

RANDOM MOMENT SAMPLING

KEVIN BAUER & STEVE IRLAND
2017 NAME CONFERENCE - FOR LAUDERDALE, FL

RANDOM MOMENT SAMPLING

Agendas:

- Kevin T. Bauer, PhD** has been the Medicaid Policy Specialist for the Michigan School-Based Services program since 2013. Prior to that he spent four years as that program's Reimbursement Auditor. Dr. Bauer has experience on the National Alliance for Medicaid in Education (NAME) Board on a past Region 120 Medicaid Reimbursement and is the current Michigan representative that is working for the State of Michigan. He spent 20 years in the United States Army before retiring in 2007. He holds a BBA in accounting and an MBA in finance from DePaul University, where he is a Professor of Finance, his Ph.D. in Business Administration/Finance from Northcentral University.
- Steve Ireland** has 25 years with the State of Michigan, the first three years as the auditor for the Law Enforcement Division of the Office of Drug Control Policy and the last 22 years with the Hospital and Clinic Reimbursement Division (HCRD). Over his time with the HCRD, Steve has worked on either the audit or in charge of all operations functions applicable to Hospital, Facility Clinic, FQHC, SRC, TRC, ESRD, CAPS, etc. and Ambulatory Surgical Centers. Steve has also completed and managed the settlements for State owned Psychiatric hospitals, local health departments, and school based services programs. He also has and oversees the physical and financial audit for the Facility and the associated tax assessed to support these payments. In all, the budgeting section of the Hospital and Clinic Reimbursement Division helps direct the \$5 billion dollars annually paid to facilities (other than training houses) for Medicaid in the State of Michigan (through fee-for-service and managed care programs).

Session Objectives:

1. Articulate how RMTS percentages are calculated
2. Learn what are and are not acceptable RMTS practices
3. Be able to access documents to support RMTS methodology

TOPICS OF DISCUSSION

- Background - Random Moment Sampling
- Michigan Model
- HHS OIG
 - Background
 - Common Findings
 - Audit Results
- Lessons Learned

BACKGROUND – FEDERAL REGULATIONS

- Substitute systems for allocating salaries and wages to Federal awards may be used in place of activity reports.
- These systems are subject to approval if required by the cognizant agency (CMS)
- Such systems may include, but are not limited to:
 - random moment sampling;
 - case counts;
 - or other quantifiable measures of employee effort
- Substitute systems which use sampling methods (primarily for Temporary Assistance to Needy Families (TANF), Medicaid, and other public assistance programs) must meet acceptable statistical sampling standards.

BACKGROUND – FEDERAL REGULATIONS

- Acceptable statistical sampling standards include:
 - The sampling universe must include all of the employees whose salaries and wages are to be allocated based on sample results except as provided in subsection 8.h.(6)(c) of this appendix;
 - The entire time period involved must be covered by the sample; and
 - The results must be statistically valid and applied to the period being sampled

BACKGROUND – OIG REPORTS

- Acceptable statistical sampling methods involve using a random number generator to produce
 - a set of random numbers used to select the sample and
 - the "seed number"
 - needed to recreate the random number selection so that the sample can be independently validated

MICHIGAN MODEL - HISTORY

- In 2000, the DHHS, acting through the CMS, imposed a federal reimbursement disallowance for the SBS Administrative Outreach Program
- In 2002, the State of Michigan and DHHS/CMS negotiated a settlement agreement that required significant revisions to the SBS Administrative Outreach Program
- Effective January 1, 2004, the State of Michigan implemented a new claims development methodology for the SBS Administrative Outreach Program
 - The new methodology included the following:
 - A random moment time study using the Medicaid Administrative Claiming System (MACS) software
 - New time study activities
 - Two options for claims development
 - Establishment of central administrative responsibilities
 - A single method of determining the discounted Medicaid eligibility rate
 - A special monitoring system
 - A revised provider "Assurance of Understanding and Compliance" document

MICHIGAN MODEL - HISTORY CONT.

- Effective July 1, 2008, the State of Michigan SBS Program will be reimbursed based on a cost-based, provider-specific and annually reconciled methodology
- The new methodology required some changes to the random moment time study methodology
 - Three new staff pools that time studies will be performed on:
 - Direct Medical Services
 - Personal Care Services
 - Targeted Case Management

MICHIGAN MODEL - CONT.

- Time studies are carried out over the following staff pools:
 - AOP Only Staff
 - Direct Medical Staff
 - Personal Care Services Staff
 - Targeted Case Management Services Staff



MICHIGAN MODEL - CONT.

- All staff pools have 800 moment surveys for the summer quarter
- 12,200 moment surveys are sent out for the remaining three quarters
 - AOP - 3000
 - TCM - 3000
 - PC - 3200
 - DS - 3000
- The sample size of each cost pool ensures a quarterly level and annual level of precision of +/- 2% with at least a 95% confidence level

MICHIGAN MODEL - CONT.

- The claims development software produces random moments concurrent with the entire reporting period which are then paired with randomly selected members of the designated staff pool population
- Once the random sample of staff moments has been generated, the sample is printed in the form of master and location control lists for sample administration purposes, and as time study forms for collecting the moment data
 - Each sampled moment is identified on its respective control list in chronological order by the name of the staff person to be sampled and the date and time at which the recording should take place

MICHIGAN MODEL - CONT.

- There are two steps to completing a time study form:
 - In the first step, for the designated moment, the time study participant provides the answers to the questions (Who was with you? What were you doing? Why were you doing this activity?)
 - In the second step, the time study forms are collected from the participants, and the Contractor assigns the appropriate activity code for that moment based on the answers of the time study questions

OFFICE OF INSPECTOR GENERAL

- Office of Inspector General's mission is to protect the integrity of Department of Health & Human Services programs as well as the health and welfare of program beneficiaries
 - HHS OIG is the largest inspector general's office in the Federal Government
 - Majority of OIG's resources goes toward the oversight of Centers for Medicare and Medicaid Services
 - Oversight extends to programs under other HHS institutions, including the Centers for Disease Control and Prevention, National Institutes of Health, and the Food and Drug Administration

OFFICE OF INSPECTOR GENERAL - CONT.

- The Office of Inspector General consists of six organizational units:
 - Immediate Office of the Inspector General
 - Office of Management and Policy
 - Office of Evaluation and Inspections
 - Office of Counsel to the Inspector General
 - Office of Audit Services
 - Office of Investigations

OFFICE OF AUDIT SERVICES

- The Office of Audit Services (OAS) conducts independent audits of HHS programs and/or HHS grantees and contractors
 - OAS is the largest civilian audit agency in the Federal Government
- These audits examine the performance of HHS programs and/or grantees in carrying out their responsibilities and provide independent assessments of HHS programs and operations
 - These assessments help reduce waste, abuse, and mismanagement and promote economy and efficiency throughout HHS

DHHS 2006 LETTER TO TEXAS

- Letter from the Director of the Division of Cost Allocation, DHHS to the Texas Health and Human Services Division
- Letter provides RMTS guidance in regard to:
 - Terminology
 - Precision of results
 - Sample size
 - Eight hour day
 - Extended day work schedules
 - Sample selection

RMTS TERMINOLOGY

- Categories of responses:
 1. Countable Response – A response received within the allowable time limit that reported a work activity that will be included in the counts used to allocate pool costs. This is a valid response.
 2. Non-Countable Response – Any response received within the allowable time limit that reports either a common activity not used to allocate cost, leave, at lunch, not scheduled to work, employee terminated, etc. which documents why a countable response was not reported. This is a valid response.
 3. Non-response – No response was received from either the employee or the employee's supervisor during the allowable time limit for responses. This is not a valid response (as long a statistical validity is achieved).

RELEASED AUDIT REPORTS - HHS OIG

- Mississippi, 3/15/2017, Region IV
- North Carolina, 10/6/2016, Region IV
- Michigan, 9/30/2016, Region V
- Alabama, 7/13/2016, Region IV
- Massachusetts, 9/30/2015, Region I
- Kansas, 8/6/2014, Region VII
- Maine, 4/29/2013, Region I
- Arizona, 1/22/2013, Region IX
- New Hampshire, 10/10/2012, Region I
- Colorado, 4/12/2012, Region VII

REGIONAL OFFICES - HHS



COMMON FINDING OF HHS OIG REPORTS

- Finding – Random Moment Sampling Was Statistically Invalid
 - Mississippi (3/15/2017), North Carolina (10/6/2016), Alabama (7/13/2016) Region IV
- Duplicates on the Participant Lists
 - (Mississippi) Our review of the available participant lists identified duplicates in every quarter. For example, in one quarter, 427 names appeared more than once in the same school district and another 50 individuals were listed as working in more than one school district during the quarter.
 - (North Carolina) Our analysis of the RMTS data files found that, for both contractors in every quarter, the participant list contained duplicate employees. For example, one contractor confirmed that it had 64 duplicate employees listed during the first quarter of 2012.
 - (Alabama) Our analysis of the RMTS data files found that, in every quarter, the participant list contained duplicate employees. For example, one school had 15 duplicate employees listed during the second quarter of 2011.

COMMON FINDINGS – CONT.

- Finding – Random Moment Sampling Was Statistically Invalid
 - Mississippi (3/15/2017), North Carolina (10/6/2016), Alabama (7/13/2016) Region IV
- Limited Work Schedules
 - (Mississippi) When selecting the RMTS sample, Education used its yearly calendar, excluding weekends, holidays, and other days when school was not in session. However, this calendar did not account for all employee schedules and did not mention daily scheduled start and stop times.
 - (North Carolina) When selecting the RMTS sample, one contractor used a standardized work schedule of 8 a.m. to 3:30 p.m. However, not all education agencies used the same standardized work schedule. Some schools started before 8 a.m. and some ended after 3:30 p.m.
 - (Alabama) When selecting the RMTS sample, a standardized work schedule was used. However, the standardized work schedule was changed five times. The standardized work schedule was changed from 7:30 a.m. to 4 p.m. in the first quarter of our audit period to 8 a.m. to 4 p.m. in the next quarter, eliminating all available moments between 7:30 a.m. and 8 a.m. for that quarter.

COMMON FINDINGS – CONT.

- Finding – Random Moment Sampling Was Statistically Invalid
 - Mississippi (3/15/2017), North Carolina (10/6/2016), Alabama (7/13/2016) Region IV
- Improper Treatment of Invalid Responses
 - (North Carolina) One contractor treated moments selected for occupied positions for which no response was received (nonresponses) as invalid responses, but the other contractor treated such moments as non-Medicaid moments. Nonresponses must be treated the same by all contractors in order to assure statistical validity and to comply with the approved cost allocation plan.
 - (Alabama) Responses for moments that occurred when the employee was not scheduled to work, for moments selected for vacant positions, and for moments selected for occupied positions for which no response was received (nonresponses) were all treated as invalid responses. While the first two types of responses were properly treated as invalid, the nonresponses should have been kept in the sample and evaluated and coded as non-Medicaid moments.

PURPOSE OF RMTS

- To determine the percentage of time (salary) that should be allocated to a certain (allowable) task.
- Allowable Percentage = Allowable Tasks/Total Tasks
- Allowable Percentage of Salary = Allowable Tasks/Salary
- Exercise (15 Cards)

EXERCISE RESULTS

- 15 Cards Handed Out
 - 6 Allowable Tasks (Paid-Countable)
 - 4 Non-Allowable Tasks (Paid-Countable)
 - 3 Non-Allowable Tasks (Not Paid-Not Countable)
 - 2 Not Returned (???)
- RMTS %
- $6/(6+4) = 60\%$

EXERCISE RESULTS (INSUFFICIENT VALID RESPONSES)

- 15 Cards Handed Out
 - 6 Allowable Tasks (Paid-Countable)
 - 3 Non-Allowable Tasks (Paid-Countable)
 - 4 Non-Allowable Tasks (Not Paid-Not Countable, 1 becomes countable)
 - 2 Not Returned (???)
- RMTS %
- $6/(6+3+1) = 60\%$

EXERCISE RESULTS

- 15 Cards Handed Out
 - 6 Allowable Tasks (Paid-Countable)
 - 4 Non-Allowable Tasks (Paid-Countable)
 - 3 Non-Allowable Tasks (Not Paid-Not Countable)
 - 2 Not Returned (Countable)
- RMTS %
- $6/(6+4+2) = 50\%$

COMMON FINDINGS - CONT.

- Finding - Inaccurately Coded Random Moment Time Study Responses
 - Kansas, 8/6/2014, Region VII
 - Of the 2,894 random moments coded as IEP-covered direct medical services, the Contractor coded 27 random moments incorrectly because it did not follow the coding guidelines specified in the Implementation Guide.
 - We recoded these 27 random moments appropriately.
 - Colorado, 4/12/2012, Region VII
 - Of the 9,000 RMTS responses that were completed by employees of all 77 participating school districts in Colorado and that we reviewed, 188 were inaccurately coded and were subsequently used in the statewide RMTS calculation.
 - We reclassified the 188 RMTS coding errors and recalculated the annual cost reports for the participating school districts accordingly.

OTHER MATTERS – CONT.

- Documentation To Support Moments
 - Massachusetts, 9/30/2015, Region I
 - We selected a statistical sample of 200 random moments coded as Medicaid-eligible direct services and requested documentation from the school districts to support the activities report. School districts could not provide support for 121 of the 200 moments.
 - Kansas, 8/6/2014, Region VII
 - We selected a statistical sample of 337 random moments coded as IEP-covered direct medical services and requested documentation from the school districts to support the activities performed. Of the 337 random moments selected, school districts could not provide support for the responses for 143 moments.

OTHER MATTERS

- Advance Notice of Moments
 - Massachusetts, 9/30/2015, Region I
 - (Background) In the Massachusetts RMTS, participants are notified of their exact moment by email 3 days in advance and they are given 120 hours (5 days) from the random moment to respond to the time study.
 - (Auditor Opinion) Advance notice potentially could bias the participant responses, making the results statistically invalid and the RMTS noncompliant with the statistical sampling standards set forth in the Cost Principles.

AUDIT RESULTS

- Ramifications of Audit Findings
 - We recommend that the State agency:
 - refund \$21,199,651 to the Federal Government; (Mississippi)
 - refund \$53,719,199 to the Federal Government; (North Carolina)
 - refund \$954,408 to the Federal Government; (Michigan)
 - refund \$75,274,946 to the Federal Government; (Alabama)
 - refund \$401,011 to the Federal Government; (Massachusetts)
 - refund \$10,748,706 to the Federal Government; (Kansas)
 - refund \$667,569 to the Federal Government; (Maine)
 - refund \$11,716,850 to the Federal Government; (Arizona)
 - refund \$2,695,809 to the Federal Government; (New Hampshire)
 - refund \$871,246 to the Federal Government; (Colorado)

LESSONS LEARNED

- Be Proactive Before Audit
 - Review your State Plan
 - Read the issued reports from HHS OIG
 - Discuss with providers
 - Discuss with contractors
- Be Proactive During Audit
 - Train, Train, Train
 - HHS OIG audits many programs across many departments.
 - This may be the federal auditors first time working with School Based Services
 - Lay the groundwork early, so that problems/issues do not occur later in audit

QUESTIONS



CONTACT INFORMATION

- Kevin Bauer
 - Email: BauerK2@michigan.gov
 - Phone: (517) 284-1197
- Steve Ireland
 - Email: IrelandS@michigan.gov
 - Phone: (517) 335-5352
- John Lambert
 - Email: LambertJ4@michigan.gov
 - Phone: (517) 335-4792
