The scope of the audit was the current records management function as it currently resides in the Financial Services Division and testing included records retention schedules and department file plans where applicable for TRS’ two core business units, the Benefit Services Division and the Investment Management Division and covered record retention periods since the Records Management department fiscal year 2015 annual records purge activity.

The audit scope did not include the forms management function or any area in the TRS Data Management department.

METHODOLOGY

Our methodology included obtaining information on management’s business objectives and risks, and focused on key processes and monitoring controls that management has established to address significant risks. To meet the audit objectives, we specifically performed the following procedures:

Performed a gap analysis of the current records management function and sample testing of two divisions’ departmental Records Retention Schedules (RRS), which included the following:

- Gathered sufficient evidence to be able to perform the gap analysis and RRS testing
- Collected and analyzed evidence with the assistance of RM management; the auditors had already reviewed the gap analysis components with RM management before audit fieldwork began
- Developed audit procedures to address fraud and compliance violations risks in the gap analysis

Testing information systems controls was not applicable for this audit.

**CONCLUSION**

As of this year, the TRS Records Management department reports to the Chief Administrative Officer allowing for enhanced visibility and a more comprehensive, enterprise-wide records management focus. In addition, the department has made ongoing operational process improvements such as developing an effective process for disposing of e-records of departing employees and contract workers, tracking and reporting on records purge measurements and departmental e-records volumes, and using enterprise records manager software to maintain department records retention schedules and related forms.

However, testing determined that while TRS has a mature records management function and experienced Records Management department leadership and staff, records management practices do not always align with state requirements and guidelines, TRS internal policies and procedures, and generally accepted recordkeeping principles and best practices.

We identified one significant issue that could reduce the department’s ability to achieve its business objective. Testing found that oversight and monitoring of program understanding does not occur by Records Management staff. Individual TRS management and staff reported that they are unsure of roles and responsibilities regarding the creation, maintenance, and disposition of records, hardcopy or electronic. Staff also stated that current guidelines are unclear for determining whether an email is a record. In addition, testing identified records that were maintained past the retention period while others were discarded prior to the retention period. Some electronic records could not be located during testing and others were filed in multiple locations.
APPENDIX B

A Picture of Effective Information Governance

The Maturity Model for Information Governance begins to paint a more complete picture of what effective information governance looks like. It is based on the eight Principles as well as a foundation of standards, best practices, and legal/regulatory requirements. The maturity model goes beyond a mere statement of the principles by beginning to define characteristics of various levels of recordkeeping programs. For each principle, the maturity model associates various characteristics that are typical for each of the five levels in the model:

Level 1 (Sub-standard)
This level describes an environment where recordkeeping concerns are either not addressed at all, or are addressed in a very ad hoc manner. Organizations that identify primarily with these descriptions should be concerned that their programs will not meet legal or regulatory scrutiny.

Level 2 (In Development)
This level describes an environment where there is a developing recognition that recordkeeping has an impact on the organization, and that the organization may benefit from a more defined information governance program. However, in Level 2, the organization is still vulnerable to legal or regulatory scrutiny since practices are ill-defined and still largely ad hoc in nature.

Level 3 (Essential)
This level describes the essential or minimum requirements that must be addressed in order to meet the organization's legal and regulatory requirements. Level 3 is characterized by defined policies and procedures, and more specific decisions taken to improve recordkeeping. However, organizations that identify primarily with Level 3 descriptions may still be missing significant opportunities for streamlining business and controlling costs.

Level 4 (Proactive)
This level describes an organization that is initiating information governance program improvements throughout its business operations. Information governance issues and considerations are integrated into business decisions on a routine basis, and the organization easily meets its legal and regulatory requirements. Organizations that identify primarily with these descriptions should begin to consider the business benefits of information availability in transforming their organizations globally.

Level 5 (Transformational)
This level describes an organization that has integrated information governance into its overall corporate infrastructure and business processes to such an extent that compliance with the program requirements is routine. These organizations have recognized that effective information governance plays a critical role in cost containment, competitive advantage, and client service.

Source: http://www.arma.org/r2/generally-accepted-br-recordkeeping-principles/metrics
APPENDIX C

Generally Accepted Recordkeeping Principles (GARP) ®

Principle of Accountability
A senior executive (or a person of comparable authority) shall oversee the information governance program and delegate responsibility for records and information management to appropriate individuals. The organization adopts policies and procedures to guide personnel and ensure that the program can be audited.

Principle of Integrity
An information governance program shall be constructed so the information generated by or managed for the organization has a reasonable and suitable guarantee of authenticity and reliability.

Principle of Protection
An information governance program shall be constructed to ensure a reasonable level of protection for records and information that are private, confidential, privileged, secret, classified, or essential to business continuity or that otherwise require protection.

Principle of Compliance
An information governance program shall be constructed to comply with applicable laws and other binding authorities, as well as with the organization’s policies.

Principle of Availability
An organization shall maintain records and information in a manner that ensures timely, efficient, and accurate retrieval of needed information.

Principle of Retention
An organization shall maintain its records and information for an appropriate time, taking into account its legal, regulatory, fiscal, operational, and historical requirements.

Principle of Disposition
An organization shall provide secure and appropriate disposition for records and information that are no longer required to be maintained by applicable laws and the organization’s policies.

Principle of Transparency
An organization’s business processes and activities, including its information governance program, shall be documented in an open and verifiable manner, and that documentation shall be available to all personnel and appropriate interested parties.
RM E-Records Projects

Jimmie E Savage
September 25, 2015
Challenges

- Volume – tidal wave, excessive resource consumption

- E-discovery, open records & regulatory requirements, i.e. records not being kept or can’t easily be located

- No centralized repositories – no policy/standards for where “official records” should be kept

- Others – Confidentiality, Data Protection, Vital Records
Metrics & Scope

- **Current: Unstructured data – User controlled**
  - Outlook (3.58 tb)
  - Network – G:\ (1.43 tb)
  - Network – S:\ (7.4 tb)
  - SharePoint – Process being developed

- **Future: Structured Databases – IT administered**
  - (Mainframe & External systems) – no metrics
  - Financial
  - Benefits
  - Tamale, Bloomberg, NEOGOV, etc.
Need Long Term Strategy

- Common thread – decentralized nature of e-records, i.e. technology has made file clerks out of us all
- No one single problem, but multiple problems
- Some are contradictory and solutions fight against each other, i.e. volume vs records not kept
- Broader context for assessing problems & developing strategic agency solutions
Generally Accepted Recordkeeping Principles

- Accountability
- Integrity
- Transparency
- Availability
- Protection
- Compliance
- Retention
- Disposition
## Process

- ROC – oversight and progress reporting
- GARP – program development and measurement
- Monitor metrics
- Resources & Succession Planning
- RM Consultant

## Projects

- Records awareness & training
- Email Policy
- Departmental Assessments
- Repositories:
  - User controlled
  - SharePoint
  - Generic FileNet app
## Projects Mapped to GARP

<table>
<thead>
<tr>
<th>Principles</th>
<th>Accountability</th>
<th>Integrity</th>
<th>Transparency</th>
<th>Availability</th>
<th>Protection</th>
<th>Compliance</th>
<th>Retention</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current RM Program</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>RM Audit</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Awareness &amp; Training</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Email Policy</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Department Assessments</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SharePoint Repository</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FileNet Repository</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
TAB 5
## FRAUD RISK IDENTIFICATION AND PREVENTION AUDIT

<table>
<thead>
<tr>
<th>Issue Type</th>
<th>Recommendation</th>
<th>Status Reported by Management</th>
<th>Reported Implementation Date</th>
<th>Management Response Addressed Recommendation?</th>
<th>Fully Implemented?</th>
<th>Implementation Current?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant</td>
<td><strong>Benefit Accounting</strong> - Improve system access reviews to ensure access privileges remain current with job duties and are appropriately balanced between the need for cross-training staff and the need for restricted access to limit opportunity for fraud</td>
<td>Implemented</td>
<td>12/2013</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Significant</td>
<td><strong>Benefit Processing</strong> - Improve system access reviews to ensure access privileges remain current with job duties and are appropriately balanced between the need for cross-training staff and the need for restricted access to limit opportunity for fraud</td>
<td>Implemented</td>
<td>9/2013</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

## REFUNDS OF INACTIVE AND DORMANT ACCOUNTS

<table>
<thead>
<tr>
<th>Issue Type</th>
<th>Recommendation</th>
<th>Status Reported by Management</th>
<th>Reported Implementation Date</th>
<th>Management Response Addressed Recommendation?</th>
<th>Fully Implemented?</th>
<th>Implementation Current?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant</td>
<td><strong>Human Resources</strong> and Executive Management should ensure Fraud, Waste, and Abuse Policy (FWAP) refresher training occurs for existing employees as required by policy.</td>
<td>Implemented</td>
<td>11/2014</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Significant</td>
<td><strong>Benefit Accounting</strong> should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds.</td>
<td>Implemented</td>
<td>2/2015</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Significant</td>
<td><strong>Benefit Processing</strong> should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds</td>
<td>Implemented</td>
<td>2/2015</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

We have completed the Follow-Up Audit on Significant Findings of Prior Benefits Audits, which is one of the areas identified in Internal Audit’s Fiscal Year 2015 Audit Plan.

The audit objective was to verify management’s implementation actions taken to address the audit recommendations made during the Fraud Risk Identification and Prevention Audit conducted in Fiscal Year 2013 as well as in the Refunds of Inactive and Dormant Accounts Audit conducted in Fiscal Year 2014 and to answer the following questions for each significant finding:

1. Did management responses fully address the original audit recommendations?
2. Were management responses implemented?
3. Is the implementation current?

During the Fraud Risk Identification and Prevention Audit, Internal Audit identified one significant finding related to system access reviews and addressed recommendations related to this finding to management of Benefit Accounting and Benefit Processing. During the follow-up audit, we concluded:

1. Management responses fully addressed all significant recommendations
2. Management responses were fully implemented by both departments
3. Implementation of indicated actions is not current for either department

During the Refunds of Inactive and Dormant Accounts Audit, Internal Audit identified one significant finding related to fraud opportunities and addressed recommendations related to this finding to management of Benefit Accounting, Benefit Processing, and Human Resources. During the follow-up audit, we concluded:

1. Management responses fully addressed all significant recommendations
2. Management responses were fully implemented by all three departments
3. Management actions remain current for all three departments

Results of our procedures are presented in more detail in the Audit Results section (page 3). The audit objective, scope, methodology and conclusion are described in Appendix A (pages 6-7). Appendix B includes the Summary Reports of the FY 2013 Fraud Risk Identification and Prevention Audit and the FY 2014 Refunds of Inactive and Dormant Accounts Audit (pages 8-9).
BACKGROUND

In August 2013, Internal Audit issued a report for the Fraud Risk Identification and Prevention Audit. The audit objective was to determine if Benefit Accounting and Benefit Processing departments mitigate significant internal and external fraud risks/opportunities by maintaining key internal controls.

Results of the audit indicated that while management controls were operating effectively to achieve the operational objectives of the business units, significant issues related to system access privileges were identified that could prevent the departments from effectively mitigating internal fraud.

It was recommended that management of Benefit Accounting and Benefit Processing improve system access reviews to ensure access privileges remain current with job duties and are appropriately balanced between the need for cross-training staff and the need for restricted access to limit opportunity for fraud. Management agreed with the recommendation and has indicated that actions have been implemented to mitigate the identified risks.

Additionally, in May 2014, Internal Audit issued a report for the Refunds of Inactive and Dormant Accounts Audit. The audit objective was to determine whether internal controls were in place and working effectively to achieve the following business objectives:

- Ensure inactive and dormant accounts are accurate, properly classified, and safeguarded
- Ensure inactive and dormant accounts are refunded to the correct person in the correct amount

Results of the audit indicated that although limited controls were in place, existing deficiencies at various points within the process created an increased risk of fraud and could significantly impact management’s ability to achieve the stated business objectives.

It was recommended that key staff within Benefit Accounting, Benefit Processing, and General Accounting evaluate the identified deficiencies and implement enhancements to strengthen account safeguards and decrease the risk of fraudulent or erroneous account refunds. A recommendation was made to Human Resources and Executive Management that Fraud, Waste, and Abuse refresher training should be administered as outlined in TRS policy.

The recommendations were accepted by management of Benefit Accounting, Benefit Processing, and Human Resources. All three departments have indicated that actions have been implemented to address the significant finding.

Management within General Accounting, accepted the identified risks and chose not to create a sub-ledger or other manner for tracking the net balance of dormant accounts as recommended by Internal Audit.

The objective of this follow-up audit was to verify the implementation actions taken by management in addressing significant risks noted in the two audit reports mentioned above.
AUDIT RESULTS

OVERALL RESULTS

Audit fieldwork focused on the significant recommendations made during the prior two audits. These recommendations were related to the following areas:

1. System access reviews (Benefit Accounting, Benefit Processing)
2. Enhanced safeguards related to account refunds (Benefit Accounting, Benefit Processing)
3. Refresher Fraud, Waste, and Abuse Training (Human Resources)

Results of fieldwork found that management responses related to all three areas were fully implemented and the implementation remains current for two of the three areas.

The table below provides details on management’s implementation status of in-scope audit recommendations from the FY 2013 Fraud Risk Identification and Prevention Audit.

<table>
<thead>
<tr>
<th>Rec #</th>
<th>Original Recommendation</th>
<th>Implementation Status (As determined by Follow-up Audit)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We recommend that Benefit Accounting improve system access reviews by developing a process for managers and team leaders to routinely review access privileges across all teams. Management should ensure that current accesses are limited to those necessary to carry out current job duties. This process should include a balance between the need for cross-training staff and the importance of restricted access to limit the opportunity for fraud</td>
<td>Management Response Fully Addressed Recommendation</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Implemented</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation is Current</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auditor Note</td>
<td>Testing found that implementation of management responses was not current. Staff were found to hold incompatible system access privileges that could create an opportunity for internal fraud.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response</td>
<td>System access was granted to fill a temporary business need and was not removed when no longer needed. This has been corrected and procedures have been updated to avoid a delay in the removal of temporary access in the future.</td>
</tr>
<tr>
<td>Rec #</td>
<td>Original Recommendation</td>
<td>Implementation Status (As determined by Follow-up Audit)</td>
<td>Notes</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Addressed Recommendation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Implemented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation is Current</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We recommend that **Benefit Processing** improve system access reviews by developing a process for managers and team leaders to routinely review access privileges across all teams. Management should ensure that current accesses are limited to those necessary to carry out current job duties. This process should include a balance between the need for cross-training staff and the importance of restricted access to limit the opportunity for fraud.

<table>
<thead>
<tr>
<th>Rec #</th>
<th>Original Recommendation</th>
<th>Implementation Status (As determined by Follow-up Audit)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Addressed Recommendation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Implemented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation is Current</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table below provides details on management’s implementation status of in-scope audit recommendations from the FY 2014 *Refunds of Inactive and Dormant Accounts Audit.*

<table>
<thead>
<tr>
<th>Rec #</th>
<th>Original Recommendation</th>
<th>Implementation Status (As determined by Follow-up Audit)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Addressed Recommendation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Response Fully Implemented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation is Current</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Benefit Accounting** Management and key staff should evaluate the identified deficiencies and implement enhancements to strengthen account safeguards and decrease the risk of fraudulent or erroneous account refunds.

**Benefit Processing** Management and key staff should evaluate the identified deficiencies and implement enhancements to strengthen account safeguards and decrease the risk of fraudulent or erroneous account refunds.
<table>
<thead>
<tr>
<th>Rec #</th>
<th>Original Recommendation</th>
<th>Implementation Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><strong>Human Resources</strong> and Executive Management, having already expressed their intention to reconcile the issue of no refresher training for existing employees, should execute the intended plan to administer the required training as outlined in policy.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

We appreciate TRS Benefit Accounting, Benefit Processing, and Human Resources management and staff for their cooperation, courtesy, and professionalism extended to us during this follow-up audit.

Amy Barrett, CIA, CPA, CISA  
Chief Audit Executive

Toma Miller, CIA, CGAP  
Senior Auditor

Jan Engler, CIA, CISA, CFE  
Audit Manager
APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted this audit in accordance with generally accepted government auditing standards contained in the Government Auditing Standards issued by the Comptroller General of the United States and the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT OBJECTIVE

The audit objective was to verify management’s implementation actions taken to address the audit recommendations made during the Fraud Risk Identification and Prevention Audit conducted in Fiscal Year 2013 as well as in the Refunds of Inactive and Dormant Accounts Audit conducted in Fiscal Year 2014 and to answer the following questions for each significant finding:

1. Did management responses fully address the original audit recommendations?
2. Were management responses implemented?
3. Is the implementation current?

SCOPE

The scope of the follow-up audit included audit recommendations related to significant findings reported in the FY 2013 Fraud Risk Identification and Prevention Audit as well as in the FY 2014 Refunds of Inactive and Dormant Accounts Audit.

METHODOLOGY

The audit methodology included obtaining information on management’s implementation actions for each significant issue. To determine the implementation status, the auditor conducted interviews, reviewed documents, performed selected tests, and reviewed departmental procedures.

CONCLUSION

During the Fraud Risk Identification and Prevention Audit, Internal Audit identified one significant finding related to system access reviews and addressed recommendations related to this finding to management of Benefit Accounting and Benefit Processing. During the follow-up audit, we concluded:

1. Management responses fully addressed all significant recommendations
2. Management responses were fully implemented by both departments
3. Implementation of indicated actions is not current for either department
During the *Refunds of Inactive and Dormant Accounts Audit*, Internal Audit identified one significant finding related to fraud opportunities and addressed recommendations related to this finding to management of Benefit Accounting, Benefit Processing, and Human Resources. During the follow-up audit, we concluded:

1. Management responses fully addressed all significant recommendations
2. Management responses were fully implemented
3. Management actions are current
APPENDIX B
Summary Report of FY 2013 Fraud Risk Identification and Prevention Audit

Findings and management responses that are in the red-line box are covered in the project scope of this follow-up audit.
Summary Report of FY 2014 Refunds of Inactive and Dormant Accounts Audit

REFUNDS OF INACTIVE AND DORMANT ACCOUNTS
May 21, 2014
TRS Internal Audit Department

Business Objectives
Ensure inactive and dormant accounts are accurate, properly classified, and safeguarded
- Internal or external fraud
- Noncompliance with laws and rules
- Inaccurate account balance records including interest earned amounts
- Processes not coordinated among various business units
- Insufficient monitoring
- Improperly trained staff

Ensure inactive and dormant accounts are refunded to the correct person in the correct amount
- Internal or external fraud
- Accounts refunded to the wrong person
- Accounts refunded in the wrong amount
- Duplicate refund payments
- Processes not coordinated among various business units
- Insufficient monitoring
- Improperly trained staff

Business Risks
- Routine reconciliations
- Segregation of duties
- Proper system access
- Supervisory review
- Exception reports
- Timely staff training
- Verification of refund application information

Management Controls
- Verification of refund application information
- Supporting documentation
- Approvals and supervisory review
- Notification and outreach
- Exception Reports
- Timely staff training
- Proper system access

Controls Tested
All controls listed above were tested

Results
In the Benefit Accounting, Benefit Processing, and General Accounting departments, factors increasing opportunities for fraud exist at various points within the process for refunding inactive and dormant accounts. These accounts include accumulated accrued contributions and earned interest of non-vested, terminated members where the average refund is $4,050.

In the Benefit Accounting and Benefit Processing departments, key controls around account corrections and refund processing are not always effective. These controls are secondary reviews and exception report monitoring, which are designed to detect and correct errors.

Recommended Actions
Benefit Accounting, Benefit Processing, and General Accounting department management should evaluate the process for refunding inactive and dormant accounts in its entirety and implement enhancements to strengthen safeguards and decrease the risk of fraudulent or erroneous account refunds. Additionally, Human Resources and Executive management should execute the intended plan to provide refresher fraud awareness and prevention training to existing employees as outlined in policy.

Management Responses
Benefit Accounting, Benefit Processing, and General Accounting department management agree with the recommendation to evaluate the process for refunding inactive and dormant accounts in its entirety and implement needed enhancements. Additionally, Human Resources and Executive management agree with the recommendation to provide refresher fraud awareness and prevention training to existing employees as per TRS policy.

Legend of Results:
- Significant to TRS
- Significant to Business Objectives
- Significant to Other Reportable Issue
- Significant to Positive Finding or No Issue

TRS Internal Audit
September 16, 2015  Follow-up Audit of Significant Findings of Prior Benefits Audits  Page 9
TAB 5B
## TRS Internal Audit
### Summary of Audit Recommendations Status
### September 2015

<table>
<thead>
<tr>
<th>Project</th>
<th>Recommendation</th>
<th>Status</th>
<th>Issue Type</th>
<th>Estimated Date</th>
<th>Revised / Actual Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-602</td>
<td>Fraud Risk Identification and Prevention Audit*</td>
<td>Implemented</td>
<td>Significant</td>
<td>12/2013</td>
<td>12/2013</td>
</tr>
<tr>
<td></td>
<td>Benefit Accounting - Improve system access reviews to ensure access privileges remain current with job duties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benefit Processing - Improve system access reviews to ensure access privileges remain current with job duties and are appropriately balanced between the need for cross-training staff and the need for restricted access to limit opportunity for fraud</td>
<td>Implemented</td>
<td>Significant</td>
<td>12/2013</td>
<td>9/2013</td>
</tr>
<tr>
<td>14-104</td>
<td>Refunds of Inactive and Dormant Accounts*</td>
<td>Implemented</td>
<td>Significant</td>
<td>12/2014</td>
<td>11/2014</td>
</tr>
<tr>
<td></td>
<td>Fraud, Waste, and Abuse Policy (FWAP) refresher training needs to occur for existing employees as required by policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benefit Accounting department should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds</td>
<td>Implemented</td>
<td>Significant</td>
<td>2/2015</td>
<td>2/2015</td>
</tr>
<tr>
<td></td>
<td>Benefit Processing department should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds</td>
<td>Implemented</td>
<td>Significant</td>
<td>2/2015</td>
<td>2/2015</td>
</tr>
</tbody>
</table>

*The results of the follow-up audit of significant Benefit recommendations will be reported at the September 2015 Board Audit Committee meeting (See Tab 5A)

### Significant to Business Objectives
- Past original estimated completion date
- No management action plan or No progress on management action plan
- Original estimated completion date has not changed
- Progress on management action plan
- Satisfactory implementation of management action plan or Acceptance of risk by management
- Implementation of management action plan pending Internal Audit validation

### Other Reportable
- Past original or first revised estimated completion date
- No management action plan or No progress on management action plan
- Within original or first revised estimated completion date
- Progress on management action plan
- Satisfactory implementation of management action plan or Acceptance of risk by management
## TRS Internal Audit
### Summary of Audit Recommendations Status
#### September 2015

<table>
<thead>
<tr>
<th>Project</th>
<th>Recommendation</th>
<th>Status</th>
<th>Issue Type</th>
<th>Estimated Date</th>
<th>Revised / Actual Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-301</td>
<td>FY 2014 Overall IMD Internal Control Opinion</td>
<td>Implemented</td>
<td>Other Reportable</td>
<td>8/2015</td>
<td>8/2015</td>
</tr>
<tr>
<td></td>
<td>The ENR team should explore leveraging consultants and expanding consultant coverage to obtain additional services and reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-401</td>
<td>Purchasing and Contract Administration</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>9/2015</td>
<td>10/2015</td>
</tr>
<tr>
<td></td>
<td>TRS’ Contract Administration Manual revision process should ensure:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>➢ revisions are made by a coordinated workgroup across various TRS departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>➢ the competitive selection process is well defined and new procedures are inclusive of various procurement processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>➢ new procedures include a clear process for documenting the justification and approval for all exceptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRS’ Contract Administration Manual should have a coaching component for all contract sponsors, their designees, and anyone involved in procurement at TRS. Coaching should be provided to the Board and include information regarding fiduciary responsibility and TRS fiduciary obligation.</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>12/2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRS’ Contract Administration Manual should have a monitoring component to ensure compliance with the revised Contract Administration Manual and a method for follow-up and/or escalation of non-compliance.</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>9/2015</td>
<td>10/2015</td>
</tr>
<tr>
<td></td>
<td>The Purchasing Department should update written procedures to match current and new processes</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>10/2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Services management should work with Legal Services to improve control over who is authorized to obligate TRS during purchasing or contracting activities</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>2/2015</td>
<td>10/2015</td>
</tr>
<tr>
<td></td>
<td>Improve central contract files to include all necessary documentation and train purchasing staff and contract sponsors on these requirements. Implement an escalation process to ensure required documentation is provided to the owner of the contract file.</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>12/2014</td>
<td>10/2015</td>
</tr>
<tr>
<td></td>
<td>Update TRS record retention schedules to clearly define who the official record holders are for all contracts and related documentation</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>2/2015</td>
<td>10/2015</td>
</tr>
</tbody>
</table>
# TRS Internal Audit
## Summary of Audit Recommendations Status
### September 2015

<table>
<thead>
<tr>
<th>Project</th>
<th>Recommendation</th>
<th>Status</th>
<th>Issue Type</th>
<th>Estimated Date</th>
<th>Revised / Actual Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-301</td>
<td>FY 2015 Overall IMD Internal Control Opinion</td>
<td>Implemented</td>
<td>Other Reportable</td>
<td>6/2015</td>
<td>8/2015</td>
</tr>
<tr>
<td></td>
<td>Clarify guidelines to ensure consistent documentation of Private Equity staff's due diligence and monitoring activities</td>
<td>Implemented</td>
<td>Other Reportable</td>
<td>6/2015</td>
<td>8/2015</td>
</tr>
<tr>
<td></td>
<td>Continue efforts to increase General Partners' transparency on fees and expenses</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>6/2015</td>
<td>12/2015</td>
</tr>
<tr>
<td></td>
<td>Provide clear guidelines for acceptable accounting and valuation standards for Private Equity investments</td>
<td>In Progress</td>
<td>Other Reportable</td>
<td>9/2015</td>
<td>3/2016</td>
</tr>
</tbody>
</table>
# TRS Internal Audit
## Summary of Audit Recommendations Status
### September 2015

**Status of Reporting Entity Audit Recommendations:**

<table>
<thead>
<tr>
<th>Audit Project #</th>
<th>Audit Report Date</th>
<th>Reporting Entity (RE)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4/29/2015</td>
<td>Santa Maria ISD</td>
<td>In Progress</td>
</tr>
<tr>
<td>2</td>
<td>5/21/2015</td>
<td>College Station ISD</td>
<td>In Progress</td>
</tr>
<tr>
<td>3</td>
<td>5/21/2015</td>
<td>Presidio ISD</td>
<td>Under Legal Services Review</td>
</tr>
<tr>
<td>4</td>
<td>5/21/2015</td>
<td>El Paso ISD</td>
<td>In Progress</td>
</tr>
</tbody>
</table>

**Statuses:**

- **Under Legal Services Review** – TRS Benefits team has requested Legal Services review before taking any further action
- **In Progress** – TRS Benefits team is working with RE on corrections/adjustments
- **Closed** – TRS Benefits team has resolved all RE audit findings
- **No Audit Findings** – the audit resulted in no audit findings
TAB 6
INTERNAL AUDIT QUALITY ASSURANCE SELF-ASSESSMENT
June 30, 2015
Teacher Retirement System Internal Audit Department

To determine whether Internal Audit (IA) function generally conforms with professional auditing standards, Texas Internal Auditing Act, auditor codes of ethics, and Internal Audit’s Quality Assurance and Improvement Program (QAIP). (Professional audit standards consider Internal Audit function authority, independence, proficiency, quality assurance and improvement program, and how the audits are planned, performed, communicated, managed, and resolved.)

Inherent Risks Without Controls
- Audits may not address significant organizational risks
- Audit processes may be inefficient and ineffective
- Assurance could be unreliable without effective quality control

Internal Audit Controls
- Internal Audit charter, organizational chart, board minutes
- Job descriptions, resumes, training records, performance evaluations
- Work papers, work programs, reports, quality control processes
- Annual risk assessment, audit plan
- IA policies and procedures
- TRS Internal Audit Quality Assurance and Improvement Program

Tests Performed
Conducted self-assessment to validate Internal Audit activities conform with applicable professional standards and state law using the self-assessment tool developed by the State Agency Internal Audit Forum (SAIAF). These tests included steps to assess implementation of Internal Audit’s QAIP.

Best Practices
- Board approved TRS Internal Audit Charter
- Achievement of professional requirements for annual training
- Supervisory review of all audit working papers
- Management involvement in annual audit planning
- IA Strategic Plan alignment with TRS Strategic Plan

Results
IA “generally conforms” with professional auditing standards, related codes of ethics, Texas state law, and Internal Audit’s Quality Assurance and Improvement Program. Many best practices were identified. Opportunities for additional improvement were identified.

Recommended Actions
Opportunities for improvement:
1. Develop and implement a process to ensure that the Chief Audit Executive (CAE) annually updates the documentation of threats to independence and objectivity
2. Ensure that audit steps for wrap up and project close-outs are completed timely

The Chief Audit Executive agrees with the recommendations and will ensure that the memo (documentation of threats to independence and objectivity) is updated annually by including it as a discussion item on the agenda for the Annual Internal Audit Retreat and that audit steps for wrap up and project close-outs are completed timely.

Legend of Results: Red - Does not conform  Yellow - Partially conforms  Green - Generally conforms
June 30, 2015

Audit Committee, Board of Trustees
Mr. Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the Internal Audit Quality Assurance Self-Assessment as included in the Fiscal Year 2015 Audit Plan. Annually, TRS Internal Audit staff conducts a self-assessment as an integral part of Internal Audit’s Quality Assurance and Improvement Program (QAIP).

The objective of the self-assessment conducted in fiscal year 2015 was to determine whether the TRS Internal Audit department (Internal Audit) generally conforms with requirements of The Institute of Internal Auditors (IIA) International Standards for the Professional Practice of Internal Auditing (Standards), the U.S. Government Accountability Office’s (GAO) Government Auditing Standards, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit’s Quality Assurance and Improvement Program (QAIP).

CONCLUSION

Based on the results of the self-assessment, we concluded that TRS Internal Audit generally conforms with the IIA International Standards for the Professional Practice of Internal Auditing, the U.S. GAO’s Government Auditing Standards, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit’s QAIP.

As part of our commitment to continuous improvement, we identified opportunities to improve our processes and procedures to enhance compliance with statutory and professional internal auditing requirements. These are included in this report as “Opportunities for Improvement” and are:

- Develop and implement a process to ensure that the Chief Audit Executive (CAE) annually updates the documentation of threats to independence and objectivity
- Ensure that audit steps for wrap up and closing out projects are completed timely

Results of our procedures are presented in more detail in the Detailed Conclusions section. The self-assessment objective, scope, methodology, and conclusion are described in Appendix A. The Internal Audit organization chart is found at Appendix B.
BACKGROUND

The Chief Audit Executive is responsible for Internal Audit’s *Quality Assurance and Improvement Program (QAIP)*, which covers all types of internal audit activities. The QAIP is designed to ensure that Internal Audit:

- Complies with professional auditing standards, codes of ethics, and state law
- Is monitored to ensure effective and efficient operations
- Provides unbiased and independent assurance activities
- Adds value and improves organizational operations
- Includes both periodic and ongoing internal assessments
- Includes an external quality assurance review (peer review) at least once every three years, the results of which are communicated to executive management and the TRS Board Audit Committee (Audit Committee)

INTERNAL ASSESSMENT

**Ongoing Reviews** of internal audit activities are conducted through:

- Supervision of engagements
- Regular, documented review of work papers during engagements by appropriate Internal Audit staff
- Consistent use of audit policies and procedures for each engagement to ensure compliance with applicable planning, fieldwork, and reporting standards
- Review and approval of all final reports and recommendations by the CAE
- Feedback from customer surveys on individual engagements
- Analyses of performance metrics established to improve effectiveness and efficiency

**Periodic Reviews** of internal audit activities are designed to assess conformance with professional auditing standards, codes of ethics, and state law, and the efficiency and effectiveness of the internal audit activity in meeting the needs of its various stakeholders. Periodic reviews are conducted through:

- Routine independent customer surveys and participation in 360 surveys
- Quarterly activity and performance reporting to executive management and the Audit Committee
- Annual risk assessment for purpose of annual audit planning
- Annual self-assessment reviews to assess compliance with internal audit policies and auditing standards, achievement of internal audit performance metrics, and benchmarking of best practices
OVERALL CONCLUSION

After completing the self-assessment for fiscal year 2015, our conclusion is that the Teacher Retirement System of Texas (TRS) Internal Audit function generally conforms with The Institute of Internal Auditor’s (IIA) International Standards for the Professional Practice of Internal Auditing, the U.S. Government Accountability Office’s (GAO) Government Auditing Standards, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit’s Quality Assurance and Improvement Program.

This conclusion is based on completion of a self-assessment using the State Agency Internal Audit Forum (SAIAF) Master Peer Review Program and the review of a complete set of working papers of an assurance and a consulting project using the SAIAF Working Paper Review Tool in TeamMate\(^1\). As part of our commitment to continuous improvement, we identified opportunities to enhance our processes and documentation as described in the Detailed Results section of this report entitled “Opportunities for Improvement.”

More detailed information regarding our self-assessment is found below. All of the standards and the individual conformance levels are detailed in Appendix C.

---

\(^1\) Audit management software
DETAILED RESULTS

I. Positive Findings

The TRS Internal Audit Charter incorporates all of the standards, is clear, is updated every two years, and is approved by the Audit Committee of the Board.

II. Opportunities for Improvement

A. The U.S. Government Accountability Office’s (GAO) Government Auditing Standards and GAO Standard on Independence and Objectivity

The U.S. Government Accountability Office’s (GAO) Government Auditing Standards and GAO Standard on Independence and Objectivity, Standard 3.59, is one aspect in managing internal audit’s independence and objectivity with all of its activities. This standard requires that the Chief Audit Executive (CAE) document threats to independence. While the CAE fulfilled this requirement via a memo, we noted that no regular update period for the memo is specified. The last memo to file was dated October 1, 2012 and the subsequent memo was updated May 15, 2015.

Opportunity for Improvement

The CAE should ensure that the required documentation of threats to independence and objectivity be updated at least annually, or more often as situations change. This process can be achieved by including it as an item for discussion on the agenda for the Annual Internal Audit Retreat.

Chief Audit Executive’s Response

The CAE agrees. Internal Audit will add this as an item for discussion on the agenda for the Annual Internal Audit Retreat. Planned implementation date is October 31, 2015.

B. The International Professional Practices Framework (IPPF) Standards on Managing the Internal Audit Activity

Although Internal Audit adheres to audit standards for performing and reporting on audits, an opportunity for improvement exists for Internal Audit to ensure that wrap-up steps in TeamMate to close out projects and dispose of temporary files are followed consistently. Some projects are not being closed out on a timely basis after recommendations have been implemented and temporary work papers residing on internal network drives are not always disposed of timely.

Opportunity for Improvement

The CAE should ensure that all wrap-up steps in the electronic work paper application, TeamMate, are completed on a timely basis. This might be accomplished by:
1. Being copied on email reminders sent by the TeamMate Administrator to project leads to close out projects and then setting firm deadlines for close-outs.
2. Assigning responsibility to the Audit Committee Coordinator(s) to ensure that temporary files are deleted from the network drive after reports are distributed to oversight bodies.

Chief Audit Executive’s Response

The CAE agrees. The CAE will monitor and set firm deadlines for closing projects and assign responsibility to the TeamMate Administrator to ensure that temporary files on the network drive are disposed of after reports have been distributed to the oversight bodies.

* * * *

We express our appreciation to the TRS Board, Audit Committee of the Board, executive management, senior management, and staff who consistently support Internal Audit and audit activities.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Dinah G. Arce, CIA, CPA, CFE, CIDA
Senior Auditor
Objective

The self-assessment objective was to determine whether the Teacher Retirement System of Texas (TRS) Internal Audit generally conforms with The IIA Standards for the Professional Practice of Internal Auditing, the U.S. GAO’s Government Auditing Standards, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit’s QAIP.

Scope

The self-assessment review period was fiscal year 2014. We used State Agency Internal Audit Forum (SAIAF) procedures and steps that included the International Standards for the Professional Practice of Internal Auditing, Generally Accepted Government Auditing Standards (GAGAS), Texas Internal Auditing Act, and Internal Audit’s QAIP requirements to conduct the annual TRS Internal Audit Quality Assurance Self-Assessment.

Methodology

We evaluated conformance with the following statutes and professional standards:

- Texas Government Code Chapter 2102 (Texas Internal Auditing Act)
- International Standards for the Professional Practice of Internal Auditing and the Code of Ethics of the Institute of Internal Auditors, Inc. (IIA)
- Generally Accepted Government Auditing Standards (GAGAS) developed by the U.S. Government Accountability Office (GAO) and the GAO Code of Ethics

During fieldwork, we performed the following procedures:

- Reviewed the most current TRS Internal Audit Charter, Internal Audit plan, TRS Internal Audit job descriptions, TRS Internal Audit certifications and continuing professional education hours, Request for Qualifications (RFQ) documentation, and follow-up documentation of the past audit recommendations
- Interviewed the Chief Audit Executive and other TRS Internal Audit Staff

Conclusion

Our conclusion is that TRS Internal Audit generally conforms with the requirements of professional standards and related codes of ethics, the state law, and Internal Audit’s QAIP.
APPENDIX B

TRS ORGANIZATIONAL CHART

The following organization chart shows the Internal Audit function reports directly to the Board of Trustees, but administratively to the Executive Director. This facilitates an independent environment for the Internal Audit function to fulfill professional standards.
## APPENDIX C

### TRS 2014 Self-Assessment

### SUMMARY OF COMPLIANCE WITH STANDARDS

<table>
<thead>
<tr>
<th>Category</th>
<th>Generally Conforms</th>
<th>Partially Conforms</th>
<th>Does Not Conform</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL CONCLUSION</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIA CODE OF ETHICS</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEXAS INTERNAL AUDITING ACT</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IIA STANDARDS:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1000 Purpose, Authority, and Responsibility</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1010 Recognition of the Definition of Internal Auditing, the Code of Ethics, and the Standards in the Internal Audit Charter</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1100 Independence and Objectivity</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1110 Organizational Independence</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1120 Individual Objectivity</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1130 Impairment to Independence and Objectivity</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1200 Proficiency and Due Professional Care</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1210 Proficiency</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1220 Due Professional Care</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1230 Continuing Professional Development</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1300 Quality Assurance and Improvement Program</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 1310 Requirements of the Quality</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard/Section</td>
<td>Description</td>
<td>Generally Conforms</td>
<td>Partially Conforms</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>AS 1311</td>
<td>Internal Assessments</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>AS 1312</td>
<td>External Assessments</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>AS 1320</td>
<td>Reporting on the Quality Assurance and Improvement Program</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>AS 1321</td>
<td>Use of “Conforms with the International Standards for the Professional Practice of Internal Auditing”</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2000</td>
<td>Managing the Internal Audit Activity</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2010</td>
<td>Planning</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2020</td>
<td>Communication and Approval</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2030</td>
<td>Resource Management</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2040</td>
<td>Policies and Procedures</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2050</td>
<td>Coordination</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2060</td>
<td>Reporting to Senior Management and the Board</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2100</td>
<td>Nature of Work</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2110</td>
<td>Governance</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2120</td>
<td>Risk Management</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2130</td>
<td>Control</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2200</td>
<td>Engagement Planning</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2201</td>
<td>Planning Considerations</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2210</td>
<td>Engagement Objectives</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2220</td>
<td>Engagement Scope</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2230</td>
<td>Engagement Resource</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>Description</td>
<td>Conformity</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Allocation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS 2240</td>
<td>Engagement Work Program</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2300</td>
<td><strong>Performing the Engagement</strong></td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2310</td>
<td>Identifying Information</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2320</td>
<td>Analysis and Evaluation</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2330</td>
<td>Documenting Information</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2340</td>
<td>Engagement Supervision</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2400</td>
<td><strong>Communicating Results</strong></td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2410</td>
<td>Criteria for Communicating</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2420</td>
<td>Quality of Communications</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2421</td>
<td>Errors and Omissions</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2430</td>
<td>Use of “Conducted in Conformance with the <em>International Standards for the Professional Practice of Internal Auditing</em>”</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2431</td>
<td>Engagement Disclosure of Nonconformance</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2500</td>
<td>Monitoring Progress</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PS 2600</td>
<td>Resolution of Senior Management’s Acceptance of Risks</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

**GOVERNMENT AUDITING STANDARDS:**

<p>| GAGAS 1.19  | Independence and Objectivity                                | Pass       |
|            |                                                            |            |
| GAGAS 2.23  | Quality Assurance and Improvement Program                   | Pass       |
|            |                                                            |            |</p>
<table>
<thead>
<tr>
<th>GAGAS</th>
<th>Engagement Planning</th>
<th>Generally Conforms</th>
<th>Partially Conforms</th>
<th>Does Not Conform</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.07</td>
<td></td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.36-38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.40-41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.45-46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.50-51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAGAS 6.53</td>
<td>Performing the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.60</td>
<td>Engagement</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.66-67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAGAS 7.04</td>
<td>Communicating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.09-7.13</td>
<td>Results</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.14-7.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.21-7.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2797.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.32-7.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A7.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Definitions of conformance ranking system:

**Generally Conforms** –
Means the assessor has concluded that the relevant structures, policies, and procedures of the activity, as well as the processes by which they are applied, comply with the requirements of the individual Standard or element of the Code of Ethics in all material respects. For the sections and major categories, this means that there is general conformity to a majority of the individual Standards or elements of the Code of Ethics, and partial conformity to the others, within the section/category. There may be significant opportunities for improvement, but these should not represent situations where the activity has not implemented the Standards or the Code of Ethics, is not applying them effectively, or is not achieving their stated objectives.

**Partially Conforms** –
Means the assessor has concluded that the activity is making good–faith efforts to comply with the requirements of the individual Standard or element of the Code of Ethics, section and major category, but has fallen short of achieving some of the major objectives. This will usually represent some significant opportunities for improvement in effectively applying the Standards or Code of Ethics and/or achieving their objectives. Some of the deficiencies may be beyond the control of the activity and may result in recommendations to senior management or the Board of the organization.

**Does Not Conform** –
Means the assessor has concluded that the activity is not aware of, is not making good–faith efforts to comply with, or is failing to achieve many/all of the objectives of the individual Standard or element of the Code of Ethics, section and major category. These deficiencies will usually have a significant negative effect on the activity’s effectiveness and its potential to add value to the organization. They may also represent significant opportunities for improvement, including actions by senior management or the Board.
TAB 7
Fiscal Year 2016 Audit Plan

September 25, 2015

Amy Barrett, CIA, CISA, CPA
Chief Audit Executive

Christopher S. Moss
Chair, Audit Committee, Board of Trustees

Brian Guthrie
Executive Director

R. David Kelly
Chair, Board of Trustees
Executive Summary

Professional and Statutory Requirements

This document provides the Fiscal Year 2016 Audit Plan (Audit Plan) as required by professional auditing standards, the Texas Internal Auditing Act (Act), and the Texas Government Code 2102.008 for the Teacher Retirement System of Texas (TRS). The Act requires state agencies to conduct a program of internal auditing that includes an annual audit plan that is prepared using risk assessment techniques and identifies individual audit projects to be conducted during the year. The Audit Plan is required to be evaluated and updated annually for recommendation of approval by the TRS Audit Committee of the Board of Trustees (Audit Committee) to the TRS Board of Trustees (Board). Internal Audit is independent of management and provides objective assurance and consulting services designed to add value and improve TRS' operations.

Audit Plan Development and Scope

Our Audit Plan is designed to provide coverage of key risks, given the existing staff and approved budget. See the Appendices for information regarding the internal audit budget, performance measures, and audit universe.

Changes Subsequent to Approval

Interim changes to the Audit Plan will occur from time to time due to changes in business risks, timing of TRS' initiatives, and staff availability. We will report Audit Plan changes to senior management and present changes to the Audit Committee at the following quarterly Audit Committee meeting. Amendments to the approved Audit Plan deemed to be significant (based on discussions with the executive director and audit committee chair) will be submitted to the Audit Committee for recommendation to the Board for approval. The State Auditor's Office also requires notification of material changes to the Audit Plan.
Risk Assessment & Audit Planning Approach

Interviews, risk assessment surveys, and the Stoplight Report developed by the Enterprise Risk Management (ERM) team were used to identify areas of risk and potential internal audit projects. This information was combined into an overall audit plan designed to address critical risks to achieving TRS objectives while balancing operational requirements. The Audit Plan also includes hours for ad hoc projects and special requests. The following approach was taken in creating the Audit Plan:

**Information Gathering and Scoping**

A. Gained understanding of industry trends and current environmental risks through discussions with industry personnel, reading publications, and attending relevant training
B. Read technical guidance from GASB and AICPA to identify changes to audit and accounting requirements
C. Gained understanding of TRS’ strategic objectives and key initiatives by reading the strategic plan
D. Updated audit universe based upon changes in organizational structure, information from TEAM, and input from staff

**Risk Analysis**

A. Interviewed members of the board and management to obtain various points of view on risks
B. Surveyed executives and select leadership team members on their assessment of risk in the categories of fraud, compliance, materiality, complexity, suspected concerns, and emerging risks
C. Obtained latest Enterprise Risk Management Stoplight Report to identify additional areas of risk

**Development and Vetting of Internal Audit Plan**

A. Developed a proposed Audit Plan based on interviews, risk assessments, resource availability, budget, and division coverage
B. Met with Risk Oversight Committee
   i. Reviewed risk assessment results
   ii. Discussed highest priority audits and projects
   iii. Discussed proposed audit plan
C. Considered updating TRS Internal Audit Charter to ensure alignment with proposed Audit Plan (no update deemed necessary)

**Next Steps**

A. Review and discuss the proposed Audit Plan with the Audit Committee
B. Obtain Audit Committee recommendation and Board approval of Audit Plan
Types of Projects to Cover Risk Areas

An important part of the Audit Plan is that the identified processes, systems, and initiatives should receive differing types and levels of review based on their importance, perceived risk, and most efficient approach. Our suggested levels of review activities are as follows:

Audit
- Audit Focus: Assess evidence available in order to conclude on an audit objective
- Deliverable: Audit report for public distribution unless protected by statute
- Estimated level of effort per project: 400 - 500 hours

Agreed-Upon Procedures
- Agreed-Upon Procedures Focus: Determine specific steps to test with management’s agreement and report on results; used for data analytics and quarterly testing of specific data and transactions
- Deliverable: Agreed-upon procedures report for public distribution (use is limited to those with understanding of procedures performed)
- Estimated level of effort per project: 100 - 300 hours

Formal Consulting
- Consulting Focus: Respond to requests for formal study or assessment with recommendations; no assurance provided
- Deliverable: Consulting report or memo for limited distribution; significant material weaknesses identified would be reported to executive management and the Audit Committee as required by professional auditing standards
- Estimated level of effort per project: 100 - 200 hours

Informal Consulting (Advisory)
- Advisory Focus: Participate in activities in a non-voting capacity, e.g., provide input on policies and procedures
- Deliverable: Verbal discussion or a brief memo to management
- Estimated level of effort per year: 10 – 100 hours
Audit Plan: TEAM

The tables on this page and the following pages provide the name of each project, type of project, and preliminary scope of work to be performed. Scope of work will be finalized as part of each project’s formal planning phase.

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Preliminary Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEAM Program Internal Controls Assessment</td>
<td>Advisory</td>
<td>Assist management in its evaluation of key internal controls incorporated into TRUST, the new benefits system, and business processes</td>
</tr>
<tr>
<td>TEAM Security and Access Controls Assessment</td>
<td>Advisory</td>
<td>Assist management in its evaluation of segregation of duties and security controls incorporated into TRUST</td>
</tr>
<tr>
<td>TEAM Independent Program Assessment (IPA) Vendor Support</td>
<td>Advisory</td>
<td>Coordinate and facilitate activities of the IPA vendor and ensure direct access to executive management and the board</td>
</tr>
</tbody>
</table>
| TEAM Committees and TEAM Projects Participation            | Advisory   | Participate in TEAM Executive Steering Committee (ESC) and other committees in a non-voting capacity, and provide advisory services related to TEAM projects’ activities as outlined in the TEAM projects’ charters pertaining to internal audit activities. In FY 2015, Internal Audit participated in the following TEAM committees and projects:  
  • Executive Steering Committee  
  • TEAM Budget Committee  
  • Organizational Change Management Advisory Groups  
  • Business Procedures and Training Project  
  • Select Detailed Level Requirements sessions  
  • Decommissioning Project  
  • Security Architecture meetings  
  • Monthly meetings with TEAM program manager and HP executives |
## Audit Plan: Pension Benefits

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Preliminary Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits Testing for State Auditor's Office (SAO) Audit of Comprehensive Annual Financial Report (CAFR)</td>
<td>Audit</td>
<td>Conduct pension benefits testing on behalf of the SAO to be used in completion of the CAFR audit</td>
</tr>
<tr>
<td>Semi-Annual Benefits Testing</td>
<td>Agreed-Upon Procedures</td>
<td>Recalculate a sample of benefit payments semi-annually and determine whether documentation on file supports the calculation; scope in other tests related to benefits as agreed-upon with management</td>
</tr>
<tr>
<td>Reporting Entity Audits (6 – 8) and investigations</td>
<td>Audit</td>
<td>Determine whether information reported to TRS is complete and accurate, especially in the areas of eligibility (pension and health care), compensation, contributions, surcharges (pension and health care), and health care premiums paid</td>
</tr>
<tr>
<td>TRS Reporting Entity Website Audit Information</td>
<td>Advisory</td>
<td>Update audit-related information and tools on the TRS employer (reporting entity) website. Information may include self-audits, audit programs, audit results, technical guidance, and frequently asked questions about reporting entity audits.</td>
</tr>
<tr>
<td>Benefits Data Analysis Pilot Project</td>
<td>Advisory</td>
<td>Develop data analysis capabilities of Internal Audit staff and analyze benefits data to identify potential errors or omissions</td>
</tr>
</tbody>
</table>
# Audit Plan: Finance and Executive

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Preliminary Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial Data Controls</td>
<td>Audit (Carryover Project from FY 2015)</td>
<td>Assess whether internal controls are in place and working effectively to determine the accuracy and completeness of the fiscal year 2014 actuarial data files for the pension trust fund (final audit objective)</td>
</tr>
<tr>
<td>State Auditor’s Office (SAO) Financial (CAFR) Audit Coordination</td>
<td>Advisory</td>
<td>Coordinate activities of the SAO to ensure deadlines are met; coordinate quarterly update meetings with executive management and the SAO; maintain SAO document request SharePoint site</td>
</tr>
<tr>
<td>Special Requests and Emerging Issues</td>
<td>Advisory</td>
<td>Address special requests and emerging issues during the year in coordination with management</td>
</tr>
<tr>
<td>Internal Ethics and Fraud Hotline Administration</td>
<td>Advisory</td>
<td>Follow-up on hotline calls (both internal and external) including complaints disclosed to TRS Internal Audit through other communication means</td>
</tr>
<tr>
<td>Meetings Participation</td>
<td>Advisory</td>
<td>Participate (non-voting) in various TRS-wide meetings such as Executive Council, Leadership Team, and Risk Oversight Committee</td>
</tr>
</tbody>
</table>
## Audit Plan: Health Care

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Preliminary Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Risk Assessment Follow Up</td>
<td>Consulting</td>
<td>Update health care risk assessment; identify key processes and controls that mitigate risks; assess control design; make recommendations for inclusion into a short-term and long-term work plan to be utilized by Health Insurance Benefits staff. Provide feedback for updating security contract language with third party vendors for purposes of annual confirmation.</td>
</tr>
<tr>
<td>Health Care Vendor Update Meetings</td>
<td>Advisory</td>
<td>Attend quarterly meetings with health care vendors to understand results, issues, and TRS management’s monitoring controls</td>
</tr>
<tr>
<td>Health Care Vendor Selection Observation</td>
<td>Advisory</td>
<td>Observe selection process of large vendor and service providers, when applicable</td>
</tr>
<tr>
<td>Title</td>
<td>Type</td>
<td>Preliminary Scope</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SharePoint Governance Audit</td>
<td>Audit</td>
<td>Assess effectiveness of SharePoint governance, access controls, and protection of confidential and sensitive data</td>
</tr>
<tr>
<td>Wi-Fi Vulnerability Assessment</td>
<td>Agreed-Upon Procedures</td>
<td>Assess security/vulnerability of Wi-Fi connections</td>
</tr>
<tr>
<td>Data Protection Project</td>
<td>Advisory</td>
<td>Provide technical expertise to Enterprise Risk Management staff in a TRS-wide project for all departments to identify, document, classify, and control sensitive and confidential data</td>
</tr>
<tr>
<td>Disaster Recovery, Network Penetration Tests; Security Risk Assessment Review</td>
<td>Advisory</td>
<td>Obtain, review, and follow-up on any issues identified during the network disaster recovery, penetration tests, and the security risk assessment conducted by the TRS Information Security Officer</td>
</tr>
</tbody>
</table>
## Audit Plan: Investment Management

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Preliminary Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Internal Control Opinion on Investment Activities</td>
<td>Audit</td>
<td>Assess key operating, compliance, and reporting controls within the Investment Management Division and its service providers relating to external public markets, strategic partners, and asset allocation activities. Activities to be assessed relating to those areas include, but are not limited to, due diligence, valuation, fees, fund transfers, risk management, governance, management and board reports, information systems, compliance, accounting, investment operations, and investment accounting.</td>
</tr>
<tr>
<td>Quarterly Investment Compliance, Incentive Pay, Ethics</td>
<td>Agreed-Upon</td>
<td>Assess compliance with TRS ethics policies and the Investment Policy Statement (IPS) requirements; incorporate other tests such as board report accuracy, wire transfer compliance with internal procedures, incentive pay results, and budget report and transfer accuracy.</td>
</tr>
<tr>
<td>Policies, and Budget Testing</td>
<td>Procedures</td>
<td></td>
</tr>
<tr>
<td>Annual Incentive Compensation Plan Testing</td>
<td>Agreed-Upon</td>
<td>Prior to payment, recalculate the incentive compensation award amounts to determine if they are calculated in accordance with plan provisions; reconcile performance to the service provider, and calculated in accordance with plan provisions.</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td></td>
</tr>
<tr>
<td>Investment Committees Attendance</td>
<td>Advisory</td>
<td>Stay current on Investment Management Division initiatives by attending the Internal Investment Committee, Derivatives Operations, Monthly Staff, and other meetings such as the Annual Town Hall meeting.</td>
</tr>
<tr>
<td>Investments Data Analysis Pilot Project</td>
<td>Advisory</td>
<td>Develop data analysis capabilities of Internal Audit staff and analyze external public markets data to identify anomalies and unusual trends for follow up in conjunction with the overall internal controls opinion.</td>
</tr>
</tbody>
</table>
# Audit Plan: Internal Audit Activities

<table>
<thead>
<tr>
<th>Title</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal and External Quality Assurance Review</td>
<td>Prepare an internal assessment and engage an independent evaluation of that assessment and of Internal Audit’s compliance with professional auditing standards as required every three years by the Texas Internal Auditing Act</td>
</tr>
<tr>
<td>Annual Internal Audit Report</td>
<td>Prepare annual report of audit activities in accordance with SAO instructions</td>
</tr>
<tr>
<td>Quarterly Audit Recommendations Follow-Up</td>
<td>Follow-up and report on the status of outstanding audit recommendations</td>
</tr>
<tr>
<td>Fiscal Year 2017 Audit Plan</td>
<td>Prepare annual audit plan based on a documented risk assessment in accordance with professional auditing standards and the Texas Internal Auditing Act</td>
</tr>
<tr>
<td>Audit Committee Meetings Preparation</td>
<td>Prepare communications and attend Audit Committee and Board meetings</td>
</tr>
<tr>
<td>Internal Audit Vendor Request for Qualifications (RFQ)</td>
<td>Post an RFQ and select qualified vendors for conducting and participating in investment, technology, health care audits and to support other audit activities such as data analysis, as needed</td>
</tr>
<tr>
<td>Data Analytics Capabilities Development</td>
<td>Utilize an outside vendor to develop internal auditors processes and expertise around data analytics</td>
</tr>
</tbody>
</table>
Audit Plan: High Risk Areas (High, Elevated, or Caution) And Areas of Interest to the SAO Excluded from the Audit Plan

<table>
<thead>
<tr>
<th>Area</th>
<th>Reason for Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records Management</td>
<td>Audited in FY 2015. TRS is in process of implementing audit recommendations.</td>
</tr>
<tr>
<td>Purchasing and Contracts</td>
<td>Audited in FY 2014. TRS is in process of implementing audit recommendations.</td>
</tr>
</tbody>
</table>
Appendix A
Internal Audit Operating Budget
## Internal Audit Operating Budget

<table>
<thead>
<tr>
<th>Line Item</th>
<th>Budget FY 2016</th>
<th>Budget FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>000 – Salaries</td>
<td>$998,762</td>
<td>$977,204</td>
</tr>
<tr>
<td>000 – Benefits</td>
<td>226,847</td>
<td>230,556</td>
</tr>
<tr>
<td>200 – Professional Fees</td>
<td>681,500</td>
<td>652,500</td>
</tr>
<tr>
<td>505 – Travel-In-State</td>
<td>14,500</td>
<td>14,500</td>
</tr>
<tr>
<td>510 – Travel-Out-of-State</td>
<td>18,000</td>
<td>18,000</td>
</tr>
<tr>
<td>705 – Dues, Fees, and Staff Development</td>
<td>22,500</td>
<td>22,500</td>
</tr>
<tr>
<td>710 – Subscriptions and Reference Materials</td>
<td>4,500</td>
<td>4,500</td>
</tr>
<tr>
<td>Total Operating Budget (excluding indirect costs such as computers, office space, and utilities)</td>
<td>$1,966,609</td>
<td>$1,919,760</td>
</tr>
<tr>
<td>Full Time Equivalent (FTE) Positions</td>
<td>10.0 – 11.0*</td>
<td>10.0</td>
</tr>
</tbody>
</table>

*Excludes interns. Internal Audit anticipates one retirement and two new staff hired in FY 2016, with no overall impact to the budget.*
Appendix B
Internal Audit
Performance Measures
For the internal audit function, the FY 2016 goals and performance measures are as follows:

**Goal 1: Enhance Effectiveness of Internal Audit Organization**

*Performance Measures*

- a. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services
- b. Complete an independent external assessment and report the results of the Quality Assurance and Improvement Program

**Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment**

*Performance Measures*

- a. Prepare an annual audit plan based on a documented risk assessment and obtain input from trustees and staff
- b. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests)
- c. Update a formal reporting entity risk assessment to identify reporting entities for audit

**Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment and Health Care**

*Performance Measures*

- a. Enhance staff knowledge of services provided to the Investment Management Division by visiting one TRS asset manager or service provider
- b. Engage a service provider for developing data analytics capabilities
Goal 4: Deliver Value-Added Consulting and Advisory Activities

Performance Measures
a. Facilitate coordination of TEAM Independent Program Assessment (IPA) Vendor by coordinating meetings with Executive Director, Executive Steering Committee (ESC) and Core Management Team (CMT), quarterly presentations to the TRS Board of Trustees, and other contractual activities
b. Facilitate timely completion and success of State Auditor's Office (SAO) audits in fiscal year 2016 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests

Goal 5: Enhance Participation in Professional and Peer Organizations

Performance Measures
a. Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SAIAF, CFA Institute) through monthly chapter meetings and participation in leadership roles in at least one professional organization
b. Support staff in obtaining additional certifications such as the CFA, CPA, and CIA certifications and have all staff obtain a minimum of 40 continuing professional education hours
Appendix C
Audit Universe
<table>
<thead>
<tr>
<th>Governance, strategy, and risk management</th>
<th>Executive and Finance Divisions</th>
<th>IMD Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board governance (FY13)</td>
<td>Talent Continuity</td>
<td>Investment Governance and Management (FY15)</td>
</tr>
<tr>
<td>Strategic planning and performance measures (FY13)</td>
<td></td>
<td>Internal Public Markets (FY14)</td>
</tr>
<tr>
<td>Enterprise Risk Management</td>
<td></td>
<td>External Public Markets (FY13)</td>
</tr>
<tr>
<td>Information technology governance (FY10)</td>
<td></td>
<td>Private Equity (FY15)</td>
</tr>
<tr>
<td>Open Government</td>
<td></td>
<td>Real Assets (FY15)</td>
</tr>
<tr>
<td>Open meetings compliance</td>
<td></td>
<td>Trade Management (FY14)</td>
</tr>
<tr>
<td>Open records request compliance</td>
<td></td>
<td>Emerging Manager Program (FY13)</td>
</tr>
<tr>
<td>Ethics and Fraud Prevention</td>
<td>403(b) certification process</td>
<td>Energy/Natural Resources (ENR) (FY14)</td>
</tr>
<tr>
<td>Employee ethics policies (FY15)</td>
<td>Records Management</td>
<td>Strategic Partners (FY14)</td>
</tr>
<tr>
<td>Fraud risk detection and prevention controls (FY15)</td>
<td>Records management (FY15)</td>
<td>Strategic Asset Allocation/Stable Value (FY14)</td>
</tr>
<tr>
<td>Regulatory, Compliance, &amp; Litigation</td>
<td>Accounting &amp; Reporting</td>
<td>Tactical Asset Allocation (FY13)</td>
</tr>
<tr>
<td>Compliance: Pension Trust (FY15)</td>
<td></td>
<td>Risk Management (FY15)</td>
</tr>
<tr>
<td>Compliance: Health Care Trusts (FY13)</td>
<td>Accounting &amp; Reporting</td>
<td>Performance Analytics and Operations (FY14)</td>
</tr>
<tr>
<td>Litigation risk management</td>
<td></td>
<td>Information Systems (FY15)</td>
</tr>
<tr>
<td>Business Continuity</td>
<td></td>
<td>Business Center, Reporting, HR, Incentive Pay (FY15)</td>
</tr>
<tr>
<td>Business continuity plan (FY09)</td>
<td>Other reporting (non-financial / CAFR)</td>
<td>Investment Accounting (FY15)</td>
</tr>
<tr>
<td>Risk management (health and safety, insurance) (FY12)</td>
<td>Employee leave, timekeeping, and payroll (FY12)</td>
<td>(FY #) - indicates last year audited</td>
</tr>
<tr>
<td>Benefits and Customer Service</td>
<td>Information Technology (IT) Processes and TEAM</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Pension Benefit Administration</strong></td>
<td><strong>Governance - IT</strong></td>
<td><strong>IT Processes</strong></td>
</tr>
<tr>
<td>1099R</td>
<td>Project prioritization (FY10)</td>
<td>Change &amp; Configuration Management</td>
</tr>
<tr>
<td>Annuity payroll (FY15)</td>
<td>IT risk management</td>
<td>Applications (FY12)</td>
</tr>
<tr>
<td>Benefit adjustments (FY15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit calculations (FY15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit estimates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash receipts (FY10)</td>
<td><strong>IT Strategy &amp; Planning</strong></td>
<td></td>
</tr>
<tr>
<td>Check payments (FY15)</td>
<td></td>
<td>Databases</td>
</tr>
<tr>
<td>Contact management</td>
<td></td>
<td>Infrastructure</td>
</tr>
<tr>
<td><strong>Employer Reporting</strong></td>
<td></td>
<td>Data Center Operations</td>
</tr>
<tr>
<td>Death benefits (FY15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability benefits (FY15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal orders (FY13)</td>
<td><strong>IT Security and Confidentiality</strong></td>
<td></td>
</tr>
<tr>
<td>Member account maintenance (FY09)</td>
<td>Identity and access management (FY14)</td>
<td>Archive management (FY13)</td>
</tr>
<tr>
<td>Member statements</td>
<td>Threat and vulnerability management (FY13)</td>
<td>Facilities management (TAC202) (FY12)</td>
</tr>
<tr>
<td>Optional Retirement Plan</td>
<td>Security awareness and training (FY11)</td>
<td>Technology Management</td>
</tr>
<tr>
<td>Refunds (FY15)</td>
<td>Security configuration management</td>
<td>Standards</td>
</tr>
<tr>
<td><strong>Health Care Administration</strong></td>
<td>Virtualization</td>
<td>Technology upgrades</td>
</tr>
<tr>
<td>Retirement application process</td>
<td>Cloud based computing (FY14 Consulting)</td>
<td>User and Vendor Support</td>
</tr>
<tr>
<td>Retirement system transfer</td>
<td>Mobile device security (FY14 Consulting)</td>
<td>Problem management</td>
</tr>
<tr>
<td>Service credit calculation and purchase (FY14)</td>
<td>Data classification and protection (FY15 Consulting)</td>
<td>Incident response</td>
</tr>
<tr>
<td>Retiree Health Care Funding</td>
<td><strong>Disaster Recovery Plan</strong></td>
<td>TEAM</td>
</tr>
<tr>
<td>TRS-Care vendor selection and contract monitoring (FY13)</td>
<td>Independent Program Oversight (FY15)</td>
<td></td>
</tr>
<tr>
<td>TRS-ActiveCare vendor selection and contract monitoring</td>
<td>Co-location (FY14 Consulting)</td>
<td></td>
</tr>
<tr>
<td>TRS-ActiveCare TRS Administration</td>
<td>Disaster Recovery Management (FY09)</td>
<td></td>
</tr>
<tr>
<td>TRS-ActiveCare TRS Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRS-Care TRS Administration (FY13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(FY #) - indicates last year audited
<table>
<thead>
<tr>
<th>Teacher Retirement System of Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2015 Audit Committee Agenda Items Mapped to TRS Stoplight Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>403(b)</th>
<th><strong>Accounting &amp; Reporting</strong></th>
<th>Active Health Care Sustainability</th>
<th>Budget</th>
<th>Business Continuity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Agenda Items 2A &amp; 2B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications &amp; External Relations</td>
<td>Credit</td>
<td>Customer Service</td>
<td>Employer Reporting</td>
<td>Ethics &amp; Fraud Prevention</td>
</tr>
<tr>
<td>Facilities Management &amp; Planning</td>
<td>Governmental/Association Relations &amp; Legislation</td>
<td><strong>Health Care Administration</strong></td>
<td><strong>Information Security &amp; Confidentiality</strong></td>
<td><strong>Investment Accounting</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Agenda Item 3</strong></td>
<td><strong>Agenda Item 4A</strong></td>
<td><strong>Agenda Item 4B</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Operations</strong></td>
<td>Legacy Information Systems</td>
<td>Liquidity/Leverage</td>
<td>Market</td>
<td><strong>Open Government</strong></td>
</tr>
<tr>
<td><strong>Agenda Items 4B &amp; 4C</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Agenda Items 5, 6, 7, &amp; 8</strong></td>
</tr>
<tr>
<td><strong>Pension Benefit Administration</strong></td>
<td>Pension Funding</td>
<td>Purchasing &amp; Contracts</td>
<td><strong>Records Management</strong></td>
<td><strong>Regulatory, Compliance &amp; Litigation</strong></td>
</tr>
<tr>
<td><strong>Agenda Item 4E</strong></td>
<td></td>
<td></td>
<td><strong>Agenda Item 4F</strong></td>
<td><strong>Agenda Item 4D</strong></td>
</tr>
<tr>
<td>Retiree Health Care Funding</td>
<td>Talent Continuity</td>
<td>TEAM Program</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

September 2015 Board Audit Committee Meeting
<table>
<thead>
<tr>
<th>Title and Project #</th>
<th>Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Texas Students’ Projects (15-606A)</td>
<td>Consulting</td>
<td>Complete</td>
</tr>
<tr>
<td>Internal Ethics and Fraud Hotline Administration</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Meetings Participation</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Special Requests</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payables Audit (15-403)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Actuarial Data Controls (14-402)</td>
<td>Audit</td>
<td>In Progress; to be reported in November 2015</td>
</tr>
<tr>
<td>Reporting Entity Audits and Investigations (15-401)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Business Process Analysis of Activities Involving Multiple Departments (15-404)</td>
<td>Consulting</td>
<td>Complete</td>
</tr>
<tr>
<td>TRS Reporting Entity Website Audit Information</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>State Auditor’s Office (SAO) Financial (CAFR) Audit Coordination</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Meetings Participation</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Special Requests and Surprise Inspections</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>TEAM Program</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEAM Program Internal Controls Assessment (15-601)</td>
<td>Advisory</td>
<td>Delayed Due to LOB Project Schedule Delay; planned for FY 16</td>
</tr>
<tr>
<td>TEAM Independent Program Assessment (IPA) Vendor Support</td>
<td>Advisory</td>
<td>Ongoing - FY 16</td>
</tr>
<tr>
<td>TEAM Committees and TEAM Projects Participation</td>
<td>Advisory</td>
<td>Ongoing - FY 16</td>
</tr>
<tr>
<td><strong>Pension Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-Up Audit on Significant Findings of Prior Benefits Audits (15-102)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Semi-Annual Benefits Testing (11-501)</td>
<td>Agreed-Upon Procedures</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Health Care</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Audit Services Review</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
</tbody>
</table>
### Status of Fiscal Year 2015 Planned Assurance, Consulting, and Advisory Services as of August 2015

<table>
<thead>
<tr>
<th>Title and Project #</th>
<th>Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Vendor Selection Observation</td>
<td>Advisory</td>
<td>In Progress</td>
</tr>
<tr>
<td>Health Care Vendor Update Meetings</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Records Management (titled Electronic Records in FY 2015 Audit Plan) (15-501)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Network Penetration Test; Security Risk Assessment Review</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Technology Committees Meeting Participation</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Investment Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Internal Control Opinion on Investment Activities (includes periodic status reports) (15-301)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Quarterly Investment Compliance and Ethics Policies Testing (15-302)</td>
<td>Agreed-Upon Procedures</td>
<td>Complete</td>
</tr>
<tr>
<td>Emerging Risks Reviews</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Incentive Compensation Plan Review</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Investment Committees Attendance</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Internal Audit Department</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Internal Audit Report (15-603)</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Quarterly Audit Recommendations Follow-up</td>
<td>Audit</td>
<td>Complete</td>
</tr>
<tr>
<td>Internal Quality Assurance Review</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
<tr>
<td>Fiscal Year 2016 Audit Plan</td>
<td>Advisory</td>
<td>Complete –Pending Board Approval</td>
</tr>
<tr>
<td>Internal Audit Vendor Request for Qualifications (RFQ) – Health Care Audits</td>
<td>Advisory</td>
<td>In Progress</td>
</tr>
<tr>
<td>Audit Committee Meetings Preparation</td>
<td>Advisory</td>
<td>Complete</td>
</tr>
</tbody>
</table>
### BENEFIT SERVICES

**Participated in the TEAM Program**
- Executive Steering Committee
- Budget Committee
- Security Architecture Meetings
- Organizational Change Management Advisory Group
- Business Procedures and Training Project Risk Assessment
- Detailed Level Requirements Reviews – Audit and Member Account Maintenance Workflows
- Monthly meetings with TEAM Program Manager and vendor personnel
- Independent Program Assessment Vendor Coordination and Support

### HEALTH BENEFITS
- Attended the Health Plan Administrator (HPA) and Pharmacy Benefit Manager (PBM) Vendor Quarterly Update Meetings
- Participated (non-voting) in the HIB Claims Audit Vendor selection process

### INVESTMENTS
- Attended Internal Investment Committee (IIC) meetings
- Attended monthly securities lending monitoring calls with State Street Bank
- Met with Chief Risk Officer and Chief Compliance Officer

### FINANCIAL SERVICES
- Coordinated State Auditor’s Office Audit of FY 2015 Comprehensive Annual Financial Report
- Participated in meetings discussing revisions to Contract Administration Manual
- Provided input on approach to GASB 72 implementation (related to investment valuation)

### EXECUTIVE
- Facilitated SAO’s Quarterly Update Meetings
- Administered and facilitated Hot Line Calls
- Participated in the Risk Oversight Committee
- Participated in Safety Committee Quarterly Committee Meetings

### INFORMATION TECHNOLOGY (IT)
- Participated in Planning Meetings for Co-Location Disaster Recovery Test
- Participated in Cloud Computing Committee
- Participated in the Enterprise Risk Management (ERM) Data Protection Project

---

1 Advisory Services (non-audit services) - The scope of work performed does not constitute an audit under Generally Accepted Government Auditing Standards (GAGAS).
## Internal Audit Goals and Performance Measures - Fiscal Year 2015
### 4th Quarter Ending August 31, 2015

<table>
<thead>
<tr>
<th>Goal 1: Enhance Effectiveness of Internal Audit Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services.</td>
</tr>
<tr>
<td>2. Complete an internal self-assessment and report annually on the results of the Quality Assurance and Improvement Program.</td>
</tr>
</tbody>
</table>

### Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment

<table>
<thead>
<tr>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Prepare an annual audit plan based on a documented risk assessment and obtain input from trustees and staff.</td>
</tr>
<tr>
<td>4. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests).</td>
</tr>
<tr>
<td>5. Prepare a formal reporting entity risk assessment to identify reporting entities for audit.</td>
</tr>
</tbody>
</table>

### Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment and Health Care

<table>
<thead>
<tr>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Enhance staff knowledge of services provided to the Investment Management Division by visiting one TRS asset manager or service provider.</td>
</tr>
<tr>
<td>7. Engage a service provider for conducting or co-sourcing health care audits</td>
</tr>
</tbody>
</table>

---

**September 2015 Board Audit Committee Meeting**
## Goal 4: Deliver Value-Added Consulting and Advisory Activities

<table>
<thead>
<tr>
<th>8.</th>
<th>Facilitate coordination of TEAM Independent Program Assessment (IPA) Vendor by coordinating meetings with Executive Director, Executive Steering Committee (ESC) and Core Management Team (CMT), quarterly presentations to the TRS Board of Trustees, and other contractual activities.</th>
<th>Coordination and support of IPA vendor is ongoing and will continue into FY 2016.</th>
<th>Achieved</th>
</tr>
</thead>
</table>
| 9. | Facilitate timely completion and success of State Auditor’s Office (SAO) audits in fiscal year 2015 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests. | Internal Audit staff has completed support for the following SAO audits:  
- Audit of Incentive Compensation  
- Audit of FY 2014 Employer Pension Liability Allocation Schedules  
- Audit of FY 2014 Comprehensive Annual Financial Report (CAFR)  
- Audit of proportionality controls | Achieved |

## Goal 5: Enhance Participation in Professional and Peer Organizations

| 10. | Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SAIAF, CFA Institute) through monthly chapter meetings and participate in leadership roles in at least two of the professional organizations | The CAE is secretary for APPFA and IT Audit Manager is the web administrator for APPFA. One audit manager is on the Board of Governors for the Austin Chapter of the IIA. Participation in professional organizations is ongoing. | Achieved |
| 11. | Support staff in obtaining additional certifications including the CFA, CPA, and CIA certifications and have a minimum of two staff seek additional professional certifications in fiscal year 2015. | One staff member has passed the CPA exam. Another staff member has passed the CIA exam. | Achieved |

### Legend: Target Status
- **Target not achieved**
- **Behind in achieving target or partially complete**
- **On task to achieve target**
- **Achieved target**
• Hugh Ohn and Nick Ballard made a presentation titled “Overall Control Opinion on Investments Using COSO” at the State Auditor’s Office Annual Conference in August.

• Nick Ballard received his CPA license in June 2015.

• Art Mata attended the State Auditor’s Office Annual Conference in August.