
Data Analytics Unit, Bureau of Special Investigations
FY 2015 Report
July 1, 2014 – June 30, 2015
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# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th></th>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>ADH</td>
<td>adult day health</td>
</tr>
<tr>
<td>2.</td>
<td>ADL</td>
<td>activities of daily living</td>
</tr>
<tr>
<td>3.</td>
<td>AFC</td>
<td>adult foster care</td>
</tr>
<tr>
<td>4.</td>
<td>BSI</td>
<td>bureau of special investigations</td>
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<tr>
<td>5.</td>
<td>CACFP</td>
<td>child and adult care food program</td>
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<tr>
<td>6.</td>
<td>CMR</td>
<td>code of Massachusetts regulations</td>
</tr>
<tr>
<td>7.</td>
<td>DAU</td>
<td>data analytics unit</td>
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<tr>
<td>8.</td>
<td>DTA</td>
<td>department of transitional assistance</td>
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<tr>
<td>9.</td>
<td>EOEA</td>
<td>executive office of elder affairs</td>
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<td>10.</td>
<td>GAFC</td>
<td>group adult foster care</td>
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<tr>
<td>11.</td>
<td>IADL</td>
<td>instrumental activities of daily living</td>
</tr>
<tr>
<td>12.</td>
<td>LTC</td>
<td>long term care</td>
</tr>
<tr>
<td>13.</td>
<td>PCA</td>
<td>personal care attendant</td>
</tr>
<tr>
<td>14.</td>
<td>ROMB</td>
<td>recovery of medical benefits</td>
</tr>
<tr>
<td>15.</td>
<td>ROI</td>
<td>return on investment</td>
</tr>
<tr>
<td>16.</td>
<td>RBRE</td>
<td>rules based risk engine</td>
</tr>
<tr>
<td>17.</td>
<td>SNAP</td>
<td>supplemental nutrition assistance program</td>
</tr>
<tr>
<td>18.</td>
<td>SQL</td>
<td>structured query language</td>
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ABOUT THE BUREAU OF SPECIAL INVESTIGATIONS

As a part of the Office of the State Auditor, the Bureau of Special Investigations (BSI) is charged with investigating allegations of public assistance fraud throughout the Commonwealth. The diligent work of BSI investigators ensures taxpayer dollars used to fund Massachusetts’ public benefits programs are used effectively so that programs are available to residents who truly need them.

Under state law, BSI’s investigative authority extends to any assistance program administered by the Department of Transitional Assistance (DTA), the Department of Children and Families (DCF), and the Division of Medical Assistance (DMA), which administers MassHealth (the state’s Medicaid program). Although not included in the BSI statute, BSI also works with the Department of Early Education and Care (EEC) through a Memorandum of Understanding.

As a result of BSI’s investigations, public assistance fraud cases are referred to agencies for administrative action, fraudulent overpayments are recovered through civil agreements, individuals are disqualified from programs for specified periods of time, and cases are prosecuted in state district or superior courts and the United States District Court for the District of Massachusetts. BSI recommends cases for prosecution based on the severity of fraud, the intent of the perpetrator, and the possibility for the case to serve as a deterrent to future fraud.

Working under Section 17 of Chapter 11 of the Massachusetts General Laws, BSI examiners operate from five offices across the Commonwealth. BSI consists of four separate investigative units: the Central Processing Unit, the MassHealth Unit, the Department of Transitional Assistance Unit, and the Data Analytics Unit. Each unit is headed by an Assistant Director who reports to the Director of BSI. While each unit has its own specific concentration, there is extensive cross-unit collaboration and investigations often involve overlap. BSI also participates in joint investigations and task forces with other state and federal agencies that focus on combating fraudulent activities throughout the Commonwealth.

This report specifically focuses on the work of the Data Analytics Unit in fiscal year 2015.
ABOUT THE BSI DATA ANALYTICS UNIT

As part of the Bureau of Special Investigations (BSI), the Data Analytics Unit (DAU) is charged with proactively identifying theft of public assistance benefits. Recognizing the important role of data analytics in identifying fraud, the Legislature funded BSI’s DAU in fiscal year 2013 (FY13). In FY15, the time period covered by this report, the Legislature funded DAU at $451,833.

DAU uses large datasets to apply a variety of analytical techniques designed to identify trends, patterns, and anomalies that may indicate fraudulent activity. By identifying questionable practices, DAU is able to focus resources in areas most likely to identify large perpetrators of fraud and detect potential systemic issues that could lead to cost savings for MassHealth and the Department of Transitional Assistance (DTA).

Working under the provisions of Section 17 of Chapter 11 of the Massachusetts General Laws, DAU examiners generate fraud referrals that can be retained by DAU for further investigation, sent to BSI’s MassHealth Unit and Department of Transitional Assistance (DTA) Unit, or referred to outside agencies. DAU works jointly with several external agencies, including the United States Department of Agriculture, the United States Department of Health and Human Services, the Office of the Inspector General, the United States Attorney’s Office, and various other administrative agencies.

BSI uses a variety of data analytics tools to conduct its analysis:

- **Rules-Based Risk Engine (RBRE)** – An analytical tool developed by the Office of the State Auditor that identifies risky transactions using database queries and aggregates the results to identify the entities with the most risk.

- **Data querying using Microsoft Access** – Examiners use Microsoft Access to join MassHealth data sets to identify instances in which data overlaps in order to identify trends.

- **SQL data scripts** – Examiners developed specific SQL scripts to download data related to Commonwealth employees receiving MassHealth coverage. SQL, or structured query language, is a computer programming language in which a user can enter commands such as edit, insert, delete, and equals with the intent to manage large sets of data in a database.

Using advanced data analytics allows DAU to proactively identify large areas of public benefits fraud in order to protect the integrity of the programs.
EXECUTIVE SUMMARY

During Fiscal Year 2015 (FY15), DAU received $451,833 from its state appropriation and identified over $4 million in fraud, achieving a return on investment of $9.08. DAU achieved this by focusing its efforts on home- and community-based waiver programs, particularly the overlap of these programs with other MassHealth programs. DAU selected this project area for further exploration because the Code of Massachusetts Regulations (CMR), for each of the home and community-based waiver programs, contains distinct rules and regulations. DAU took particular interest in services that are not covered by MassHealth while a member is enrolled in a home- and community-based waiver program. The results showed a significant amount of overlap of services considered duplicative and therefore non-allowable by the CMRs.

The four main overlap areas analyzed by DAU in FY15 were:

- **Adult day health (ADH) and long term care (LTC) overlap**: ADH is an organized program of services for elderly and disabled MassHealth members including nursing and supervision, therapy, nutrition, counseling, activities, and case management. ADH providers receive per-diem payments for each enrolled member in attendance. MassHealth does not pay for adult day health services for individuals who reside in a facility-based setting, which is considered long term care.

- **Adult foster care (AFC) and personal care attendant (PCA) overlap**: AFC services ordered by a physician are delivered to a MassHealth member in a qualified setting by a multidisciplinary team and qualified AFC caregiver. These services include assistance with Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), other personal care as needed, nursing services and oversight, and AFC care management. The Personal Care Attendant Program (PCA Program) is a MassHealth program under which PCA services are available to MassHealth members who need assistance with ADLs and IADLs including transfers, taking medications, bathing/grooming, meal preparation, housekeeping, laundry, and shopping. The Commonwealth of Massachusetts Regulations clearly state that MassHealth members cannot receive services from both the AFC and PCA programs.
• **AFC/group adult foster care and rest home overlap:** According to the AFC CMR, the MassHealth agency does not pay an AFC/group adult foster care provider when the member is a resident or inpatient at a rest home. MassHealth considers this a non-covered day.

• **PCA and LTC overlap:** Commonwealth of Massachusetts Regulations clearly state that PCA services cannot overlap with services provided to a MassHealth member while the member is a resident of a nursing facility or other inpatient facility.
OVERVIEW OF CASE OVERLAP RESULTS

Adult Day Health and Long Term Care Overlap

Beginning in the 2nd quarter of fiscal year 2015, the Data Analytics Unit (DAU) conducted an overlap analysis of MassHealth’s adult day health (ADH) program and other MassHealth programs. Using the Rules-Based Risk Engine (RBRE), DAU identified any instance in which a MassHealth member was attending an ADH program while concurrently residing in a facility-based setting. The analysis returned substantial results totaling approximately $12,410,338 in improper MassHealth payments made to ADH facilities for members who were residing in a facility-based setting. As a result, DAU opened investigations into six ADH providers that billed and received payment from MassHealth for approximately 369,254 claims, on behalf of 395 members. Five of the six investigations are ongoing and one was referred to U.S. Department of Health and Human Services, Office of Inspector General for further action.

Adult Foster Care and Personal Care Attendant Overlap

Also during the 2nd quarter of fiscal year 2015, DAU analyzed possible overlap of the MassHealth adult foster care (AFC) program and other MassHealth programs. MassHealth does not cover AFC services provided to a member receiving personal care attendant (PCA) services, and vice versa. The two MassHealth programs are mutually exclusive, and simultaneous billing for AFC and PCA is considered fraudulent. Using the RBRE, DAU ran a test to determine whether MassHealth was paying claims for members receiving both services. The analysis generated a total of 15 potential cases of duplicative payments. DAU completed 13 cases with a total identified fraud of $743,954; the remaining two are active investigations. Using the RBRE, DAU also generated three Department of Transitional Assistance cases in which the AFC was a DTA recipient and did not report their AFC earnings to DTA. The three DTA spin-off cases from the 15 MassHealth AFC/PCA overlap cases resulted in approximately $18,000 in DTA fraud.

Of the 13 completed PCA/AFC overlap cases, five cases, totaling $253,116, were returned to MassHealth to recover the payments; 6 cases, totaling $300,810, were closed with civil recovery, an agreement in which the subject agreed to pay back the fraudulently obtained benefits; one case, totaling approximately $140,000, was referred to the Attorney General’s Office; and one case, totaling over $50,000, is pending court determination.
Adult Foster Care/Group Adult Foster Care and Rest Home Overlap

During the 3rd quarter and into the 4th quarter of fiscal year 2015, the Data Analytics Unit (DAU) conducted an analysis of MassHealth's group adult foster care (GAFC) and adult foster care (AFC) programs. GAFC and AFC claims cannot be billed simultaneously with long term care (LTC) rest home claims.

For the GAFC portion of the project, DAU identified 23 GAFC providers with a total of 33,024 overlapping claims totaling $10,344,791 for members who were concurrently residing in rest homes.

For the AFC portion of the project, DAU identified 6 AFC providers with overlapping claims. Among the 6 AFC providers, DAU identified 22 AFC claims totaling $15,361 for members who resided in rest homes at the time of the AFC claims.

Results of the Top 5 GAFC and AFC Providers

<table>
<thead>
<tr>
<th>Provider Name</th>
<th>Number of Concurrent Claims</th>
<th>Paid Amount for Concurrent Claims</th>
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<tbody>
<tr>
<td>PEABODY RES SERV INC.</td>
<td>3,488</td>
<td>$3,598,444.25</td>
</tr>
<tr>
<td>WEBSTER LIGHT</td>
<td>11,872</td>
<td>$2,619,917.46</td>
</tr>
<tr>
<td>CITYWIDE HOME CARE</td>
<td>1,709</td>
<td>$2,073,042.66</td>
</tr>
<tr>
<td>SENIOR HOME CARE SERVICES</td>
<td>695</td>
<td>$789,016.12</td>
</tr>
<tr>
<td>GREATER LYNN SENIOR SVCS</td>
<td>7,156</td>
<td>$646,691.55</td>
</tr>
<tr>
<td>ALL OTHER GAFC PROVIDERS</td>
<td>8,104</td>
<td>$617,679.10</td>
</tr>
<tr>
<td><strong>Total GAFC Concurrent Claim Summary</strong></td>
<td><strong>33,024</strong></td>
<td><strong>$10,344,791.14</strong></td>
</tr>
</tbody>
</table>

1 130 CMR - Adult Foster Care Manual 408.437: Noncovered Days: (B) the member is a resident or inpatient of a hospital, nursing facility (with the exception of MLOA or alternative placement days), rest home, group home, intermediate care facility for the mentally retarded, assisted living residence, or any other residential facility subject to state licensure or certification.
Any discrepancies in claim to paid amounts in the above charts are due to variation in provider billing cycles and methodologies.

After identifying this overlap and before generating a referral, DAU members met with GAFC and AFC Program Directors on April 22, 2015. At that time, it was disclosed that the Executive Office of Elder Affairs (EOEA) allowed the majority of the GAFC/AFC and rest home overlap claims that existed before 2013, but the practice would not be allowed for any new GAFC participants. EOA sent a letter dated May 8, 2013 to all GAFC providers to address the GAFC and rest home concurrent billing. Essentially, the letter stated that AFC regulations clearly exclude concurrent billing, and although it had been permitted, as of the date of the letter, any claims for new GAFC participants living in a Rest Home would be denied.

DAU could not prove intent to submit fraudulent claims by the AFC/GAFC providers. Without intent, DAU could not substantiate a fraud referral; therefore, this topic area was submitted to the Office of the State Auditor Medicaid Audit Unit for further review. The audit has not yet been published.

**Personal Care Services and Long Term Care Overlap**

The Data Analytics Unit (DAU) conducted overlap analyses of the MassHealth Personal Care Attendant (PCA) Program and other MassHealth programs. These analyses sought to identify instances in which a
MassHealth member received PCA services while concurrently residing in a long term care (LTC) facility, a practice that is prohibited by MassHealth\(^2\). Using MassHealth data, DAU was able to extract and isolate PCA and LTC claims for calendar years 2013 and 2014. DAU combined the PCA and LTC datasets using Microsoft Access, which allowed DAU to highlight instances in which a PCA claim was submitted for a member while they were residing in an LTC facility. As a result, four cases were identified in FY14 and completed during the beginning of FY15 totaling approximately $8,000 in PCA overlap fraud.

Additionally, as a result of the PCA and LTC data joint analysis, DAU generated 21 referrals to BSI’s MassHealth Unit in FY15. These new referrals totaled approximately $98,000 in improper MassHealth payments made to personal care attendants.

\(^2\) 130 CMR - Personal Care Manual 422.412: Noncovered Services: MassHealth does not cover any of the following as part of the PCA program or the transitional living program: (D) PCA services provided to a member while the member is a resident of a nursing facility or other inpatient facility.
SUMMARY OF IDENTIFIED FRAUD

The following charts demonstrate the total number of cases and the total fraud identified as a result of the overlap analyses highlighted in the previous section with the exception of the adult foster care/group adult foster care and rest home overlap. This analysis uncovered additional concern indicating systemic problems best addressed through a traditional audit. As a result, this analysis was turned over to the Office of the State Auditor’s Medicaid Audit Unit.
ACTIVE AND COMPLETED CASES BY ANALYSIS TYPE

- ADH/LTC Overlap: 5 active, 1 completed
- PCA/LTC Overlap: 4 active, 21 completed
- PCA/AFC Overlap: 2 active, 13 completed
DAU CASE HIGHLIGHTS

South Shore ADH Provider Case Summary

Data Analytics Unit (DAU) examiners completed and closed an investigation of a South Shore adult day health (ADH) provider identified by the ADH and long term care (LTC) overlap analysis. DAU examiners determined that the South Shore provider billed and received payment for MassHealth members who were residing in facility-based settings and provided transportation for those members to and from the ADH facility. The South Shore provider submitted 95,863 improper claims on behalf of 138 MassHealth members, totaling $3,086,175.

Using the Massachusetts Management Accounting and Reporting System, DAU identified $396,532.70 in Child and Adult Care Food Program funds improperly paid to the South Shore provider. This violation resulted in duplicative meal funding that the South Shore provider received from both state and federal sources. The South Shore provider unlawfully billed and received payment from both Medicaid and the Child and Adult Care Food Program for the same meal. Additionally, a third bill for the same meal was submitted to Medicaid from the member’s respective LTC facility. As a result of the South Shore provider’s actions, state and federal resources paid for the same daily meal three separate times for the same member. DAU referred this case to an outside agency whose investigation is currently ongoing.

PCA and AFC Overlap Case Summary

One of the six cases that resulted from the adult foster care (AFC) and personal care attendance (PCA) overlap analysis ended with civil recovery involving a mother and daughter. The mother received daily AFC services from November 2010 through July 2014 and unknowingly to her, the consumer’s daughter acted as both the AFC and PCA caretaker from July 18, 2011 through July 1, 2014 (excluding February 13, 2012 through March 2, 2012). During this time, the daughter falsified 78 PCA timesheets covering 1,047 days and 7,099.25 hours. The timesheets falsely claimed in-home personal care services when the consumer received around-the-clock AFC. As a result of the submission of falsified timesheets, the consumer’s daughter was overpaid $89,325.96. During an interview, the consumer’s daughter accepted full responsibility and agreed to repay the money to MassHealth. Additionally, a separate Department of Transitional Assistance (DTA) referral was opened for the consumer’s daughter because she did not report her AFC income to DTA while she was receiving Supplemental Nutritional Assistance Program (SNAP) benefits.
Other Case Types

Throughout Fiscal Year 2015 (FY15), the Data Analytics Unit (DAU) completed additional case types including an analysis of the top earning Personal Care Attendants (PCAs) as well as a review of individuals receiving MassHealth who failed to meet the MassHealth program eligibility requirements.

The top earning PCA cases originated from the Executive Office of Elder Affairs (EOEA). EOEA provided DAU with a list of PCAs who earned over $40,000 in calendar year 2012. Using a variety of criteria, DAU further identified potential subjects for fraud investigation, including such instances as overemployment by the PCA, unreported income by the PCA, overbilling above the MassHealth approved hours, duplicative billing by more than one PCA at the same time, and overlapping hours between consumers.

For the MassHealth eligibility cases, DAU took a particular interest in identifying any Commonwealth of Massachusetts employees who have been enrolled in a MassHealth program while simultaneously earning income in excess of the MassHealth program limit. During FY15, these other case types amounted to four investigations totaling over $53,000.