



Office of the State Auditor  
Suzanne M. Bump

*Making government work better*



# Data Analytics: Investigating Public Assistance Fraud and an Overview of the AG's Opioid Task Force Use of Data Analytics

November 4, 2016

# Recent Welfare Fraud Cases

## Philip Fitzherbert (Maine)

- Sentenced to 15 months in jail for two counts of theft by deception and five counts of unsworn falsification
- Collecting welfare benefits while also receiving private annuity payments of about \$110,000 in lump sums in addition to \$1,000 a month.
- Over five years, Fitzherbert collected more than \$22,000 from the HHS and more than \$5,000 from the Supplemental Security Income program.
- Fitzherbert ordered to pay more than \$27,000 in restitution plus a \$10,000 fine.



# Recent Welfare Fraud Cases

## Essex Court

November 5, 2015

### Lawrence Man To Serve 4 t

A father and son pleaded guilty yesterday in Salem Superior Court to a scheme that defrauded the federal food stamps program out of \$1.5 million.

## Maple Valley

March 31, 2012

### Two sentenced to prison for

Magnolia Gin, 52, of Seattle, and Son Hoang Le, 35, of Bellevue, who owned two adjacent businesses in the White Center were sentenced this week to prison terms for food stamp fraud.

Gin and Le were arrested in July 2011 as part of an ongoing investigation of food stamp trafficking in Western Washington. Gin was sentenced Monday, March 26, 2012, to

18 months in prison and

today Le was sentenced to 24 months in prison. Gin owned Asian

Bubble Tea, and Le owned NW Halal Asian Food Corporation, d/b/a D.P. Northwest Halal & Asian Food Corporation, LLC, on 17th Avenue SW, Seattle. The two conspired to redeem USDA Supplemental Nutrition Assistance Program (SNAP) benefits for cash. The benefits are supposed to be used only for the purchase of food.

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# Recent Welfare Fraud Cases

## Authorities: Mom scammed state out of thousands in EBT benefits

According to Alexandra B. Alland, the Director of Bureau of Special Investigations for State Auditor Suzanne Bump and the special prosecutor handling the Chinatown raids, Sherwood had used her EBT card 22 times at the C Mart supermarket at 629 Washington Street to illegally obtain \$2,723 in cash.

BOSTON HERALD, Richard Weir  
Friday, April 20, 2012

Aimee Sherwood pled guilty and was sentenced to one year in the house of corrections, suspended for two years and ordered to pay restitution.



# Wells Fargo

*Wells Fargo Exec Who Headed Phony Accounts Unit Collected \$125 Million*

Fortune, September 12, 2016



Carrie Tolsted

*The Wells Fargo Reminder: Incentives Can Be Dangerous*

Forbes Magazine, September 27, 2016

# Countrywide Mortgage Fraud

- Countrywide's Mozilo accused of fraud SEC: Countrywide founder and 2 others misled investors about mortgage lender's health - Mozilo pocketed \$140 million from insider trades. – CNN.com, June 5, 2009
- *In Financial Crisis, No Prosecutions of Top Figures* New York Times, April 14, 2011

## What Happened to Mozil?

- In the 10 years prior to the housing bubble bursting, Mozilo personally raked in \$500 million.
- He later paid just \$67.5 million to the Securities and Exchange Commission in connection with the investigation.
- **He never conceded wrongdoing**
- **Bank of America even picked up a good part of the tab**



# Hollywood

**Wolf of Wall Street** – Based on the true story of Jordan Belfort (Oscar Nominated)

**The Big Short** – Based on the non-fiction 2010 book [The Big Short: Inside the Doomsday Machine](#) by [Michael Lewis](#), (2016 Best Picture Oscar winner).

**Catch Me If You Can** – The true story of Frank Abagnale Jr. who, before his 19th birthday, successfully conned millions of dollars' worth of checks as a Pan Am pilot, doctor, and legal prosecutor.

**Wall Street** 

# Bureau of Special Investigations

**M.G.L. c 11 § 16** – Creates the Bureau of Special Investigations within the Office of the State Auditor to be lead by a director. The budget is set by the state legislature.



**M.G.L. c 11 § 17** – The Director can initiate investigations into fraudulent claim for payment or services under any assistance program administered by the department of transitional assistance, the department of children and families, the division of medical assistance or any other program administered by said departments.

# Other states....

**Maine** - Fraud, Investigation and Recovery Unit (FIRU) located in the Division of Audit in the Department of Health and Human Services

**Vermont** - Economic Services Division (ESD) of the Department for Children and Families

**New Hampshire** - Special Investigations (SI) Health and Human Services Department

**Connecticut** - Investigations Division, Department of Social Services

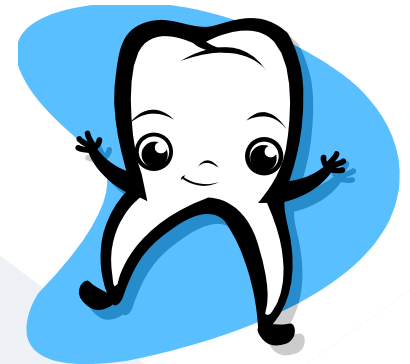
**Rhode Island** - Collections, Claims, and Recovery Fraud Unit, Department of Human Services

# Data Analytics Driven Investigation

BSI derived a targeted investigation OSA's dental audit focusing on Dr. Scarlett.

BSI expanded time frame from Audit's sample

- Audit scope:
  - January 2008 - December 2010
- BSI scope:
  - January 2006 - December 2012



# Dr. Scarlett's Story

## Background

- Married
  - Husband is also a Doctor
- 2 Kids
- Living in Norwell
  - Compound
  - Numerous family members living with her



# Dr. Scarlett Data Analysis Approach

1. Dental procedure codes
2. Dr. Scarlett and peer dental providers
3. Bank records
4. Individual patients
5. Tax analysis
6. Provider service and childbirth
7. Geographic analysis
8. Other toothaches

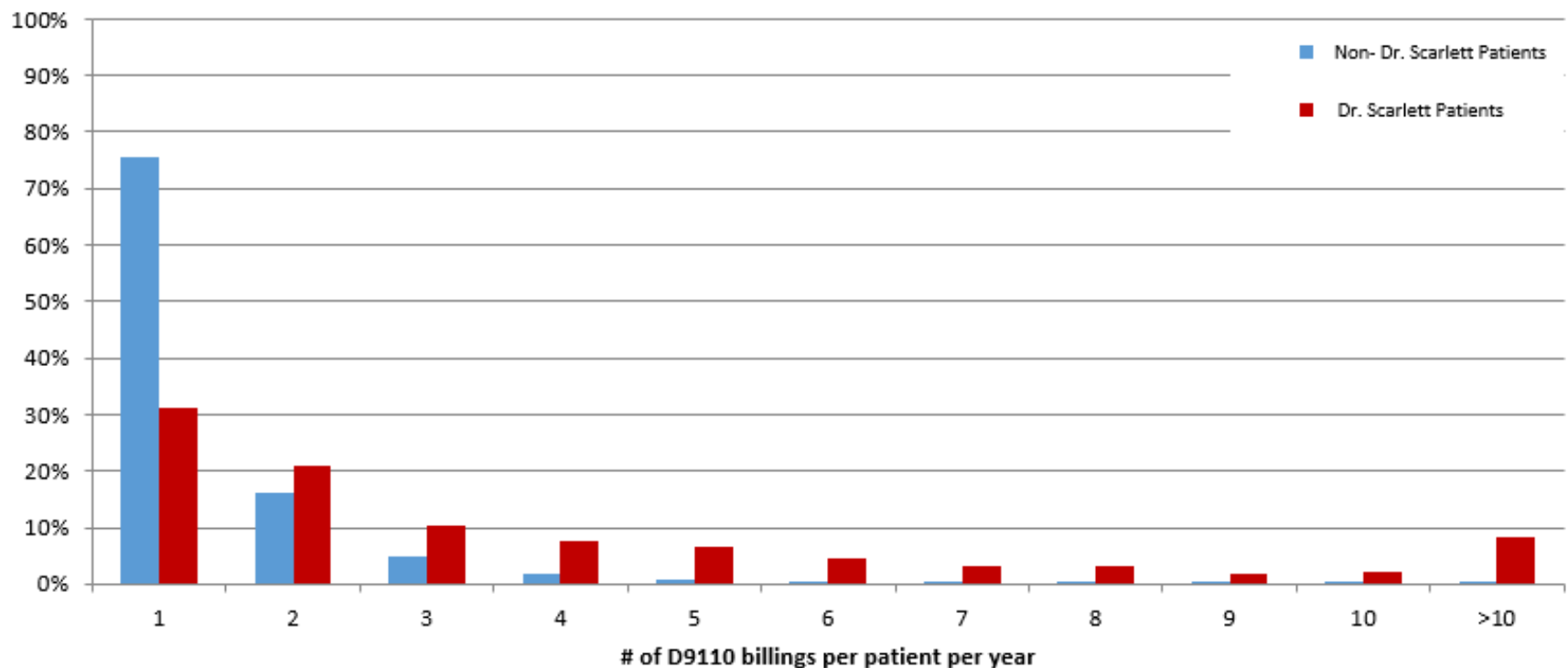
# Dental Codes – D9110 & D0160

- ◉ Observation: Within the audit sample, many of Dr. Scarlett's patients received frequent D9110 (emergency palliative treatment of dental pain) and D0160 (detailed oral evaluations for chemotherapy, transplant, amputation patients) services
- ◉ Investigation goal: Determine whether frequency of 2 specific codes was common for all MassHealth patients or only Dr. Scarlett's
- ◉ Data analytical steps: BSI queried claims data for all MassHealth patients who received D0160 and D9110 services from January 1, 2006, through December 31, 2012 and separated Dr. Scarlett's from all other MassHealth providers for comparison
- ◉ Determination: The following graph analysis shows that Dr. Scarlett's patients received significantly more frequent D9110 and D0160 treatments than other MassHealth members who received those treatments

# Code D9110- Emergency Palliative Treatment

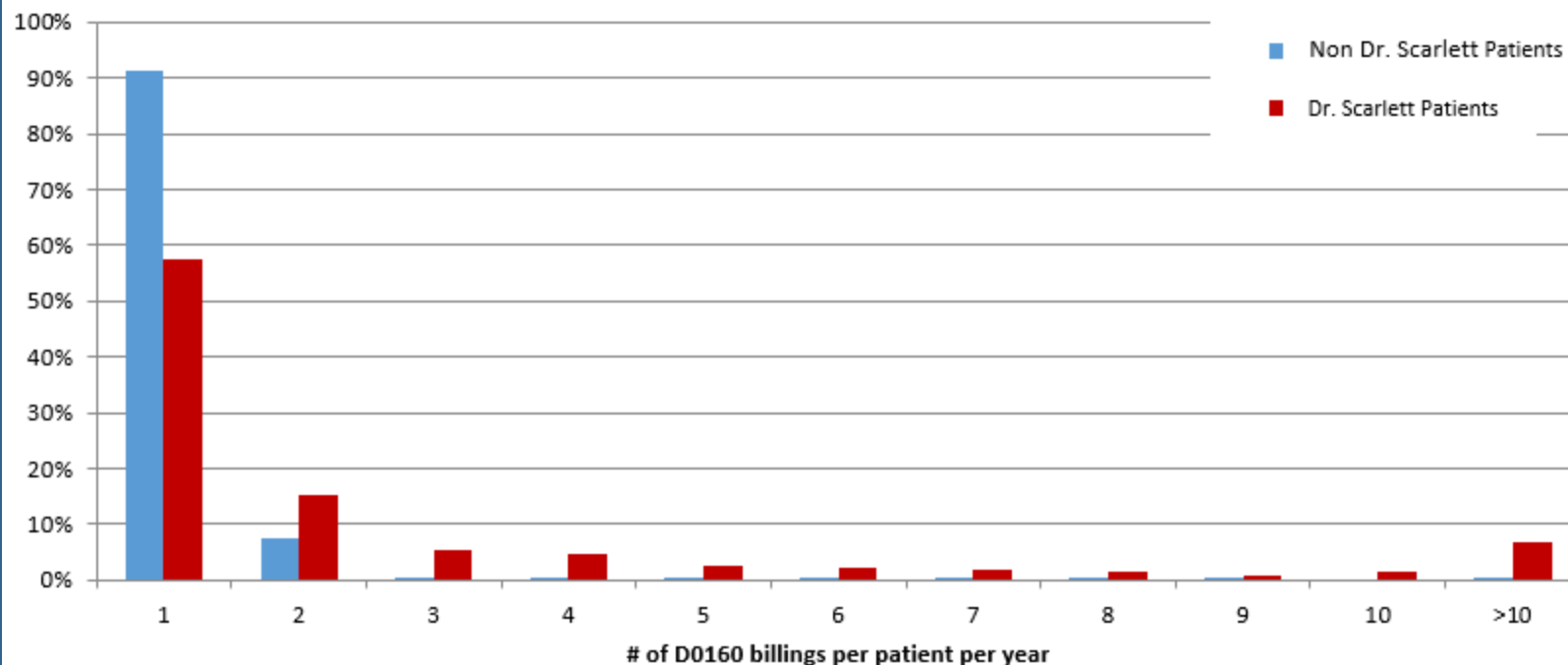
## Comparison of Dr. Scarlett Patients and All Other Patients

(Patients who received at least one D9110 treatment)



# Code D0160 - Detailed Evaluations for Chemotherapy, Transplant, Amputation Patients

**Comparison of Dr. Scarlett Patients and All Other Patients**  
(Patients who received at least one D0160 treatment)



# Dental Provider Comparisons

- ◎ Using what was learned from this billing pattern, the MassHealth claims database was queried for other dental codes during the 7 year time frame
  - > Two dentists emerged as billing for a high number of D5520 (replacement of missing or broken teeth) claims per patient
  - > A single dental practitioner submitted more claims than both Boston University School of Dental Medicine and Tufts Dental Clinic
- ◎ While this analysis did not directly benefit the Dr. Scarlett investigation, it provides the basis for future investigations of dental providers

# Following the Money



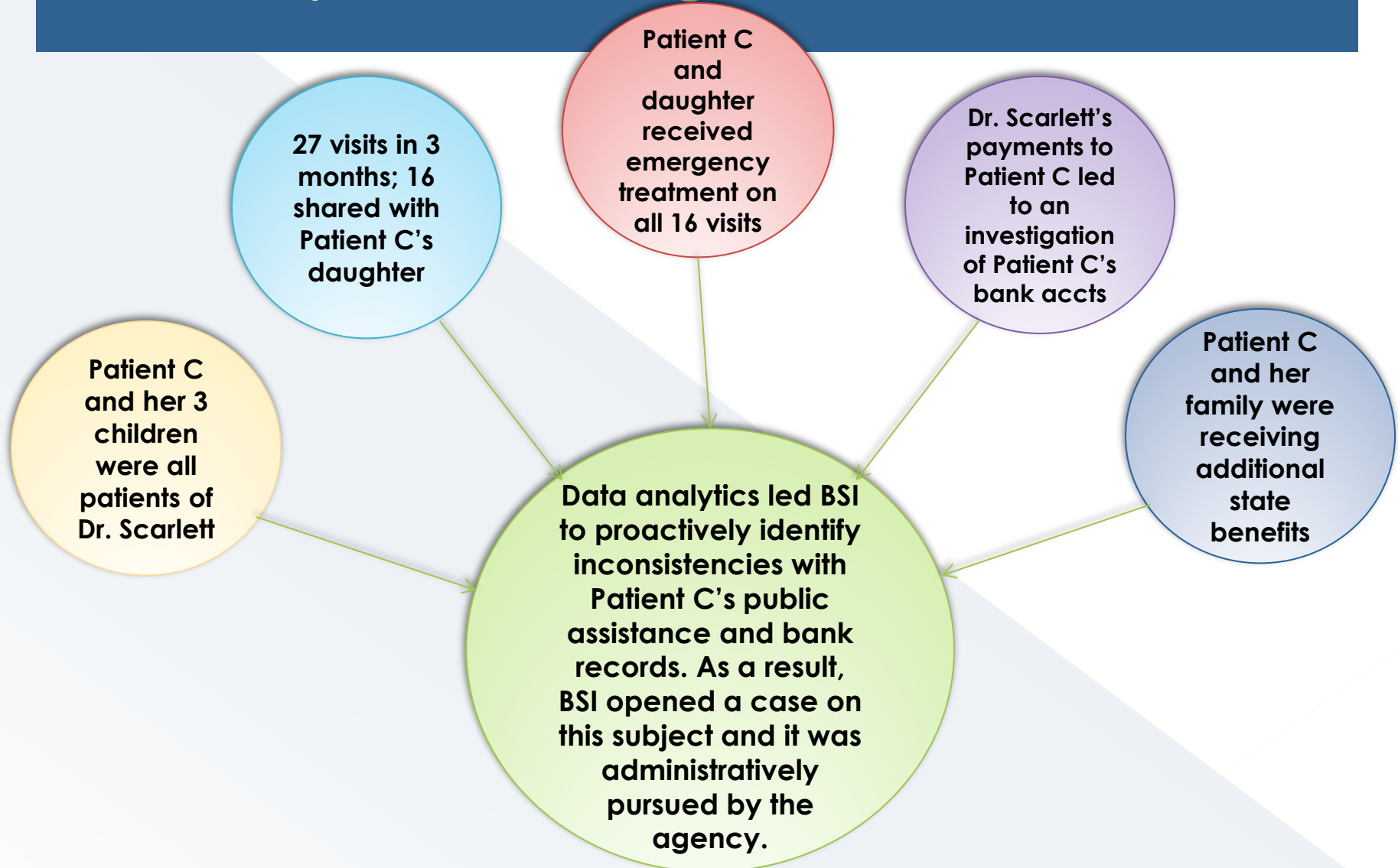
- Dr. Scarlett's bank records show transactions between Dr. Scarlett and her patients
- Analysis showed checks to 5 of her patients, Patient C received **\$3,743.38 in 3 years**

| Date:             | Check Number: | Amount:            | Made Payable To: | Dr. Scarlett Claims Near Date:                                   |
|-------------------|---------------|--------------------|------------------|------------------------------------------------------------------|
| 12/7/2007         | 1056          | \$ 141.75          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 12/14/2007        | 1063          | \$ 150.00          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 12/21/2007        | 1066          | \$ 140.40          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 1/16/2008         | 1081          | \$ 316.80          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 2/15/2008         | 1092          | \$ 105.00          | Patient C        | 4 Claims on 2/19/2008, Paid Amount \$186.00                      |
| 2/28/2008         | 1104          | \$ 80.70           | Patient C        | 4 Claims on 2/19/2008, Paid Amount \$186.00                      |
| 3/12/2008         | 1111          | \$ 351.43          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 3/27/2008         | 1117          | \$ 275.55          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 4/11/2008         | 1137          | \$ 243.90          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 4/23/2008         | 1150          | \$ 320.25          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 5/8/2008          | 1155          | \$ 137.40          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 5/21/2008         | 1166          | \$ 233.40          | Patient C        | 1 Claim on 5/14/2008, Paid Amount \$132.00                       |
| 6/5/2008          | 1169          | \$ 248.85          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 6/20/2008         | 1177          | \$ 201.45          | Patient C        | No Dr. Scarlett Claims Near Check Date                           |
| 9/18/2009         | 1404          | \$ 75.00           | Patient C        | 68 Claims between 9/10/2009 and 9/17/2009, Paid Amount \$6,996   |
| 11/5/2009         | 1427          | \$ 136.80          | Patient C        | 26 Claims between 11/2/2009 - 11/19/2009, Paid Amount \$2,018.58 |
| <b>11/16/2009</b> | 1428          | \$ 273.60          | Patient C        | 26 Claims between 11/2/2009 - 11/19/2009, Paid Amount \$2,018.58 |
|                   |               |                    |                  | 2 Claims on <b>11/16/2009</b> , Paid Amount \$93.00              |
| 1/27/2010         | 1550          | \$ 274.95          | Patient C        | 34 Claims between 1/18/2010 - 1/25/2010, Paid Amount \$7,863.00  |
| <b>2/21/2011</b>  | 1597          | \$ 36.45           | Patient C        | 3 Claims on <b>2/21/2011</b> , Paid Amount \$114.00              |
|                   | <b>Total:</b> | <b>\$ 3,743.38</b> |                  |                                                                  |



Checks made payable to a patient from a dental provider

# Analysis and Progression of Patient C

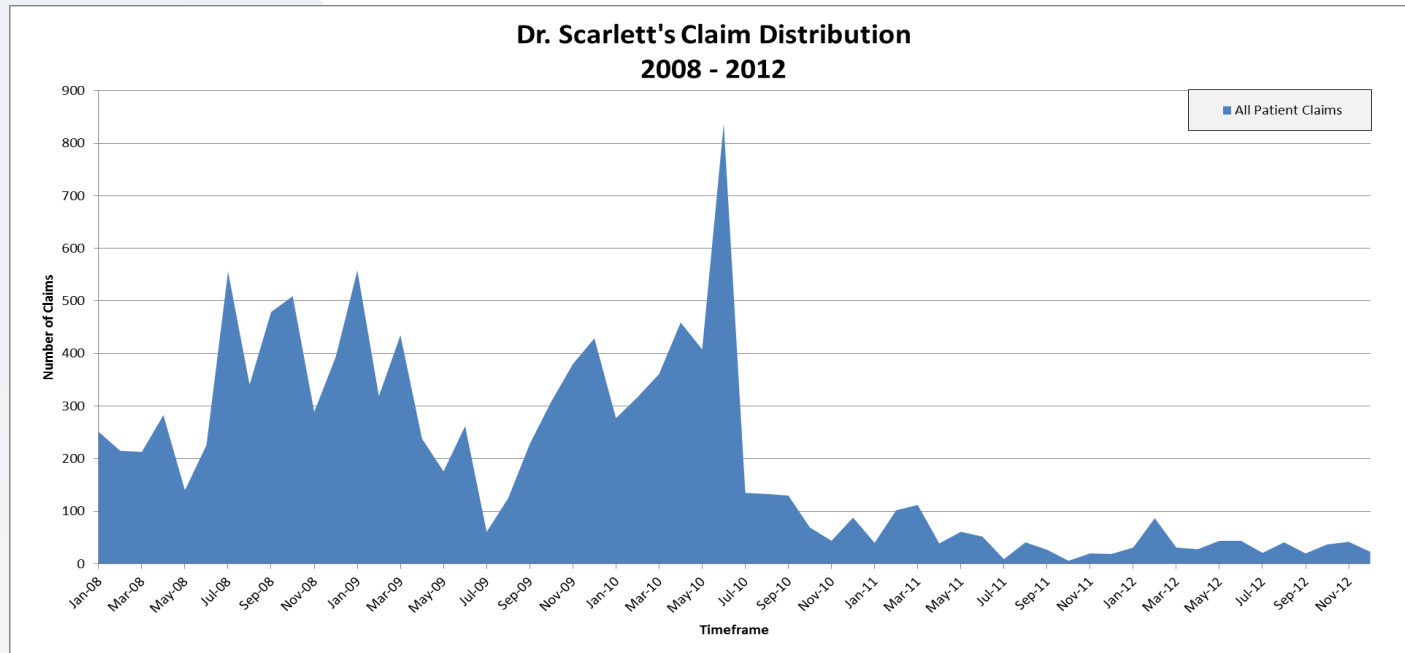


# Select lines from Dr. Scarlett's Income Tax Returns

|                      | 2008              | 2009              | 2010              | 2011              |
|----------------------|-------------------|-------------------|-------------------|-------------------|
| Wages                | \$ 238,100        | \$ 443,850        | \$ 402,500        | \$ 293,926        |
| <b>Total Income</b>  | <b>\$ 222,563</b> | <b>\$ 315,773</b> | <b>\$ 365,284</b> | <b>\$ 237,790</b> |
| Total Taxable Income | \$ 177,226        | \$ 275,831        | \$ 322,970        | \$ 209,790        |
| Break out of Wages   |                   |                   |                   |                   |
| Husband Wages- Job 1 | \$ 177,000        | \$ 188,500        | \$ 217,500        | \$ 182,051        |
| Husband Wages- Job 2 |                   | \$ 43,350         | \$ 37,000         | \$ 13,000         |
| Dr. Scarlett Wages   | \$ 61,100         | \$ 210,000        | \$ 148,000        | \$ 52,000         |
|                      |                   |                   |                   | \$ 46,875         |
| Subtotal             | <u>\$ 238,100</u> | <u>\$ 443,850</u> | <u>\$ 402,500</u> | <u>\$ 293,926</u> |
| Dependents           | Mother            | Mother            | Mother            | Mother            |
|                      | Father in Law     | Father in Law     | Father in Law     | Father in Law     |
|                      | Mother in Law     | Mother in Law     | Mother in Law     | Mother in Law     |
|                      | Son #1            | Son #1            | Son #1            | Son #1            |
|                      |                   | Son #2            | Son #2            | Son #2            |
|                      |                   | Brother           | Brother           | Brother           |
|                      |                   | Sister            | Sister            | Sister            |
|                      |                   | Niece             | Niece             | Niece             |

# Take Aways from Tax Analysis

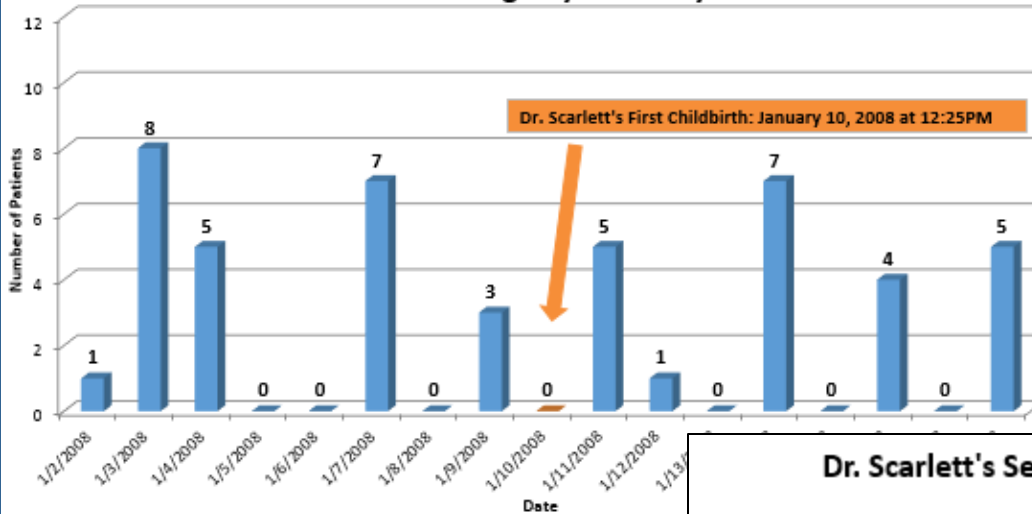
- Dr. Scarlett's practice suffered a significant income decrease from 2010 to 2011 (approx. 35%). This corresponds with provider's decrease in claims



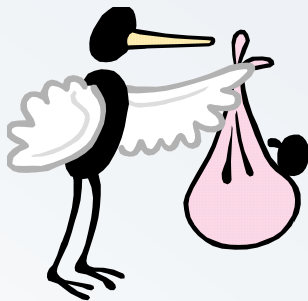
- Dr. Scarlett's husband was paid by her company (Husband's Job #2)
- Dr. Scarlett owns dental practice (reports income loss on corporate tax returns)

# Childbirth and Treatment on Surrounding Days

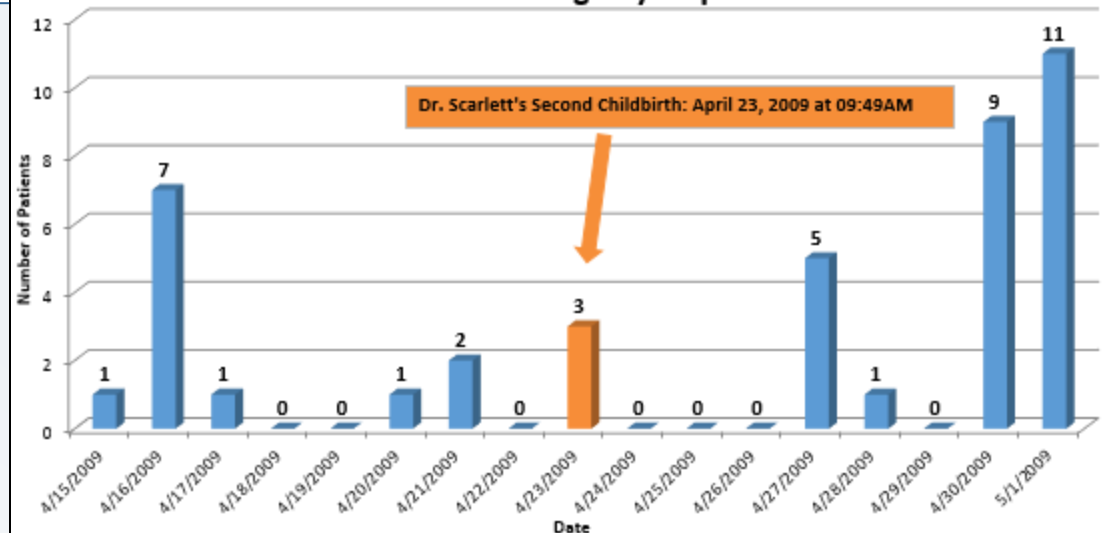
**Dr. Scarlett's First Childbirth & MassHealth Patients Treated in the Surrounding Days: January 2008**



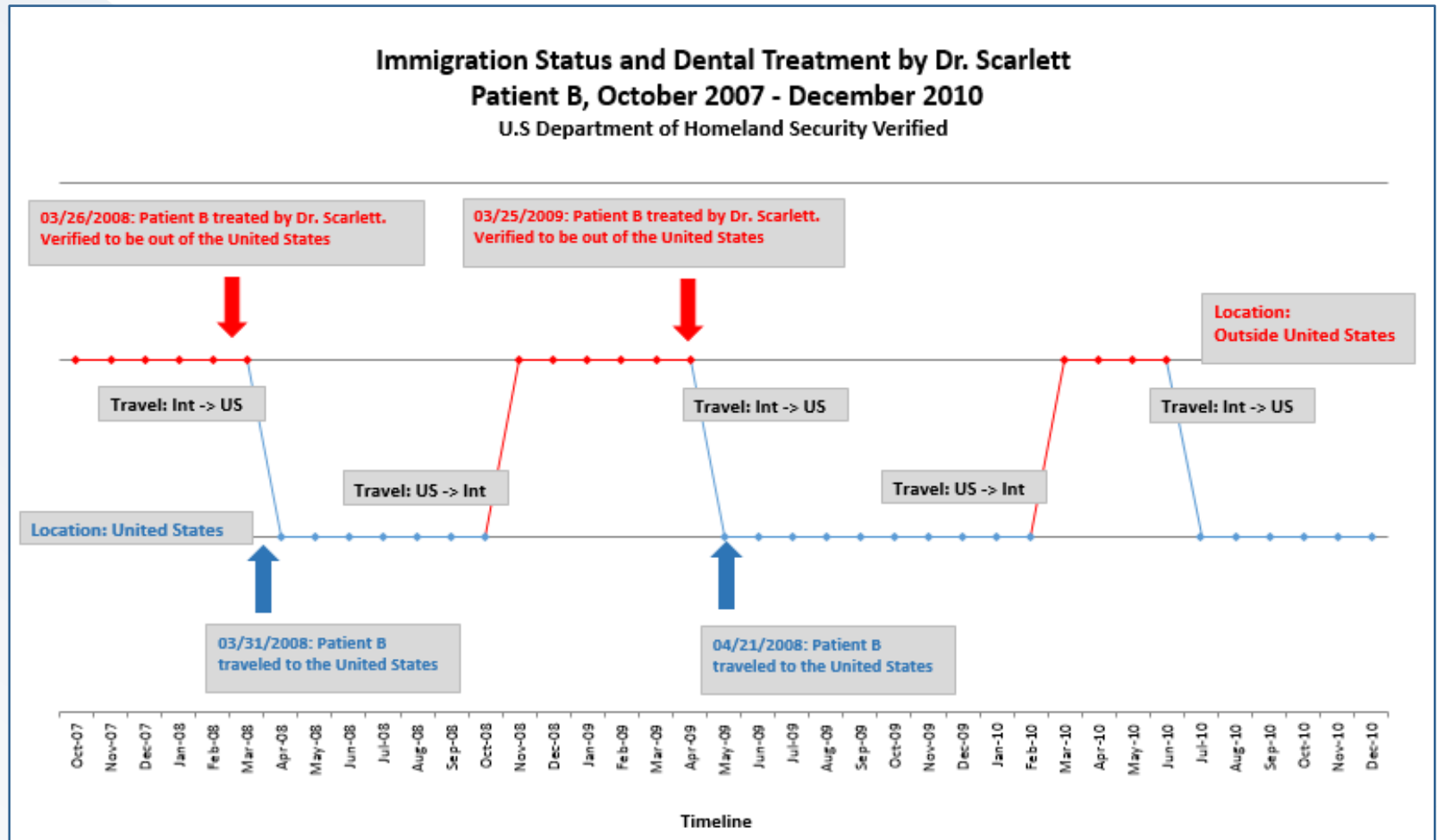
Claims data indicates treatment performed by Dr. Scarlett on the days surrounding childbirth



**Dr. Scarlett's Second Childbirth & MassHealth Patients Treated in the Surrounding Days: April 2009**



# Treatment Provided to Patients Outside the United States



Verified with Department of Homeland Security, a patient was outside the United States on 2 days that the patient was treated by Dr. Scarlett

# Other Toothaches

- ⦿ Compared claims history to MassHealth death records
- ⦿ Queried husband's patients vs. Dr. Scarlett's patients to identify possible overlap of patient population
- ⦿ Reviewed MassHealth pharmaceutical claims to identify the amount of Dr. Scarlett's narcotics prescriptions
- ⦿ Data analysis on denied claims to identify irregular billing practices

# Deceased Patients Analysis

- ⦿ **Compared Dr. Scarlett's patients to the MassHealth Death Records**
  - > She treated 745 Patients during 7 year period
  - > 6 of those patients died during that time
- ⦿ **Dr. Scarlett did not submit claims for the six patients after they died**

# Analysis Husband's Practice

- ◉ Dr. Scarlett had 745 patients
- ◉ Her husband had 1,032 patients
- ◉ Only two patients were seen by both:
  - > \$203.88 in medical claims (husband)
  - > \$1,717.00 in dental claims (Dr. Scarlett)
- ◉ Patient M and Patient W never received services at the same time from Dr. Scarlett and her husband

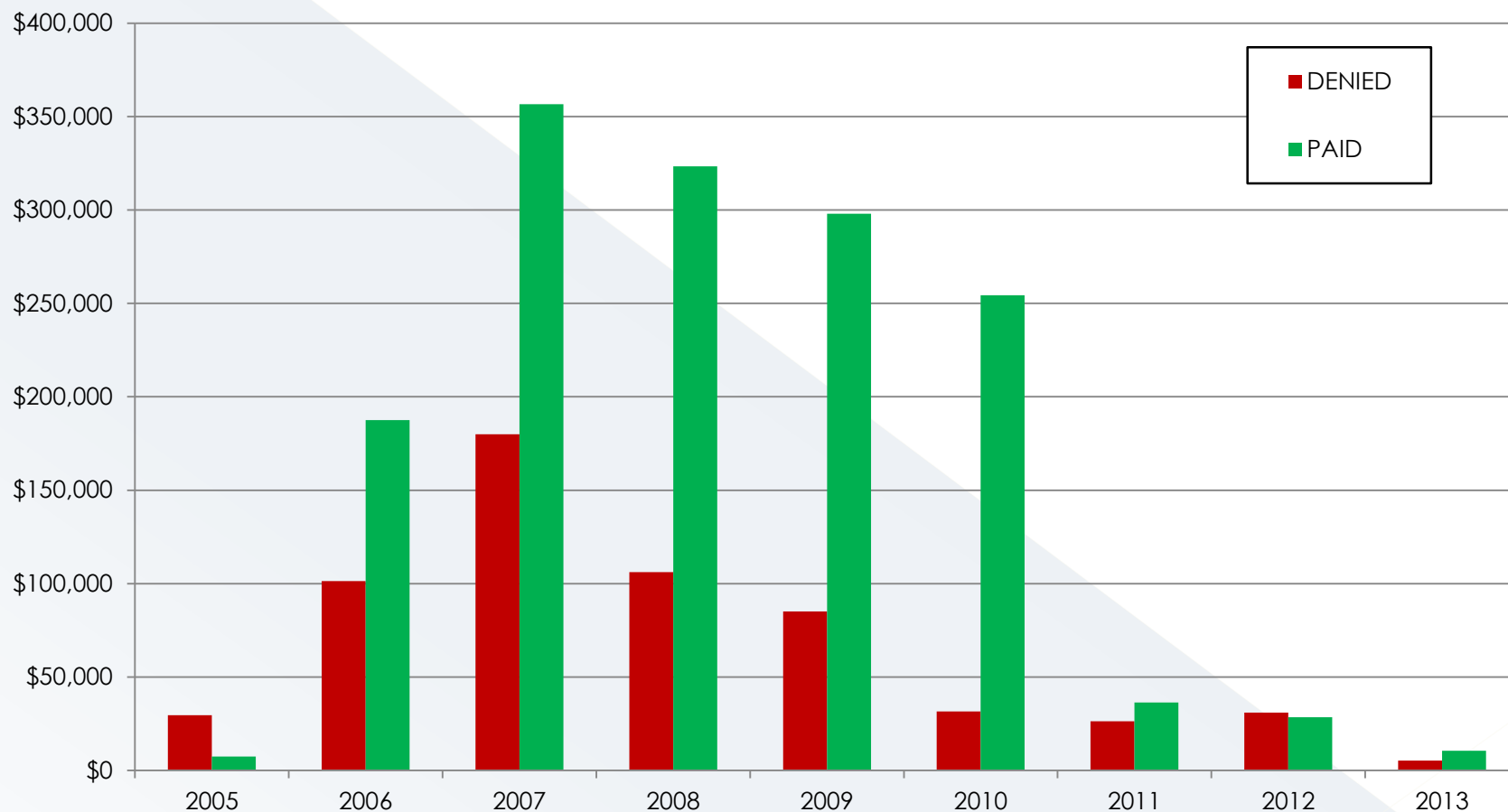


# Analysis Prescription Narcotics

- ◉ Reviewed 5 years of narcotics prescriptions written by Dr. Scarlett
  - > 15 claims
  - > 14 different MassHealth patients
  - > MassHealth paid \$51.03 total



# Dr. Scarlett Claims Analysis Paid vs. Denied Claims



# BSI Findings: Dr. Scarlett

213 out of 387 member patients (**55%**) received cancer screenings

| Description                                                                                          | Amount           |
|------------------------------------------------------------------------------------------------------|------------------|
| Fraudulent claim for Cancer Screenings (D0160) and Emergency Visits (D9110).                         | \$191,773        |
| Dr. Scarlett provided 16 claims on or immediately after the birth of her children.                   | \$909            |
| Six claims for family members when they were confirmed to be out of the country.                     | \$228            |
| Unbundling of services, individual tooth replacement (D5520) vs. denture replacements(D5110/D55120). | \$18,144         |
| Fluoride treatments provided, 45 to 1 patient in 15 months.                                          | \$1,170          |
| <b>Total Value of Fraudulently Identified Claims:</b>                                                | <b>\$212,224</b> |

# Complaint To Bureau of Special Investigations

## Medicaid Provider Complaint – Fraud & Waste

Name::

Enter Your Full Address::

Telephone::

Relationship with subject::

Patient

First Name::

Dr. Scarlett

Last Name::

Dr. Scarlett

Middle Name::

Dr. Scarlett

Enter Subject's Full Address:

Dental Office Alpha

Quincy, MA 02170

Date of Birth (mm/dd/yyyy)::

Alias::

Describe the nature of the fraud being committed or any helpful information, including information about the persons in the home

- Fraudulent billing and excessive charges to patients.
- Procedures done did not help solve the problem
- Falsely presenting procedures and a "fix" for problem
- Additional procedures done on dentist's personal gains and preferences
- Purposely overcharged misc. procedures
- Adding false procedures to claims
- Misleading patients
- Failure to follow treatment plan
- Abuse of "Doctor/Dentist" title using bullying tactics
- Abundance of unnecessary x-rays due to dentist mistakes
- Unwilling to provide proper documents for claims
- Did not follow medical/dental procedures for insurance claims

# Dental Provider Business Profiles

## Dental Office Alpha

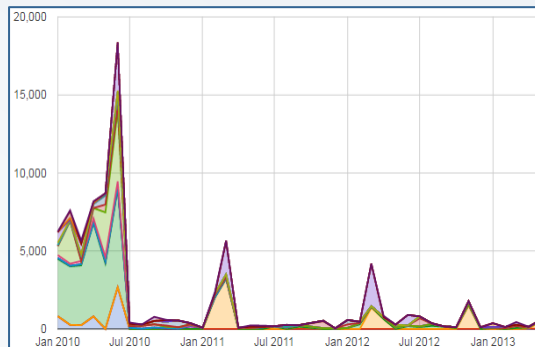
Date of Organization: 8/31/2005  
Date of Dissolution: 12/29/2014  
Address: Quincy, MA 02170  
President: Dr. Scarlett

Date of Organization: 1/12/2016  
Date of Dissolution: N/A  
Address: Wollaston, MA 02170  
President: Dr. Scarlett

Servicing Provider Name: Dr. Scarlett

Dr. Scarlett

Entity Risk Total Score: 144,153 from 2,323 Transactions  
Entity Risk Rank: 1,507 of 17,336 Entities of this Type



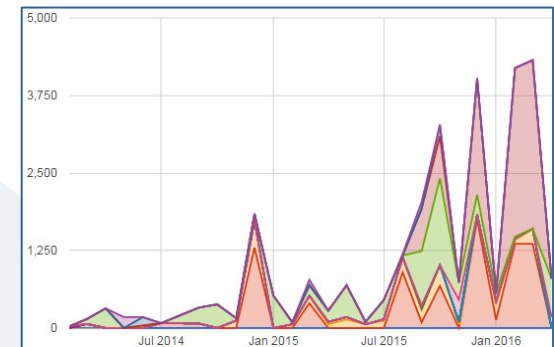
SETTLEMENT AGREEMENT AND RELEASE  
AMONG  
Dr. Scarlett, D.M.D  
Dental Office Yankee  
And  
MASSACHUSETTS  
EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES  
And  
OFFICE OF THE ATTORNEY GENERAL  
PARTIES

- Provider to pay \$300,000 as restitution for overpayments
- Provider to notify Medicaid Fraud Division of intent to re-apply to be a MassHealth provider
- Provider to submit to monitoring program if reinstated as MassHealth provider

Servicing Provider Name:  
Dental Office Alpha

Dental Office Alpha

Entity Risk Total Score: 27,692 from 263 Transactions  
Entity Risk Rank: 2,737 of 14,279 Entities of this Type



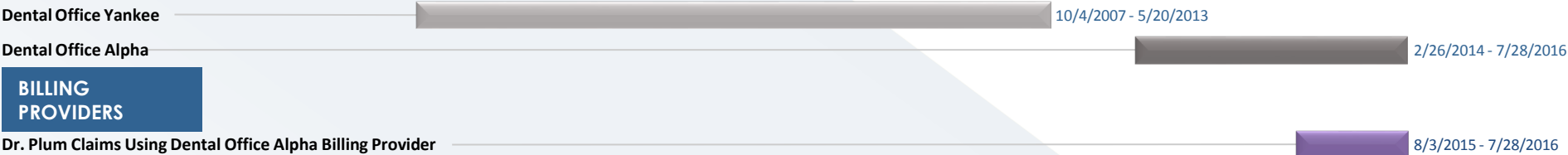
# Dental Provider Business Profile

## Claims Activity

### SERVICING PROVIDERS



### BILLING PROVIDERS



| Provider Type      | Provider ID | Provider Name        | Date: First Claim | Date: Last Claim | Number of Paid Claims | Total Amount Paid | Number of Patients | Date: Provider Active |
|--------------------|-------------|----------------------|-------------------|------------------|-----------------------|-------------------|--------------------|-----------------------|
| Servicing Provider | SSSS-SSS    | Dr. Scarlett         | 10/5/2005         | 5/20/2013        | 19,816                | \$ 1,502,711      | 745                | 10/4/2005             |
| Servicing Provider | AAAA-AAA    | Dental Office Alpha  | 2/26/2014         | 9/17/2015        | 1,724                 | \$ 121,834        | 87                 | 2/9/2014              |
| Servicing Provider | PPPP-PPP    | Dr. Plum             | 4/7/2008          | 8/2/2016         | 7,851                 | \$ 584,642        | 1621               | 9/1/1983              |
| Billing Provider   | YYYY-YYY    | Dental Office Yankee | 10/4/2007         | 5/20/2013        | 9,327                 | \$ 749,127        | 298                | 6/25/2007             |
| Billing Provider   | AAAA-AAA    | Dental Office Alpha  | 2/26/2014         | 7/28/2016        | 1,549                 | \$ 120,045        | 135                | 2/9/2014              |

# Dr. Scarlett Dental Services During Suspensions

2005

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2016

## Provider Discipline

Dr. Scarlett MassHealth Suspension

6/1/2013 - Present

Dr. Scarlett Massachusetts State License Suspension/Probation

## MassHealth Members

Suspension – 5/1/2013 – 6/9/2014 | Probation – 6/9/2014 – 6/9/2015

MH Member\_Patient W

13 DOS

3/19/2014 - 4/9/2015

MH Member\_Patient JK

14 DOS

4/26/2016 - 8/24/2016

MH Member\_Patient B

8 DOS

6/18/2015 - 9/3/2015

MH Member\_Patient CK

4 DOS

4/21/2016 - 8/18/2016

MH Member\_Patient NK

2 DOS

3/12/2014 - 4/9/2015

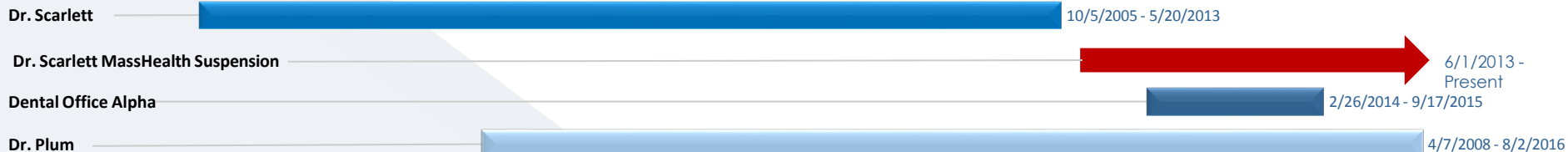
# Patient Interviews

## PATIENT INTERVIEW FINDINGS

- Patient NK –
  - Saw Dr. Scarlett for dental services twice (04/02/2015 & 04/09/2015) during Dr. Scarlett's MassHealth suspension
  - Patient NK was charged out of pocket expenses for dental work
  - Patient stated that Dr. Scarlett stopped in the middle of an extensive surgical procedure and instructed her to drive to another dentist across town to finish the services
- Patient EW -
  - Saw Dr. Scarlett for dental services 13 times (3/19/2014-4/9/2015) during Dr. Scarlett's state and MassHealth suspensions
  - Patient EW was charged out of pocket expenses for dental work
- Patient JK -
  - Saw Dr. Scarlett for dental services 17 times (4/26/2016-9/22/2016) during Dr. Scarlett's MassHealth suspension
  - Patient JK was charged out of pocket expenses for dental work
- Patient BB -
  - Saw Dr. Scarlett for dental services 7 times (6/18/2015-8/20/2015) during Dr. Scarlett's MassHealth suspension
  - Patient BB was told he needed to pay out of pocket expenses, however, he declined to open a line of credit
- Patient CK -
  - Saw Dr. Scarlett for dental services twice (4/21/2016 & 7/19/2016) during Dr. Scarlett's MassHealth suspension
  - Saw Dr. Plum for dental services 2 times (7/21/2016 & 8/18/2016)

# Dental Office Alpha Encounter Claims

## SERVICING PROVIDERS



2005

2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016

2016

### Encounter Claims - DOS

5/8/2014 – 6 Claims submitted listing Dr. Scarlett as SP and Dental Office Yankee as BP. Claims resubmitted on later date with Dr. Plum as SP and Dental Office Alpha as BP.

### Encounter Claims – Billing Submit Date

5/19/2014 – 6 Claims submitted on behalf of 2 patients for work on DOS 5/8/2014

### Encounter Claims – Billing Resubmit Date

5/19/2014 – 6 Claims Resubmitted on behalf of 2 patients for work on DOS 5/8/2014

### Encounter Claims - DOS

4/28/2015 – 2 Claims submitted listing Dr. Scarlett as SP and Dental Office Yankee as BP. Claims resubmitted on later date with Dr. Plum as SP and Dental Office Alpha as BP.

### Encounter Claims – Billing Submit Date

5/11/2015 – 2 Claims submitted on behalf of 1 patients for work on DOS 4/28/2015

### Encounter Claims – Billing Resubmit Date

5/26/2015 – 2 Claims Resubmitted on behalf of 2 patients for work on DOS 4/28/2015

# Dental Office Alpha Encounter Claims

| DATE OF SERVICE | CLAIM CREATE DATE | BILLED AMOUNT | GROSS PAID AMOUNT | PAID AMOUNT | SERVICING PROVIDER NAME | PROVIDER ID | MEMBER ID | MEMBER NAME | DSC_PROG                                        |
|-----------------|-------------------|---------------|-------------------|-------------|-------------------------|-------------|-----------|-------------|-------------------------------------------------|
| 08-MAY-14       | 19-MAY-14         | \$ 75         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | CCCC-CCCC | PATIENT C   | D0274 - BITEWINGS- FOUR FILMS                   |
| 08-MAY-14       | 19-MAY-14         | \$ 95         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | CCCC-CCCC | PATIENT C   | D1110 - PROPHYLAXIS - ADULT (OVER AGE 14)       |
| 08-MAY-14       | 19-MAY-14         | \$ 55         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | CCCC-CCCC | PATIENT C   | D0120 - PERIODIC ORAL EXAMINATION               |
| 08-MAY-14       | 14-JUL-14         | \$ 95         | \$ 49             | \$ 49       | Dr. Plum                | PPPP-PPPP   | CCCC-CCCC | PATIENT C   | D1110 - PROPHYLAXIS - ADULT (OVER AGE 14)       |
| 08-MAY-14       | 14-JUL-14         | \$ 55         | \$ 23             | \$ 23       | Dr. Plum                | PPPP-PPPP   | CCCC-CCCC | PATIENT C   | D0120 - PERIODIC ORAL EXAMINATION               |
| 08-MAY-14       | 14-JUL-14         | \$ 75         | \$ 33             | \$ 33       | Dr. Plum                | PPPP-PPPP   | CCCC-CCCC | PATIENT C   | D0274 - BITEWINGS- FOUR FILMS                   |
| 08-MAY-14       | 19-MAY-14         | \$ 55         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | HHHH-HHHH | PATIENT H   | D0120 - PERIODIC ORAL EXAMINATION               |
| 08-MAY-14       | 19-MAY-14         | \$ 75         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | HHHH-HHHH | PATIENT H   | D0274 - BITEWINGS- FOUR FILMS                   |
| 08-MAY-14       | 19-MAY-14         | \$ 150        | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | HHHH-HHHH | PATIENT H   | D6930 - RECEMENT FIXED PARTIAL DENTURE          |
| 08-MAY-14       | 14-JUL-14         | \$ 55         | \$ 23             | \$ 23       | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D0120 - PERIODIC ORAL EXAMINATION               |
| 08-MAY-14       | 14-JUL-14         | \$ 75         | \$ 33             | \$ 33       | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D0274 - BITEWINGS- FOUR FILMS                   |
| 08-MAY-14       | 14-JUL-14         | \$ 75         | \$ -              | \$ -        | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D0274 - BITEWINGS- FOUR FILMS                   |
| 08-MAY-14       | 22-JUL-14         | \$ 150        | \$ 67             | \$ 67       | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D6930 - RECEMENT FIXED PARTIAL DENTURE          |
| 28-APR-15       | 11-MAY-15         | \$ 25         | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | HHHH-HHHH | PATIENT H   | D0220 - INTRAORAL - PERIAPICAL - FIRST FILM     |
| 28-APR-15       | 11-MAY-15         | \$ 150        | \$ -              | \$ -        | Dr. Scarlett            | SSSS-SSSS   | HHHH-HHHH | PATIENT H   | D9110 - PALLIATIVE (EMERGENCY) TREATMENT OF DEN |
| 28-APR-15       | 26-MAY-15         | \$ 117        | \$ 33             | \$ 33       | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D9110 - PALLIATIVE (EMERGENCY) TREATMENT OF DEN |
| 28-APR-15       | 26-MAY-15         | \$ 117        | \$ 33             | \$ 33       | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D9110 - PALLIATIVE (EMERGENCY) TREATMENT OF DEN |
| 28-APR-15       | 26-MAY-15         | \$ 25         | \$ -              | \$ -        | Dr. Plum                | PPPP-PPPP   | HHHH-HHHH | PATIENT H   | D0220 - INTRAORAL - PERIAPICAL - FIRST FILM     |

## DENTAL OFFICE ALPHA ENCOUNTER CLAIMS

- Dr. Scarlett is not an active MassHealth Encounter Provider
- Dr. Scarlett submitted encounter claims for 2 patients on 3 occasions which were all denied
- Denied encounter claims were resubmitted and subsequently paid out after the servicing provider was changed from Dr. Scarlett to Dr. Plum

# Dental Office Yankee & Alpha Financials

## BANK ACCOUNTS

Eastern Bank Acct XXXX "Dental Office Yankee"

12/01/2006 - 10/20/2015

Eastern Bank Acct YYYY "Dental Office Alpha"

10/20/2015 - Present

2005

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

2016

### MassHealth Payments

06/08/2007 – Dr. Scarlett transferred MassHealth payments from BofA to Eastern Bank Acct xxxx.

### MassHealth Payments

09/08/2008 – First Preauthorized credit: **COMM OF MASS TREVENDOR** in xxxx

### MassHealth Payments

11/25/2013 – Final Preauthorized credit: **COMM OF MASS TREVENDOR** in xxxx

### Synchrony Payments

09/16/2014-01/08/2015 – 14 Preauthorized credits totaling \$6,340.21: **"SYNCHRONY BANK BTOT DEP/ BILLING"**

### New bank account

10/20/2015 – Dental Office Yankee acct xxxx closed with \$757.68 withdrawal; Dental Office Alpha acct yyyy opened with \$757.68 deposit

### Merchant Bankcard Payments

11/10/2015-08/24/2016 – 42 Preauthorized credits totaling \$15,754.06: **"MERCH BANKCARD NET SETLMT / BILLING"**

# State Vendor Payments

## Dental Office Yankee, Dental Office Alpha, Dr. Scarlett & Dr. Plum

### VENDOR PAYMENT SUMMARY DURING DR. SCARLETT SUSPENSION

- Timeframe: June 2013 - November 2014
- Number of Payments: 14
- Value of Payments: \$4,773.50

### SERVICING PROVIDERS RECEIVING STATE VENDOR PAYMENTS

2009

2009

2010

2011

2012

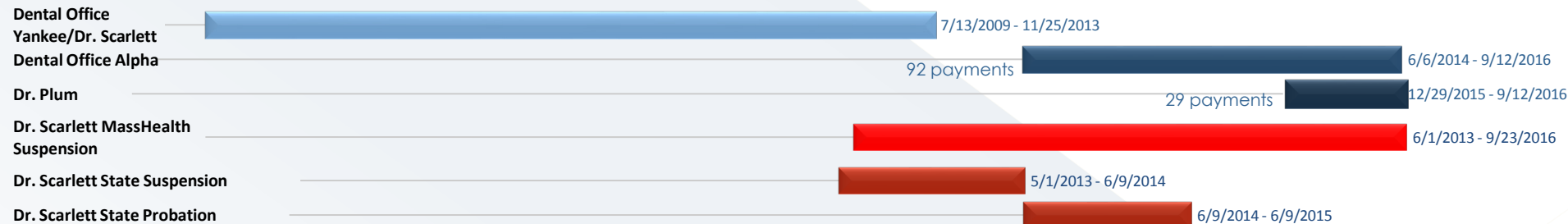
2013

2014

2015

2016

2016



# Surveillance Report & Claims Monitoring

## Surveillance Summary

Dates - September 13, 2016 & September 22, 2016

| MassHealth Dental Claims on Surveillance Days - Dr. Scarlett, Dr. Plum, Dental Office Alpha |             |             |                   |               |                 |               |                     |                                                 |             |       |
|---------------------------------------------------------------------------------------------|-------------|-------------|-------------------|---------------|-----------------|---------------|---------------------|-------------------------------------------------|-------------|-------|
| DATE OF SERVICE                                                                             | MEDICAID ID | MEMBER NAME | MEMBER RESIDENCY  | S PROVIDER ID | S PROVIDER NAME | B PROVIDER ID | B PROVIDER NAME     | PROCEDURE CODE DESCRIPTION                      | AMOUNT PAID |       |
| 13-SEP-16                                                                                   | XXXXXXXXXX  | PATIENT X   | MASHPEE, MA       | PPPP-PPPP     | DR. PLUM        | PPPP-PPPPA    | DR. PLUM            | D2393 - RESIN-BASED COMPOSITE 3 OR MORE SURFACE | \$          | 77.00 |
| 13-SEP-16                                                                                   | YYYYYYYYYYY | PATIENT Y   | EAST SANDWICH, MA | PPPP-PPPP     | DR. PLUM        | PPPP-PPPPA    | DR. PLUM            | D2391 - RESIN-BASED COMPOSITE-ONE SURFACE, POST | \$          | 51.00 |
| 13-SEP-16                                                                                   | YYYYYYYYYYY | PATIENT Y   | EAST SANDWICH, MA | PPPP-PPPP     | DR. PLUM        | PPPP-PPPPA    | DR. PLUM            | D2391 - RESIN-BASED COMPOSITE-ONE SURFACE, POST | \$          | 51.00 |
| 13-SEP-16                                                                                   | YYYYYYYYYYY | PATIENT Y   | EAST SANDWICH, MA | PPPP-PPPP     | DR. PLUM        | PPPP-PPPPA    | DR. PLUM            | D2391 - RESIN-BASED COMPOSITE-ONE SURFACE, POST | \$          | 51.00 |
| 13-SEP-16                                                                                   | YYYYYYYYYYY | PATIENT Y   | EAST SANDWICH, MA | PPPP-PPPP     | DR. PLUM        | PPPP-PPPPA    | DR. PLUM            | D2391 - RESIN-BASED COMPOSITE-ONE SURFACE, POST | \$          | 51.00 |
| DATE OF SERVICE                                                                             | MEDICAID ID | MEMBER NAME | MEMBER RESIDENCY  | S PROVIDER ID | S PROVIDER NAME | B PROVIDER ID | B PROVIDER NAME     | PROCEDURE CODE DESCRIPTION                      | AMOUNT PAID |       |
| 22-SEP-16                                                                                   | KKKKKKKKKK  | PATIENT JK  | QUINCY, MA        | PPPP-PPPP     | DR. PLUM        | AAAA-A AAAA   | DENTAL OFFICE ALPHA | D9110 - PALLIATIVE (EMERGENCY) TREATMENT OF DEN | \$          | 33.00 |
| 22-SEP-16                                                                                   | MWMWMW      | PATIENT MW  | MILTON, MA        | PPPP-PPPP     | DR. PLUM        | AAAA-A AAAA   | DENTAL OFFICE ALPHA | D0230 - INTRAORAL - PERIAPICAL - EACH ADDITIONA | \$          | 12.00 |
| 22-SEP-16                                                                                   | MWMWMW      | PATIENT MW  | MILTON, MA        | PPPP-PPPP     | DR. PLUM        | AAAA-A AAAA   | DENTAL OFFICE ALPHA | D0220 - INTRAORAL - PERIAPICAL - FIRST FILM     | \$          | 14.00 |
| 22-SEP-16                                                                                   | MWMWMW      | PATIENT MW  | MILTON, MA        | PPPP-PPPP     | DR. PLUM        | AAAA-A AAAA   | DENTAL OFFICE ALPHA | D0140 - LIMITED ORAL EVALUATION - PROBLEM FOCUS | \$          | 39.00 |

### Surveillance Detail – September 13, 2016 (T)

-NO PATIENTS OBSERVED AT DENTAL OFFICE-

### Surveillance Detail – September 22, 2016 (Th)

#### 3 Employees Observed

- Dr. Scarlett
- Dr. Scarlett Mother in-law
- Nurse Peacock

#### 2 Patients Observed

- Patient MW
- Patient JK

-DR. PLUM NOT OBSERVED AT DENTAL OFFICE-

### Surveillance and MassHealth Dental Claims Verification and Notes

- 09/13/2016 – Dr. Plum SP/BP is for dental work confirmed to have been conducted at dental office on Cape Cod based on MH member interview
- 09/22/2016 – Claim for Patient JK has been verified to be fraudulent. Member confirmed provider and procedure cited in claim were inconsistent with his patient experience
- Additional claims may be submitted in future, monitoring efforts remain ongoing

# Dr. Plum – Multiple Patients, Multiple Locations and the Same Date of Service

## Analysis Summary Findings

- 91 DOS with Dr. Plum as SP at multiple office locations
  - Date Range: 7/21/2015 – 9/15/2016
  - Claim Count: 1,754
  - Claim Paid Amount: \$124,851
- 82 DOS with Dr. Plum as SP at 2 office locations
- 9 DOS with Dr. Plum as SP at 3 office locations
- 21 DOS with 10 or more patients serviced by Dr. Plum at multiple locations

## Analysis Methodology

- Evaluated all member residency locations for all claims between Jan 2015 and Sept 2016 with Dr. Plum as SP
- Based on residency town, established which dental office the member was likely receiving services at, Franklin, Quincy, Cape Cod
- Compared billing provider name to residency based office location analysis, match rate about 95%
- Adjusted likely residency based office location to correlate with billing provider name/office location
- Identified days where SP Dr. Plum provided services at multiple office locations

Distance and Drive Times Between Dental Offices

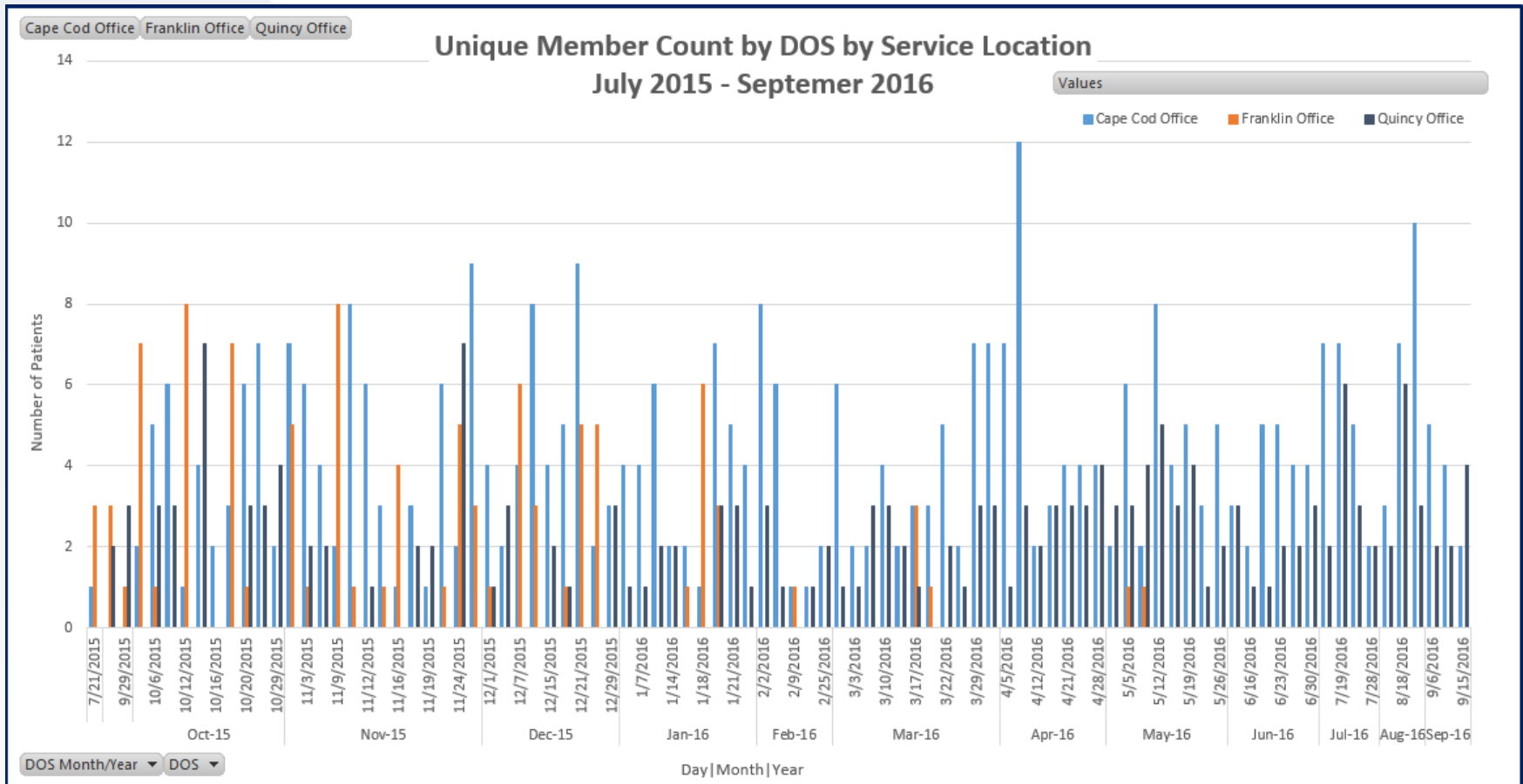
| Office Locations    | Address      | Cape Cod Charlie  | Cape Cod Delta    | Dental Office Alpha | Franklin Echo     |
|---------------------|--------------|-------------------|-------------------|---------------------|-------------------|
| Cape Cod Charlie    | Cape Cod, MA |                   | 26 Miles, 49 Mins | 65 Miles, 69 Mins   | 78 Miles, 75 Mins |
| Cape Cod Delta      | Cape Cod, MA | 26 Miles, 49 Mins |                   | 67 Miles, 66 Mins   | 71 Miles, 70 Mins |
| Dental Office Alpha | Quincy, MA   | 65 Miles, 69 Mins | 67 Miles, 66 Mins |                     | 36 Miles, 39 Mins |
| Franklin Echo       | Franklin, MA | 78 Miles, 75 Mins | 71 Miles, 70 Mins | 36 Miles, 39 Mins   |                   |

\*Source Google Maps Distance and Drive Time

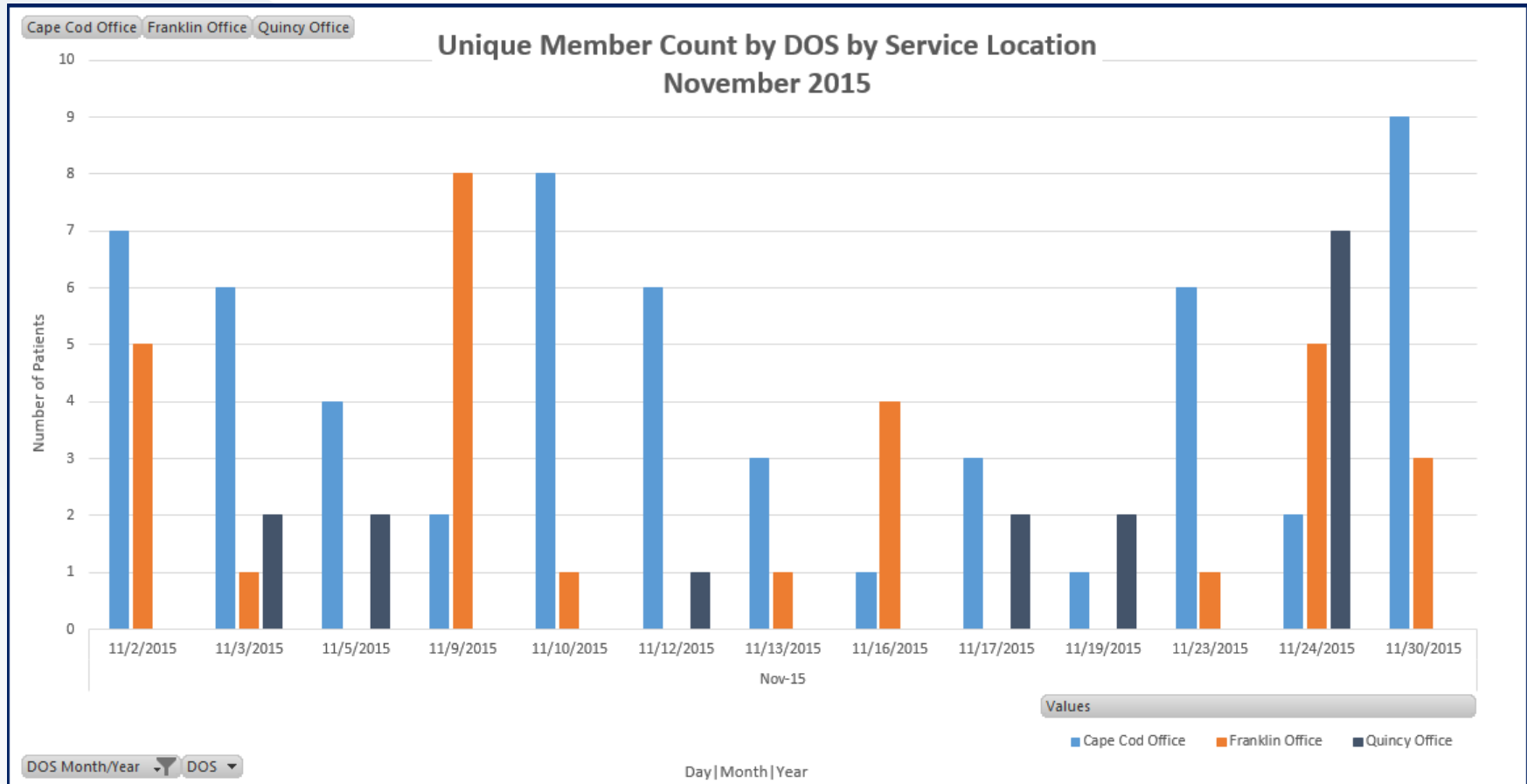
Member Geographic Distribution Based on MassHealth Residency



# Dr. Plum – Multiple Patients, Multiple Locations and the Same Date of Service



# Dr. Plum – Multiple Patients, Multiple Locations and the Same Date of Service



# Dr. Plum's Bank Record Review

## Bank Account Summary Information

- 3 accounts at Cape Cod Five Cents Savings Bank
  - Checking account is primary general use account

## Bank Account Detail Information

- Incoming Transactions
  - Checks from Dental Practices
    - DMD A [\$1,000/week]
    - DMD B
    - DMD C
    - DMD D
    - DMD E
  - Checks from Dental Office Alpha
    - \$39.05 check signed by Dr. Scarlett Mother in-law, memo "2/1/14 – 2/28/14"
    - \$1,342.43 check signed by Dr. Scarlett, memo "9/1-9/30/14"
  - Round dollar cash deposits [\$200 - \$900]
- Outgoing Transactions
  - Large checks to family members [up to \$7,000]
  - Large checks to US Treasury [ Approx. \$25,000 between 2014 – 2016]

## Bank Account Cash Activity - Cash Withdrawals - Cash Deposits

### 2014

- Cash Deposits [Dr. Plum]: \$18,800
- Cash Withdrawals [Dr. Scarlett]: \$800

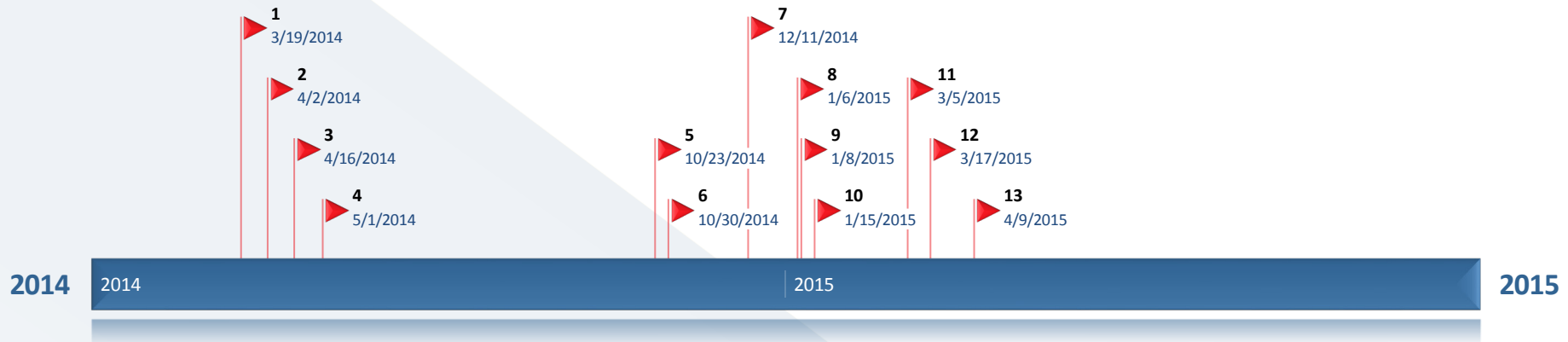
### 2015

- Cash Deposits [Dr. Plum]: \$22,960
- Cash Withdrawals [Dr. Scarlett]: \$0

### 2016

- Cash Deposits [Dr. Plum]: \$17,300
- Cash Withdrawals [Dr. Scarlett]: \$0

# Dr. Scarlett's Dental Services During Suspension According to Patient Interviews



MH Member\_Patient W — 3/19/2014 - 4/9/2015

- Interview Notes: Patient W identified Dr. Scarlett as the servicing dental provider at every visit except 1(unknown DOS), though Dr. Scarlett was present at office for that visit. SP at visit was an unidentified man
- Claims Data: 13 DOS, 40 Paid Claims, Dental Office Alpha as Servicing and Billing Provider

# Patient W

## Documents and Statement

### **Patient History Report:** 03/19/2014 - 03/08/2016

- All 40 dental claims totaling \$5,445 from Patient W's all services report correspond to a claim on Patient History Report
- 48 additional claims totaling \$10,790 not charged to MH
- Patient W states Dr. Scarlett treated him for 9 claims totaling \$1,485
  - 15 claims totaling \$9,473 paid out of pocket by Patient W
    - 11 of these claims totaling \$5,389 were paid during period patient was insured by MassHealth
  - 16 claims totaling \$2,526 "Payment from insurance"

### **Treatment Plan:**

- Presented by Dr. Scarlett to patient with Dr. Plum listed as the servicing provider
- Patient W saw Dr. Plum twice for regular cleanings prior to Dental Office Alpha inception

### **Patient Concerns and Complaint Information:**

- Refund letter in amount of \$1,299 for a disputed claim (crown that fell out). Letter on Dental Office Alpha letterhead – unsigned but pre-dated with year 2016
  - Patient W claims he actually paid \$1,494 – no refund ever issued
  - No crowns charged to MH
- Statement from Northstar (3D imaging) for service on 10/26/15 in amount of \$299. Patient W was first told Dental Office Alpha covered the full amount, then was informed he owed \$182. Patient W refused to pay
  - Claim not charged to MH
- Dental Records Release Form dated 3/31/2016
  - After weeks of requesting his records and threatening to contact the Dental Board, he was provided the release form
  - \$100 was requested for the record release, Patient W elected to not pay

# Patient W

## Documents and Statement

### Metlife Explanation of Benefits

- **DOS 08/13/2015 totaling \$150** [EXHIBIT A]
  - Dr. Plum is servicing provider on claims. Patient W claims he was serviced by Dr. Scarlett
  - Claims not charged to MH - no corresponding MH claim with Dr. Plum as servicing provider
  
- **DOS 09/03/2015 totaling \$1,494**
  - Dr. Plum is servicing provider on claims. Patient W claims he was serviced by Dr. Scarlett
  - Claims not charged to MH - no corresponding MH claim with Dr. Plum as servicing provider
  
- **DOS 11/12/2015 totaling \$150**
  - Dr. Plum is servicing provider on claims. Patient W claims he was serviced by Dr. Scarlett
  - Claims not charged to MH - no corresponding MH claim with Dr. Plum as servicing provider
  
- **DOS 03/08/2016 totaling \$235** [EXHIBIT B]
  - Dr. Plum is servicing provider on claims. Patient W claims he was serviced by Dr. Scarlett
  - Patient W claims the D9110 "Emergency relief of pain" claim is bogus since he was never in pain
  - Claims not charged to MH - no corresponding MH claim with Dr. Plum as servicing provider

# Patient W Documents and Statement

MetLife Dental Service EOB  
DOS 08/13/2015 totaling \$150  
[EXHIBIT A]

MetLife Dental Service EOB  
DOS 03/08/2016 totaling \$235  
[EXHIBIT B]

**Explanation of Dental Benefits**

This shows how we determined your benefits after a recent visit to the dentist. Please save this explanation for your taxes.

Go Green! Please visit [www.metlife.com/mybenefits](http://www.metlife.com/mybenefits) to register for paperless EOB delivery and confirm your email address for electronic delivery notifications.

**Claim summary**

|                           |           |
|---------------------------|-----------|
| Your dentist submitted    | \$ 150.00 |
| MetLife paid your dentist | \$ 0.00   |

**This is not a bill.** You may receive a bill from your dentist. Please refer to the claim detail for more information.

**We've here to help.** Please visit us at [metlife.com/mybenefits](http://metlife.com/mybenefits) for additional information on your Dental Program, benefits, and claim details, or call 855-638-2221, Monday - Friday, 8am - 11pm ET.

**Your information**

Name/Relationship: PATIENT W  
Name: PATIENT W  
Employer: EMPLOYER  
Group: 7000640  
Claim: 5081730010 99  
Dentist: DR. PLUM  
Date processed: August 20, 2015  
ID: 962687595  
Document: 150817882009

**Plan overview**

**Claim detail**

| Date of service | Service code, description     | Your dentist submitted | Negotiated fee | Allowed amount | MetLife paid | You owe your dentist |
|-----------------|-------------------------------|------------------------|----------------|----------------|--------------|----------------------|
| 08/13/15        | D410, Periodontal maintenance | \$150.00               | \$92.00        |                |              | SEE NOTE 1           |
| <b>Totals</b>   |                               | <b>\$150.00</b>        | <b>\$92.00</b> |                |              |                      |

**Plan overview**

**Claim detail**

| Date of service | Service code, description            | Your dentist submitted | Negotiated fee  | Allowed amount | MetLife paid | You owe your dentist                                          |
|-----------------|--------------------------------------|------------------------|-----------------|----------------|--------------|---------------------------------------------------------------|
| 03/08/16        | D9115, Emergency visit of pain       | \$150.00               | \$18.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| 03/08/16        | D0220, Periapical radiographic image | \$25.00                | \$18.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| 03/08/16        | D0230, DS, Asht periapical images    | \$60.00                | \$24.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| <b>Totals</b>   |                                      | <b>\$235.00</b>        | <b>\$100.00</b> |                |              |                                                               |

**Explanation of Dental Benefits**

This shows how we determined your benefits after a recent visit to the dentist. Please save this explanation for your taxes.

Go Green! Please visit [www.metlife.com/mybenefits](http://www.metlife.com/mybenefits) to register for paperless EOB delivery and confirm your email address for electronic delivery notifications.

**Claim summary**

|                           |           |
|---------------------------|-----------|
| Your dentist submitted    | \$ 235.00 |
| MetLife paid your dentist | \$ 0.00   |

**This is not a bill.** You may receive a bill from your dentist. Please refer to the claim detail for more information.

**We've here to help.** Please visit us at [metlife.com/mybenefits](http://metlife.com/mybenefits) for additional information on your Dental Program, benefits, and claim details, or call 855-638-2221, Monday - Friday, 8am - 11pm ET.

**Your information**

Name/Relationship: PATIENT W  
Name: PATIENT W  
Employer: EMPLOYER  
Group: 7000640  
Claim: 6080370022 99  
Dentist: DR. PLUM  
Date processed: August 09, 2016  
ID: 962687595

**Plan overview**

**Claim detail**

| Date of service | Service code, description            | Your dentist submitted | Negotiated fee  | Allowed amount | MetLife paid | You owe your dentist                                          |
|-----------------|--------------------------------------|------------------------|-----------------|----------------|--------------|---------------------------------------------------------------|
| 03/08/16        | D9115, Emergency visit of pain       | \$150.00               | \$18.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| 03/08/16        | D0220, Periapical radiographic image | \$25.00                | \$18.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| 03/08/16        | D0230, DS, Asht periapical images    | \$60.00                | \$24.00         |                |              | SEE NOTE 1<br>Services rendered after the coverage cancelled. |
| <b>Totals</b>   |                                      | <b>\$235.00</b>        | <b>\$100.00</b> |                |              |                                                               |

# BSI Referral Findings

- C: 112 §: 52 (Penalties for violations regarding licensing of dental professionals) – One (1) count
- C: 266 §: 037E (Use of Personal Identification of Another; Identity Fraud; Penalty; Restitution)
- C: 266 §: 030 (Larceny over \$250 by Single Scheme) – Four (4) counts
- C: 118E §: 40 (False Statements or Representations by providers; penalty) – Two (2) counts
- C: 175H §: 003 (Solicitation, Improper Inducement To Use Goods, Facilities, Services, Or Products Covered By Insurance)
- C: 266 §: 31 (Signature; obtaining under false pretenses) – One (1) count
- 130 CMR 450.000 Administrative and Billing Regulations
  - 450.203 Payment in Full
  - 450.204 Medical Necessity
  - 450.205 Recordkeeping and Disclosure
  - 450.212 Provider Eligibility
  - 450.217: Provider Eligibility: Ineligibility of Suspended Providers
  - 450.222: Provider Contract: Application for Contract
  - 450.231: General Conditions of Payments
  - 450.235: Overpayments
  - 450.238: Sanctions: General
  - 450.260: Monies Owed by Providers
  - 450.301: Claims
  - 450.302: Claim Submission

# Adult Day Health

## Program Overview

- Adult Day Health Services — all services provided by a MassHealth agency-approved ADH provider that meet the conditions of 130 CMR 404.000. The general goal of these services is to provide an organized program of nursing services and supervision, maintenance-therapy services, and socialization.
- Adult Day Health (ADH) Program (Site) — a physical location that has been reviewed and approved by the MassHealth agency and by other appropriate authorities for the provision of adult day health services for a specific number of daily members. If a provider offers adult day health services in more than one location, each location is a separate site

# Adult Day Health

## Duplicate Services

❑ **Adult Day Health Services**— Provide nursing services and supervision, as well as therapy and socialization services through an organized program

- 404.415: Noncovered Services- **MassHealth does not pay for adult day health services for:**

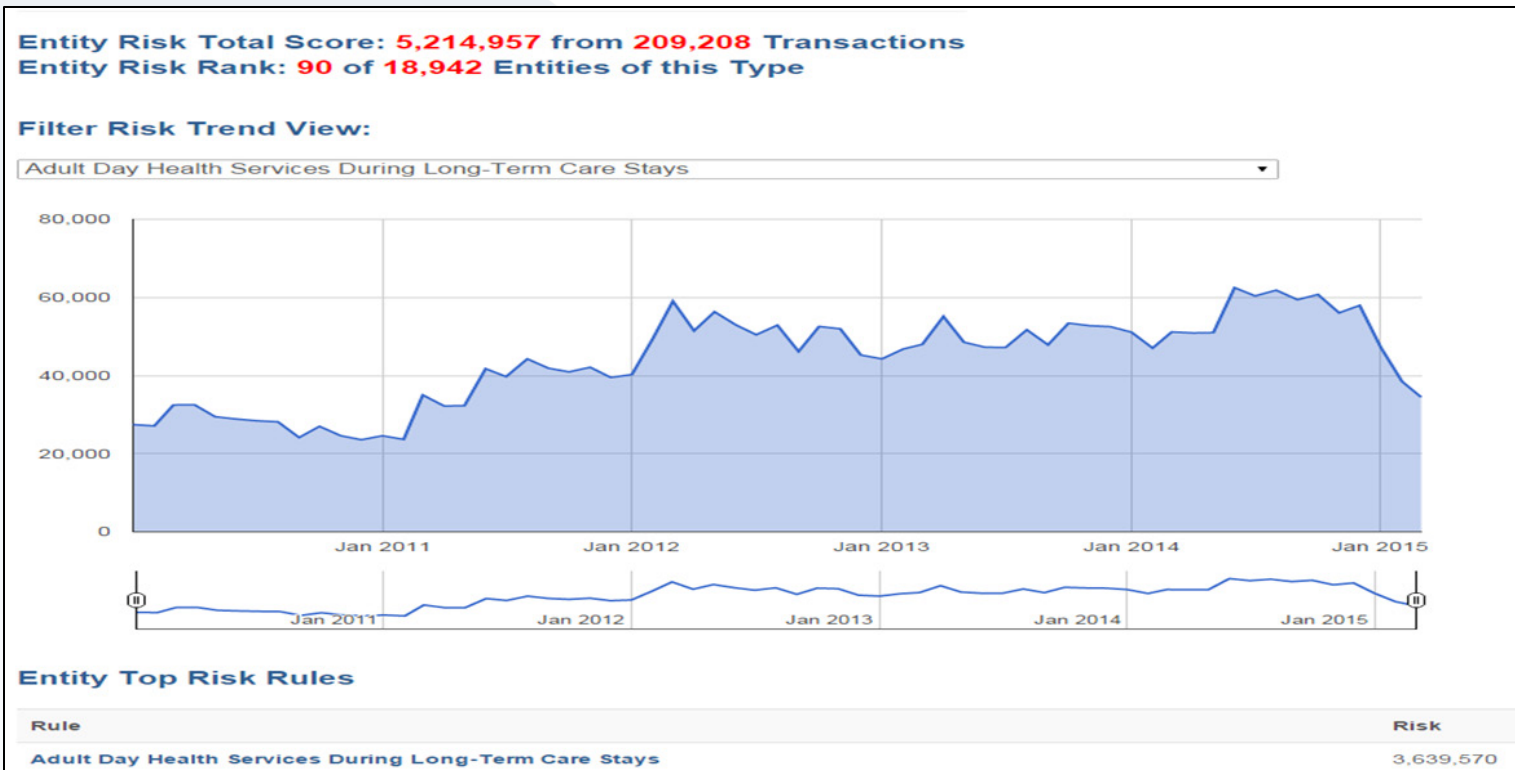
- (A) Individuals who reside in a facility-based setting

❑ **Duplicate Service Analysis**

- Identify relevant provider types for ADH and LTC claims
  - LTC- Provider Type: 09- Nursing Home, 55- Rest Home
  - ADH- Provider Type: 63- Adult Day Health
- Identify ADH claims occurring within a LTC date range of service
- (LTC bill on monthly cycle, ex. January 1, 2011 – January 13, 2011= 1 Claim)
  - LTC Claims: 1 Claim per month or entire stay if less than 1 month
  - ADH Claims: 1 Claim per day
- Leverage Rules Based Risk Engine [RBRE] to execute query to isolate claims violating the ADH x LTC concurrent service rule

# Rules-Based Risk Engine

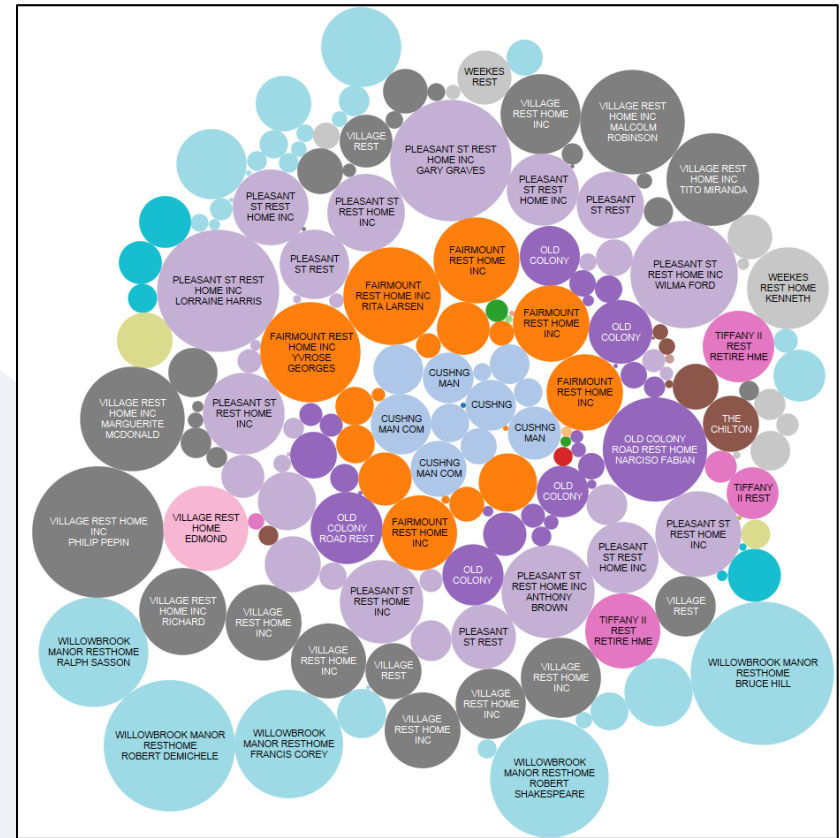
- ☐ Rule Creation
- ☐ Riskiest Provider Identification
- ☐ RBRE Results Validation
- ☐ RBRE as a tool to Identify and Prioritize Risky Entities



# Adult Day Health x Long Term Care Analytical Tasks

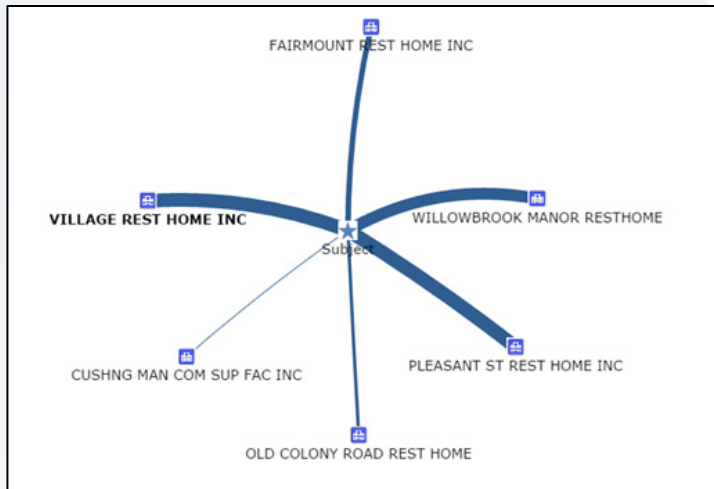
## ❑ Initial Concept Analysis –FOCUS:

- Relationship analysis related to ADH and the long term care facilities that fed the MassHeath member
- ADH peer group analysis
- MMARS vendor analysis related to ADH's receipt of federal funds
- Overlap analysis of a second ADH location under the same ownership
- Geographical analysis, member and facility location
- Comprehensive overlap analysis expanding the scope to all applicable HBCW programs
- SSN Death Match analysis for ADH's member population
- Analysis of MassHealth provider applications
- Analysis of DTA EPPIC data related to SNAP vendor identification
- Paid claim vs denied claim ratio analysis



# Analytical Tasks

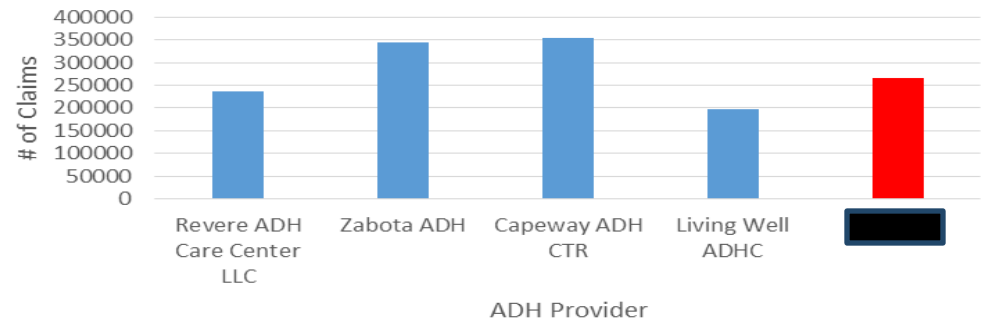
## ADH Peer Grouping



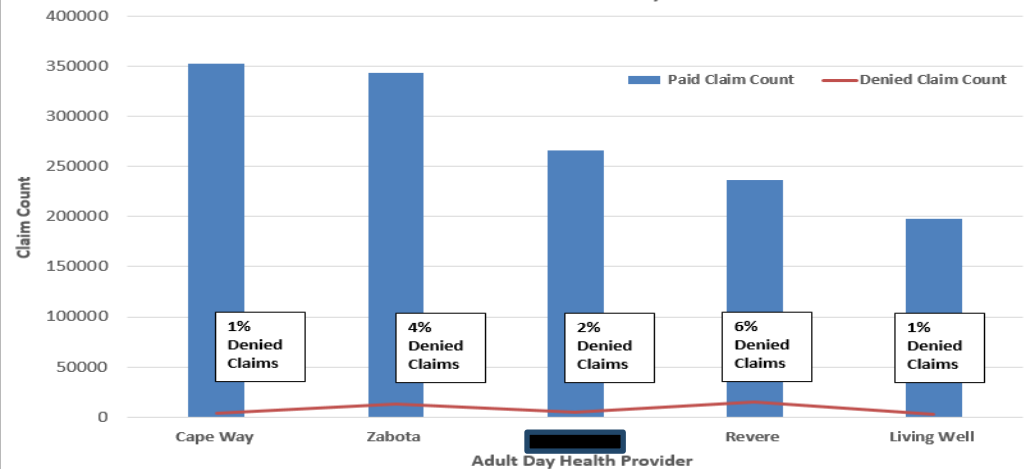
LTC feeder pattern analysis  
illustrated by RBRE network  
web

Paid vs Denied claim  
ratio

## Number of Claims January 2010 to September 2014



## Peer Comparison Paid Claim vs Denied Claim Ratio, 2010 - 2014



# Preliminary Investigation

After initial data analysis and provider screening, DAU and BSI Examiners conducted preliminary investigative activities into

██████████ including:

- Identification of transportation company used by ██████████
- Link analysis using the Secretary of State corporations database to identify relationships and associations among ██████████ officers
- Long term care member residency verification
- Interviewing the owner of a long term care facility

AND.....

The screenshot shows the official website of the Secretary of the Commonwealth of Massachusetts, William Francis Galvin. The page is for the Corporations Division, specifically the Business Entity Summary for ID Number 203238594. The page includes a search bar, a 'Request certificate' button, and a 'New search' button. The entity is a Domestic Profit Corporation. The identification number is 203238594. The date of organization in Massachusetts is 08-12-2005. The current fiscal month/day is 12/31, and the previous fiscal month/day is 12/31. The location of the principal office is in Brockton, MA 02303 USA. The name and address of the registered agent are also listed. The officers and directors of the corporation are listed in a table with columns for Title, Individual Name, and Address. The table shows the President, Treasurer, Secretary, and Director, all of whom are redacted with black boxes.

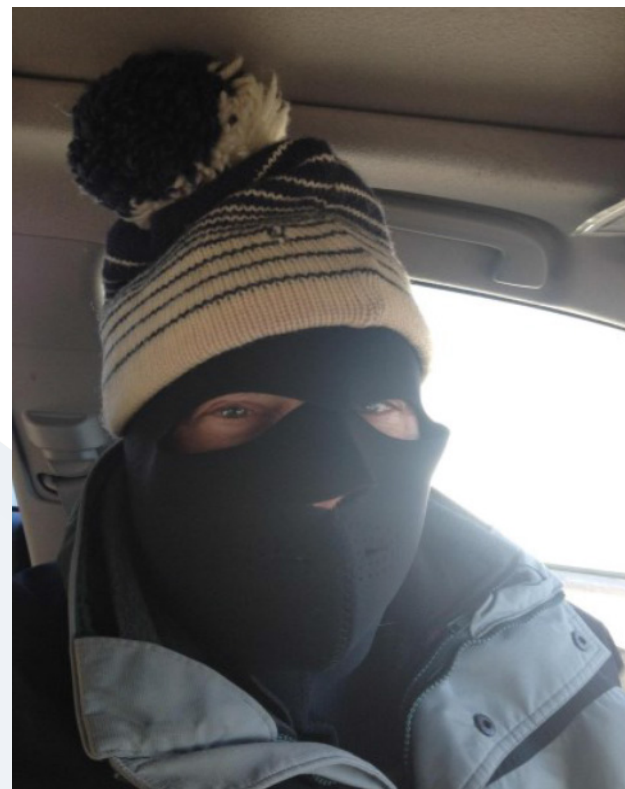
| Title     | Individual Name | Address |
|-----------|-----------------|---------|
| PRESIDENT |                 |         |
| TREASURER |                 |         |
| SECRETARY |                 |         |
| DIRECTOR  |                 |         |

# Preliminary Investigation

- BSI Surveillance Operations



DAU's initial discovery of



Kevin Macdonald conducting surveillance

# Referral

- BSI DAU concluded that based on the elements of the case, [REDACTED] violations fell within the scope of federal jurisdiction.
- BSI DAU determined that Medicaid funds received by [REDACTED] were matched by federal funds at a rate of 50%.
- BSI DAU identified additional federal funds that [REDACTED] was receiving through the Child and Adult Care Food Program (“CACFP”).
- BSI determined that the Office of the Inspector General at the Department of Agriculture was the appropriate federal agency to adopt the case.

## Bureau of Special Investigations

### Referral

**To:** [REDACTED]  
**From:** Bureau of Special Investigations, State Auditor's Office, Massachusetts  
**cc:**  
**Date:** March 30, 2015  
**Re:** [REDACTED]

[REDACTED] Brockton, Massachusetts, bills and receives payment from MassHealth and Food and Nutritional Services (FNS) for the same meal. [REDACTED], as a MassHealth provider, submits claims for individuals enrolled in their program to MassHealth and Child and Adult Care Food Program (CACFP) for reimbursement of meals. [REDACTED] receiving state and federal funds for the same meal for their patient population, unlawfully getting paid twice for every one meal they give to a member.

[REDACTED] is responsible for the filing of all MassHealth related documents. [REDACTED] owns [REDACTED] Inc., the transportation company used by [REDACTED] also owns [REDACTED] a second adult day health facility located in Stoughton, Massachusetts.

# Referral Findings

- ❑ Period of Fraud: **January 1, 2006 – December 31, 2014**
- ❑ **95,011\*** Claims Identified to be in violation of duplicate service regulations
- ❑ Value of violating claims paid to [REDACTED] **\$3,060,564\***
- ❑ **138\*** Members identified to be receiving duplicate ADH and LTC services
- ❑ Value of Federal CACFP program funds paid to [REDACTED] **\$756,837**

\* Pending MassHealth Verification

# Opioid & Narcan Analysis

## Current Direction

- “Provider Level Approach”
- Analyzing Provider Claims
- Looking for the “Pill Mills”, drug dealers, abusive prescribers.

## DAU’s Approach

- DAU is focused on analyzing the opioid epidemic by taking a “Member Level” approach.
- Attempting to identify effected regions geographically by member, rather than provider.
- Proactively, attempting to find the next epidemic “hotspot.”

# Opioid Analysis

- Sample Population/Narcotic
  - Possible high risk target population:
    - 14-17 year olds
  - Narcotic:\*
    - Oxycodone (Brand Name: OxyContin) – pictured below
      - Oxycodone is an opioid pain medication
      - Used to treat moderate to severe pain
- Results of Analysis
  - Legal vs. Illegal
  - Pharmacy Disbursement (CVS & Rite-Aid)
  - Member's medical necessity



\*[www.drugs.com](http://www.drugs.com)

# Opioid Epidemic Spotlight: Narcan (Naloxone)

- What is it? What does it do?\*
- Naloxone is an opioid antagonist that blocks the effects of opioids such as heroin, oxycodone, hydrocodone, fentanyl, codeine, and methadone.
- Used to halt the effects of an opioid overdose.
- Who has it?\*\*
- Emergency Responders, including Paramedics and Emergency Room physicians, have been using Narcan since the 1970s.
- Several police departments in MA have their officers carrying Narcan (ex. Quincy PD).
- Public Access
  - Pharmacies & Community Health Clinics
  - Price
- Narcan Side Effects
- Effect on Opioid Dependent Population

\*<http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/prevention/opioid-overdose-prevention.html>

\*\*<http://www.usatoday.com/story/news/nation/2014/01/30/police-use-narcan-to-reverse-heroin-overdoses/5063587/>

# Narcan Macro-Analysis

- Dataset Parameters:
  - Time Period: **January 1, 2010 – December 31, 2014 (5 years)**
  - Procedure Code: **J2310 (J2310 - INJECTION, NALOXONE HYDROCHLORIDE ,PER 1)**
- Absence of Pharmacy claims within the above listed dataset.

A single member has eleven (11) Narcan claims over the 5 year time period

“Poster Child”

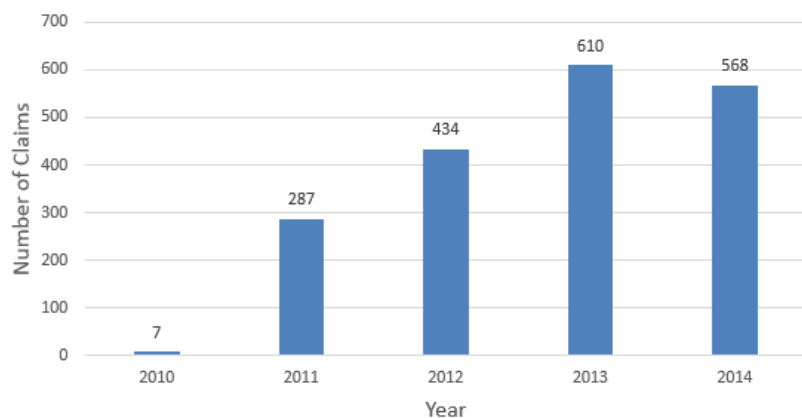
| Top Members with a High Quantity of Narcan claims |             |
|---------------------------------------------------|-------------|
| Member ID                                         | # of Claims |
|                                                   | 11          |
|                                                   | 9           |
|                                                   | 8           |
|                                                   | 7           |
|                                                   | 6           |
|                                                   | 6           |
|                                                   | 5           |
|                                                   | 5           |
|                                                   | 5           |
|                                                   | 5           |
|                                                   | 5           |
|                                                   | 5           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |
|                                                   | 4           |

## General Findings:

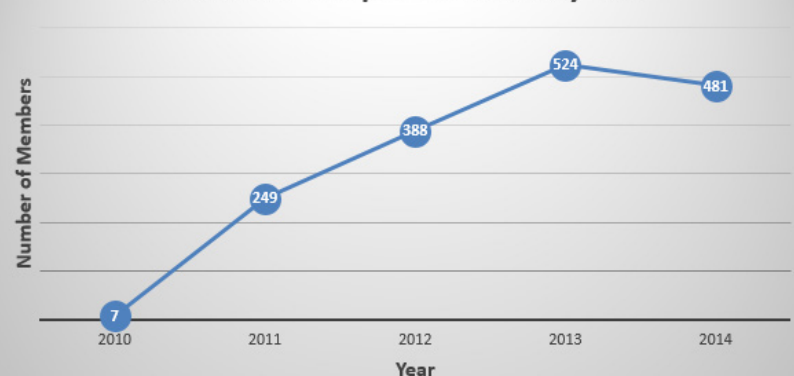
- 1,906 Narcan claims.
- 1,572 individual members made up this claim population.
  - Of the 1,572 population, there were 21 members that recorded more than 3 Narcan claims (over the 5 years).

# Narcan Macro-Analysis

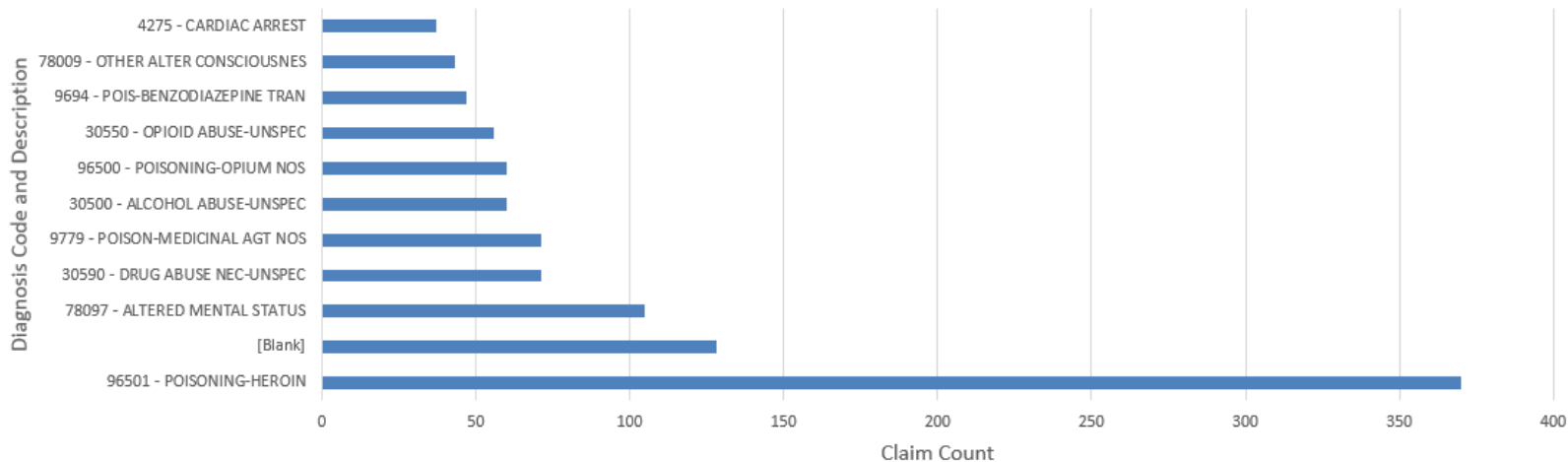
# of Claims by Year



Number of Unique Members by Year



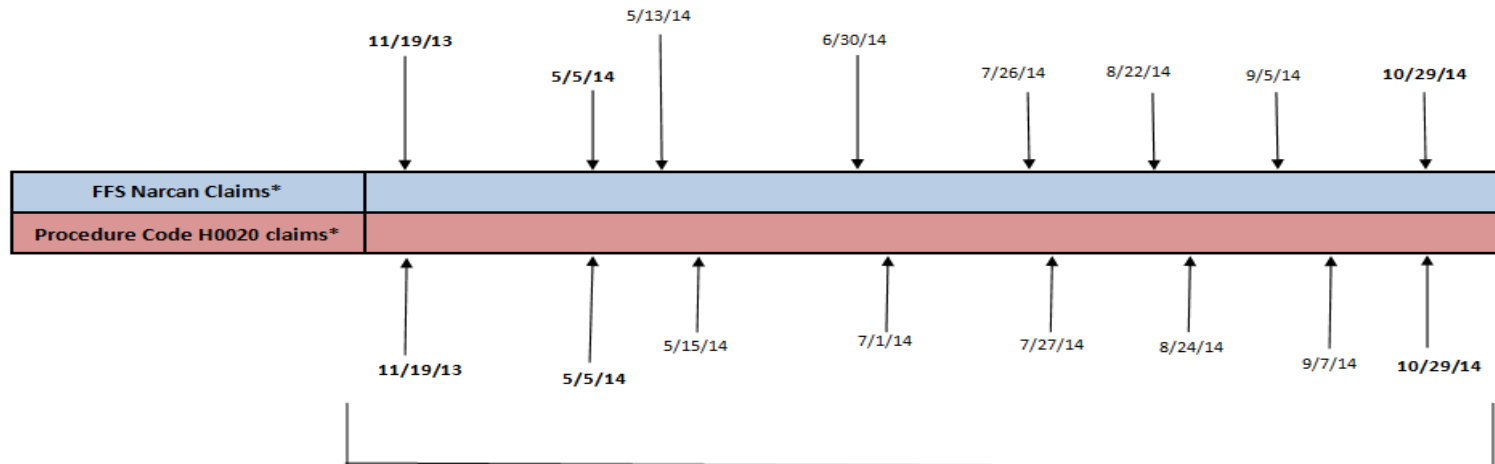
Top Diagnosis Codes by Claim Count



# Narcan “Poster Child”

## Narcan Poster Child: [REDACTED]

An analysis into an individual’s Fee for Service (FFS) Narcan (J2310) and Encounter Methadone (H0020) claims for 2013 & 2014



Each date above signifies the **first claim** with the Procedure Code H0020 - ALCOHOL &/OR DRUG SRVCS; METHADONE ADMI directly following a FFS Narcan claim. Numerous H0020 claims may be present between each initial claim dated above (i.e. There were 15+ H0020 claims between 11/19/14—5/5/14). Furthermore, there were approx. 264 H0020 claims recorded between 11/19/13—10/29/14.

**Analysis:** This individual's FFS claims history shows many claims with the Procedure Code J2310—INJECTION, NALOXONE HYDROCHLORIDE, PER 1, followed by multiple claims with the Procedure Code—H0020 - ALCOHOL &/OR DRUG SRVCS; METHADONE ADMI. Per the Transmittal Letter (SAT-17) dated 01/16/2013, procedure code H0020 is only used for “Alcohol and/or drug services methadone administration and/or services (provision of the drug by licensed program (dose only visit)”. The administration of a Methadone dose is used for heroin substance abuse.

\* The data set used in this timeline was constructed using a single individual's 2014 claims history that reflected a high count of the specific Narcan Procedure Codes; J2310 and Methadone Procedure Code: H0020.

# "Poster Child"

PROGRAM NAME: WELEBP64  
REPORT ID: DTARQ070  
REQUESTED BY: SAOAVM

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF TRANSITIONAL ASSISTANCE  
RECIPIENT HISTORY

RUN DATE: 101915  
PAGE NO: 1

FOR PERIOD: 2014/11/13 THROUGH 2015/10/18

\*\*\*\*\*  
\* EBT FOODSTAMPS  
\*\*\*\*\*

| PAN NO       | AUTH NUMB | TR TY | AVAIL DATE | BEN TYP | TRAN DATE | TRANS TIME | TRANS AMOUNT | FNS NO /TERM ID | NAME                 | LOCATION                |            |    |
|--------------|-----------|-------|------------|---------|-----------|------------|--------------|-----------------|----------------------|-------------------------|------------|----|
| 131721190181 | 58422349  | AU    | 120714     | F9M     | 120414    | 01:28      | 175.00       |                 |                      |                         |            |    |
|              | 57946599  | FP    | 110714     |         | 120714    | 09:10      | 1.00-        | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 58422349  | FP    | 120714     |         | 120714    | 09:10      | 175.00-      | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 58884447  | AU    | 010715     |         | 010315    | 04:09      | 175.00       |                 |                      |                         |            |    |
| 131721850743 |           | FP    |            |         | 010715    | 14:17      | .99-         | 0278959         | ALLTOWN ROXBURY      | 85 SOUTHAMPTON ST       | BOSTON     | MA |
|              |           | FP    |            |         | 010715    | 14:39      | 174.01-      | 9146539         | LORD JEFF FOOD M     | 128 NEWMARKET SQ        | BOSTON     | MA |
|              | 59347797  | AU    | 020715     |         | 020315    | 03:45      | 175.00       |                 |                      |                         |            |    |
| 131722055631 |           | FP    |            |         | 020715    | 08:01      | 175.00-      | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 59805624  | AU    | 030715     |         | 030415    | 01:45      | 177.00       |                 |                      |                         |            |    |
|              |           | FP    |            |         | 030715    | 09:27      | 177.00-      | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
| 131722579713 | 60513657  | AU    | 042515     | F9D     | 042415    | 22:57      | 84.00        |                 |                      |                         |            |    |
|              |           | FP    |            |         | 042515    | 13:36      | 3.49-        | 0166204         | CVS 01252            | 01252--874 Harrison Ave | Boston     | MA |
|              |           | FEE   |            |         | 042615    | 01:54      | 5.00-        | 0407144         |                      |                         |            |    |
|              |           | FP    |            |         | 042615    | 17:20      | 2.38-        | 4766415         | WALGREENS            | 1603 WASHINGTON ST      | BOSTON     | MA |
|              |           | FP    |            |         | 042715    | 11:12      | .01-         | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              |           | FP    |            |         | 042715    | 11:12      | 73.00-       | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 60713658  | AU    | 050715     | F9M     | 050515    | 01:23      | 194.00       |                 |                      |                         |            |    |
|              | 60513657  | FP    | 042515     | F9D     | 050715    | 09:41      | .12-         | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 60713658  | FP    | 050715     | F9M     | 050715    | 09:41      | 193.88-      | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
| 131722852037 | 61169706  | AU    | 060715     |         | 060315    | 01:44      | 194.00       |                 |                      |                         |            |    |
|              | 60713658  | FP    | 050715     |         | 060715    | 10:18      | .12-         | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              | 61169706  | FP    | 060715     |         | 060715    | 10:18      | 189.88-      | 0044094         | CRAM SEAFOOD         | 145 SHIRLEY ST          | ROXBURY    | MA |
|              |           | FP    |            |         | 060715    | 14:10      | 2.99-        | 0389923         | TEDESCHI FOOD SHOP 4 | 187 EAST COTTAGE STREET | DORCHESTER | MA |
|              |           | FP    |            |         | 061115    | 16:05      | 1.10-        | 0389923         | TEDESCHI FOOD SHOP 4 | 187 EAST COTTAGE STREET | DORCHESTER | MA |
|              | 61629978  | AU    | 070715     |         | 070315    | 02:11      | 194.00       |                 |                      |                         |            |    |
|              | 61169706  | FP    | 060715     |         | 070715    | 11:40      | .03-         | 2780925         | HAPPY SUPERMARKET,   | 868 BLUE HILL AVEN      | DORCHESTER | MA |
|              | 61629978  | FP    | 070715     |         | 070715    | 11:40      | 193.97-      | 2780925         | HAPPY SUPERMARKET,   | 868 BLUE HILL AVEN      | DORCHESTER | MA |
|              | 62093798  | AU    | 080715     |         | 080115    | 02:17      | 194.00       |                 |                      |                         |            |    |
|              | 61629978  | FEE   | 070715     |         | 080815    | 01:42      | .03-         | 0407144         |                      |                         |            |    |
|              | 62093798  | FEE   | 080715     |         | 080815    | 01:42      | 4.97-        | 0407144         |                      |                         |            |    |
|              | 62560658  | AU    | 090715     |         | 090215    | 02:58      | 194.00       |                 |                      |                         |            |    |

\*\*\* EBT DATA COMMENCED 3/19/1997 - NON EBT DATA COMMENCED 10/01/1997 \*\*\*

# Future of Narcan

## Progress in Massachusetts

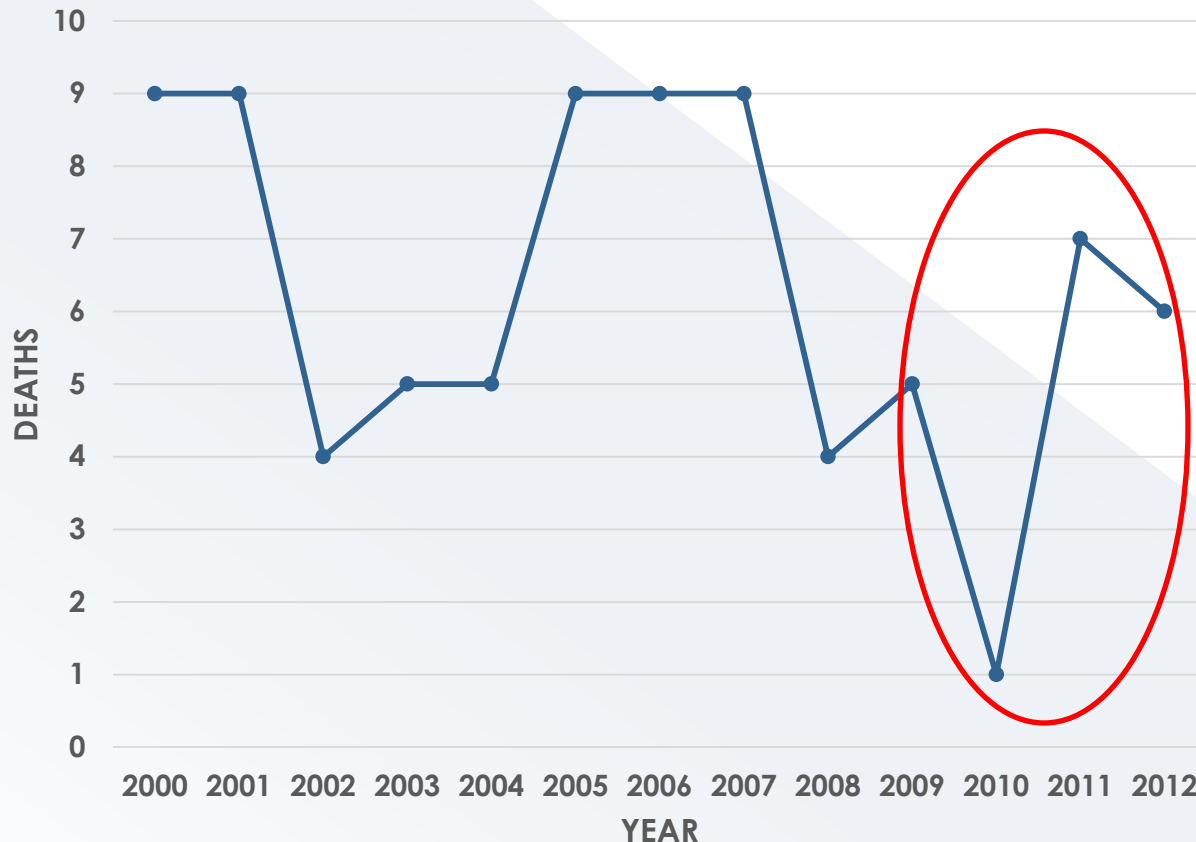
- DPH funded a pilot program for first responders to carry Narcan
- Norfolk DA's Office Stepped in – using drug forfeiture money to fund Narcan
- Provided temporary support for Police Departments within their county



© 2005 GS

# Bureau of Substance Abuse Statistics

Lawrence Opioid Overdose Deaths



\*

## Lawrence Overdose Statistics:

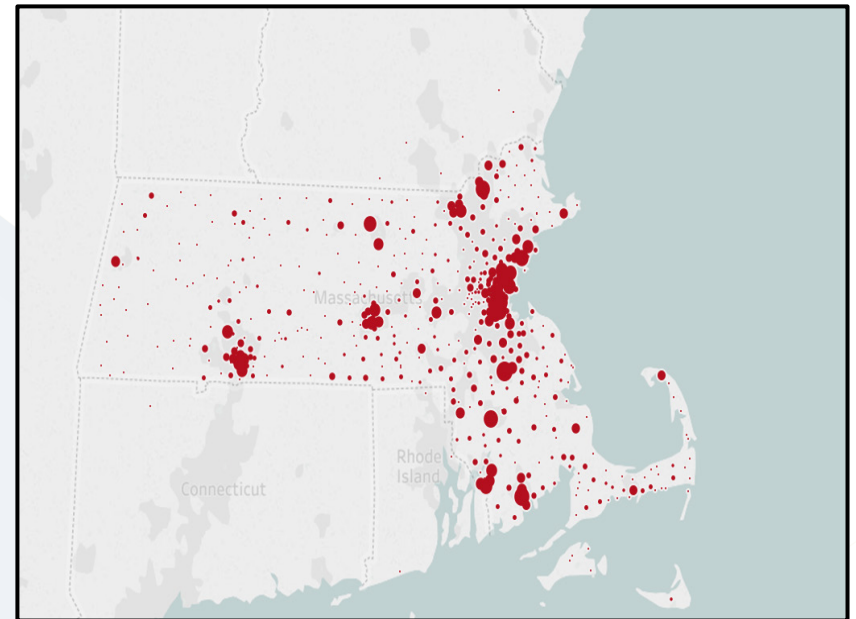
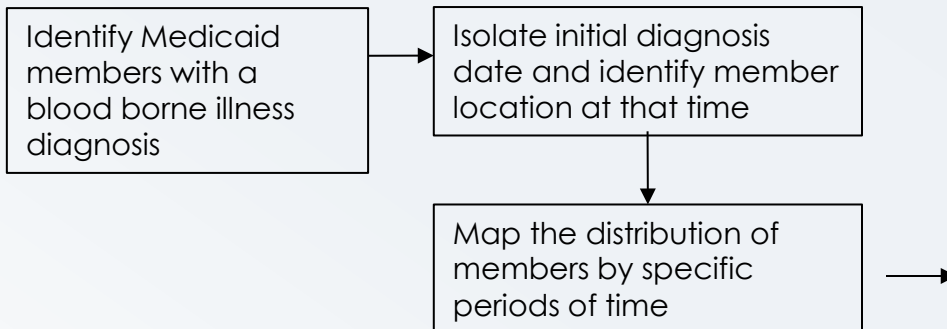
- 82 Unintentional Overdoses From 2000-2012
- Ranks 14<sup>th</sup> out of 297 Massachusetts Cities and Towns

*\*Bureau of Substance Abuse Statistics,  
Massachusetts Department of Public Health*

# Opioid Abuse Detection: Blood Borne Illness Theory

- **Hypothesis:** A potential correlation exists between regions with a high concentration of blood borne illnesses (e.g. Hepatitis, HIV, AIDS, etc) and regions suffering from high rates of opioid abuse.

## Methodology:



*\*This map is strictly an example and does not represent an actual distribution*

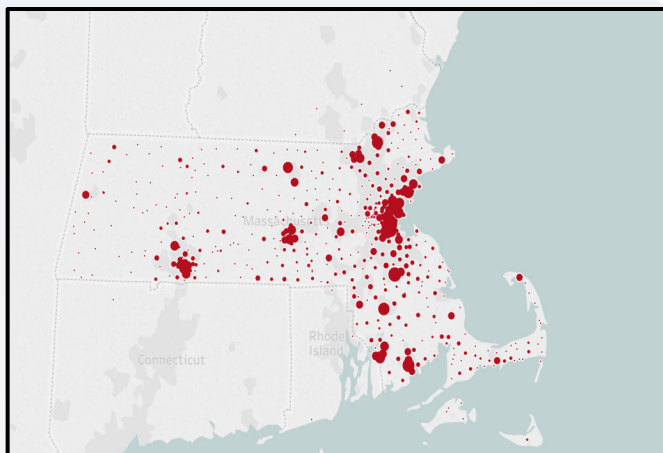
# Methodology

Identify Medicaid members with opioid dependency/abuse diagnoses

Isolate initial diagnosis date and identify member location at that time

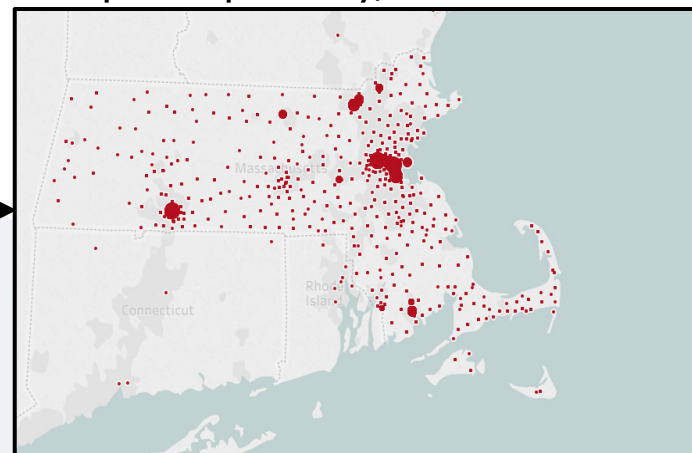
Map the distribution of members by specific periods of time

**Blood Borne Illness Distribution**



*\*This map is strictly an example and does not represent an actual distribution*

**Opioid Dependency/Abuse Distribution**



*\*This map is strictly an example and does not represent an actual distribution*

Identify a region with a high concentration of both and you have potentially identified a high risk area

# Rules Based Risk Engine RBRE



Commonwealth of Massachusetts  
Office of the State Auditor  
Suzanne M. Bump  
*Making government work better*

## Menu

Results by Entity Type

Results by Rule

Results by Rule Group

Prior Audit Findings & Recommendations

Code of Massachusetts Regulations

Commonwealth Table of Organization

Analytics Pipeline

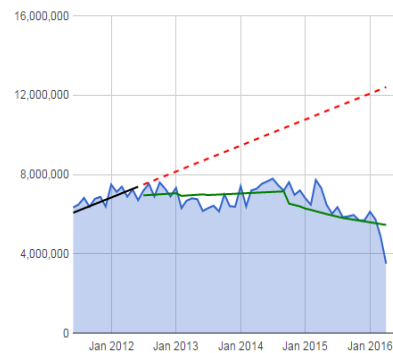
Medicaid Post-Audit Summary

## Rules-Based Risk Engine

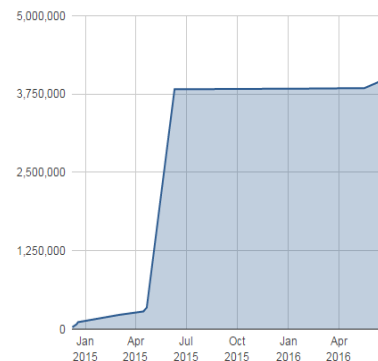
The Office of the State Auditor is creating a comprehensive, statewide database of operational information for review and analysis supporting audit planning, risk analysis and management, post-audit monitoring, and transparency in state government.

The Rules-Based Risk Engine identifies risky transactions using database queries expressing a range of business rules, calculates the weight of each transaction's risk, assigns a share of that risk weight to entities associated with the transaction, and aggregates the results to identify the entities with the most risk.

**SAO Trend Impact : \$156,362,147.00**



**BSI Calculated Fraud: \$4,045,057.97**



## News Feed

- Scheetz, Brian R. 10/11/2016  
Updated the rule code for: DCF Clients Prescribed Anti-Psychotic Medications - Fee for Service
- Scheetz, Brian R. 10/11/2016  
Updated the rule code for: Adult Day Health Services During Long-Term Care Stays
- Scheetz, Brian R. 10/11/2016  
Updated the rule code for: Adult Day Health Services During Long-Term Care Stays
- Scheetz, Brian R. 10/11/2016  
Updated the rule code for: Adult Day Health Services During Long-Term Care Stays
- Gourineni, Sathvika 08/12/2016  
Created a new rule: Test Rule
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- RBRE System 08/11/2016  
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Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- RBRE System 08/11/2016  
Fired the query code for: IGIP - Prescription Series Containing Overdose Event(s) (Encounter)
- Scheetz, Brian R. 08/11/2016  
Created a new rule: IGIP - Prescription Series Containing Overdose Event(s)

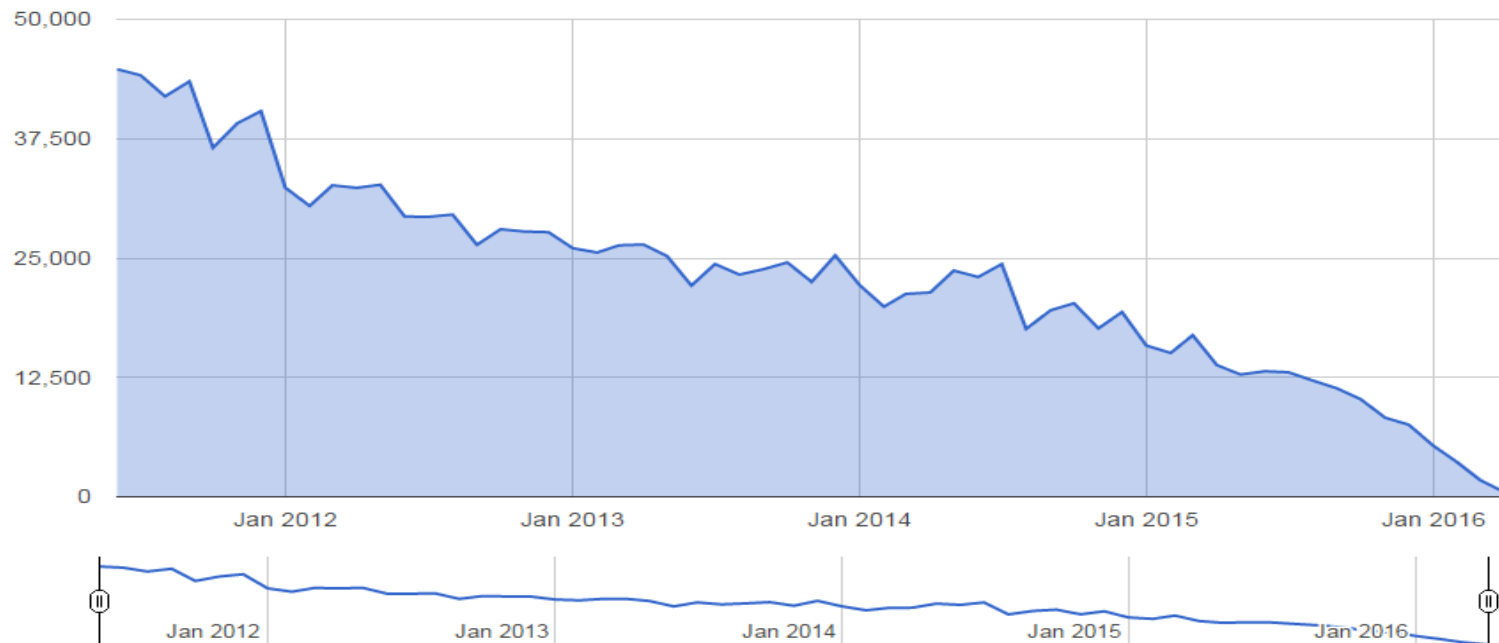
# MassHealth Narcotic Prescriptions for Members Who Had Previously Overdosed on a Narcotic

## MassHealth Narcotic Prescriptions for Members Who Later Overdosed

We joined WORK\_MEMBERS\_NARCOTICS and WORK\_DRUG\_OVERDOSE\_DATES on ID\_MEDICAID and queried for records in WORK\_MEMBERS\_NARCOTICS with a DOS\_FROM\_DT < the DOS\_FROM\_DT in WORK\_DRUG\_OVERDOSE\_DATES.

**Risk Trend: 84,492 Transactions / 2,134,723 Risk**

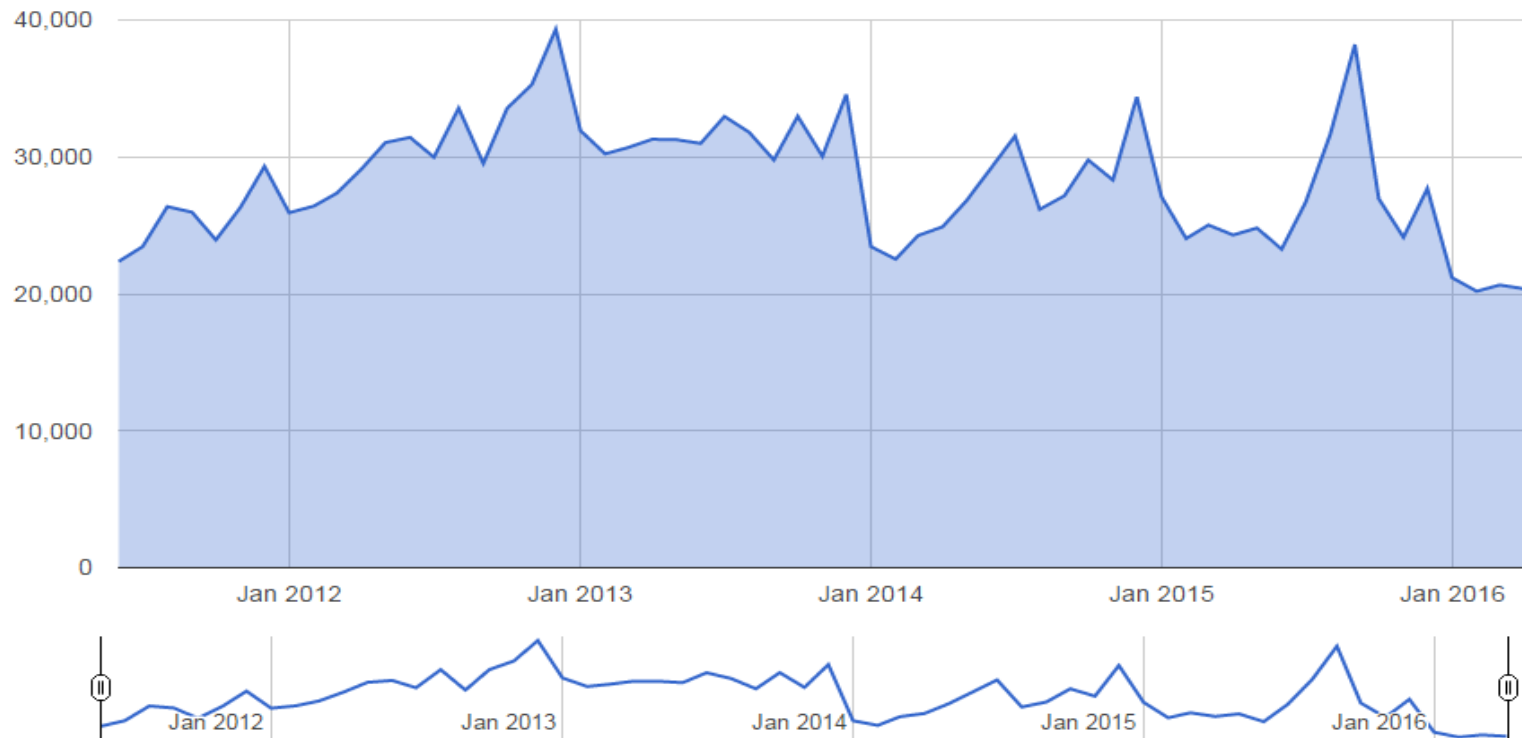
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# MassHealth Members Prescribed Narcotics After Entering Drug Treatment

Risk Trend: **239,713** Transactions / **1,920,025** Risk

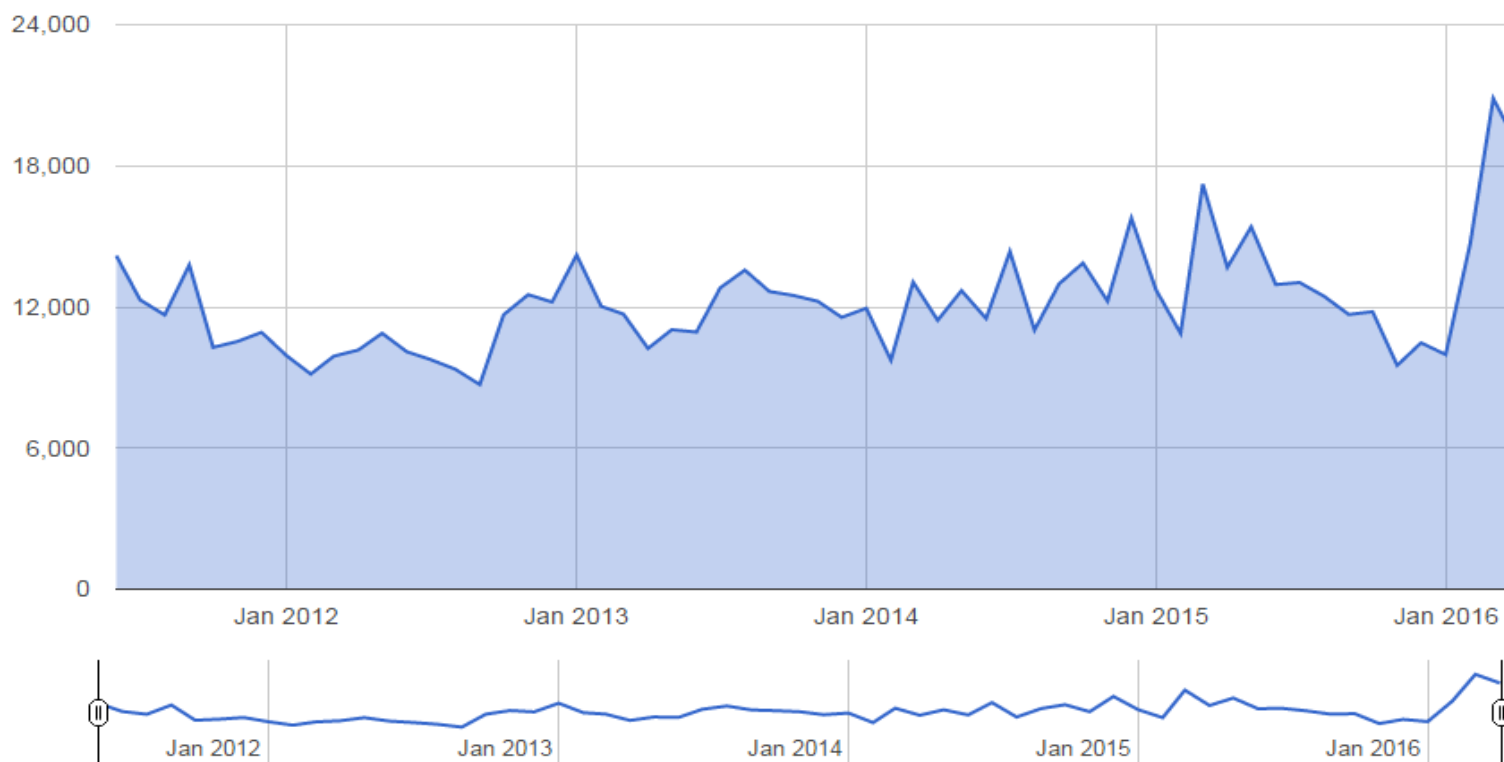
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# Narcotics Claims for MassHealth Lock in Program Members Filled at Non-Lock in Pharmacy

Risk Trend: **17,500** Transactions / **964,020** Risk

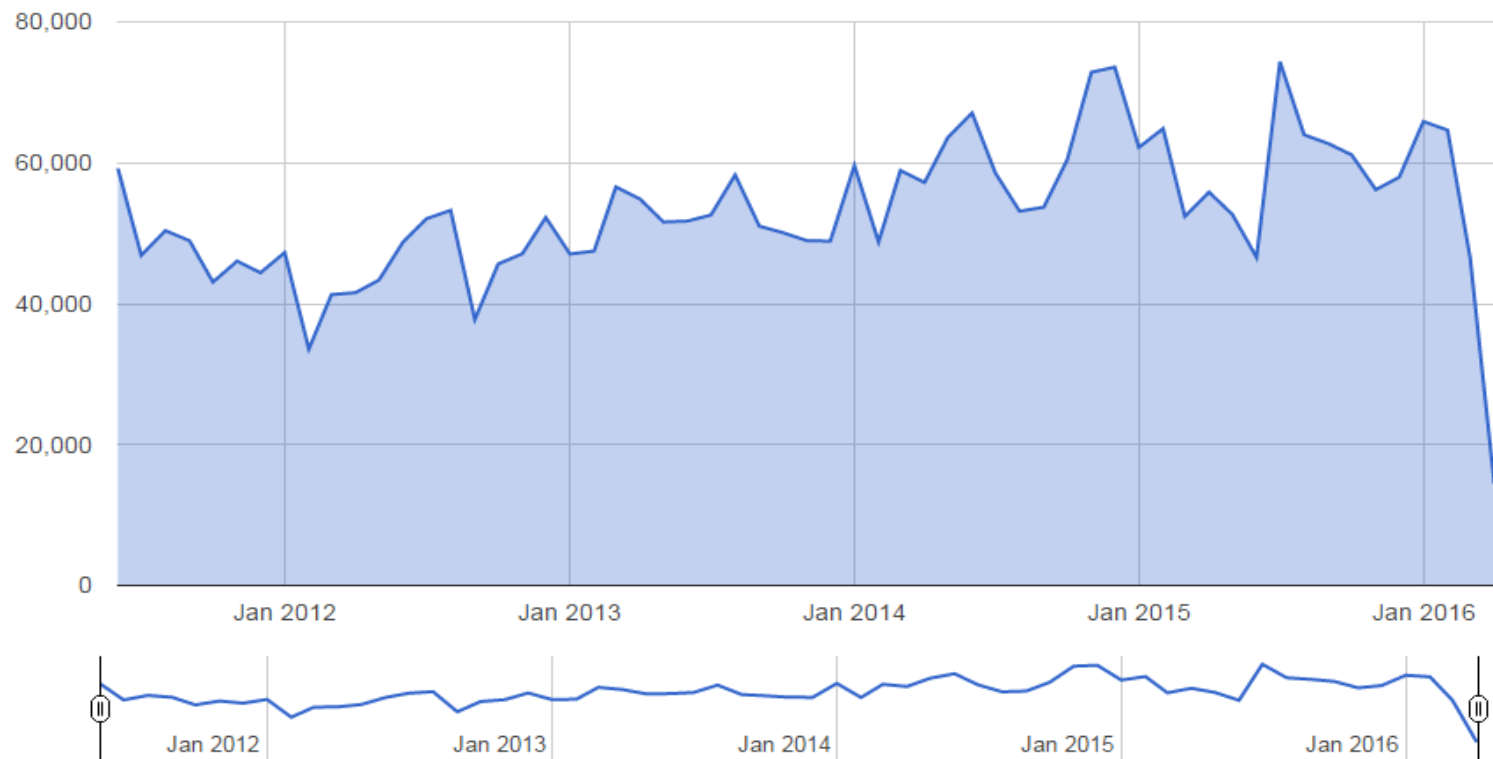
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# Narcotics Prescriptions with Refill Date 1.5 or More Standard Deviations More Rapid than CDE\_NDC Peers

Risk Trend: **155,901** Transactions / **4,004,632** Risk

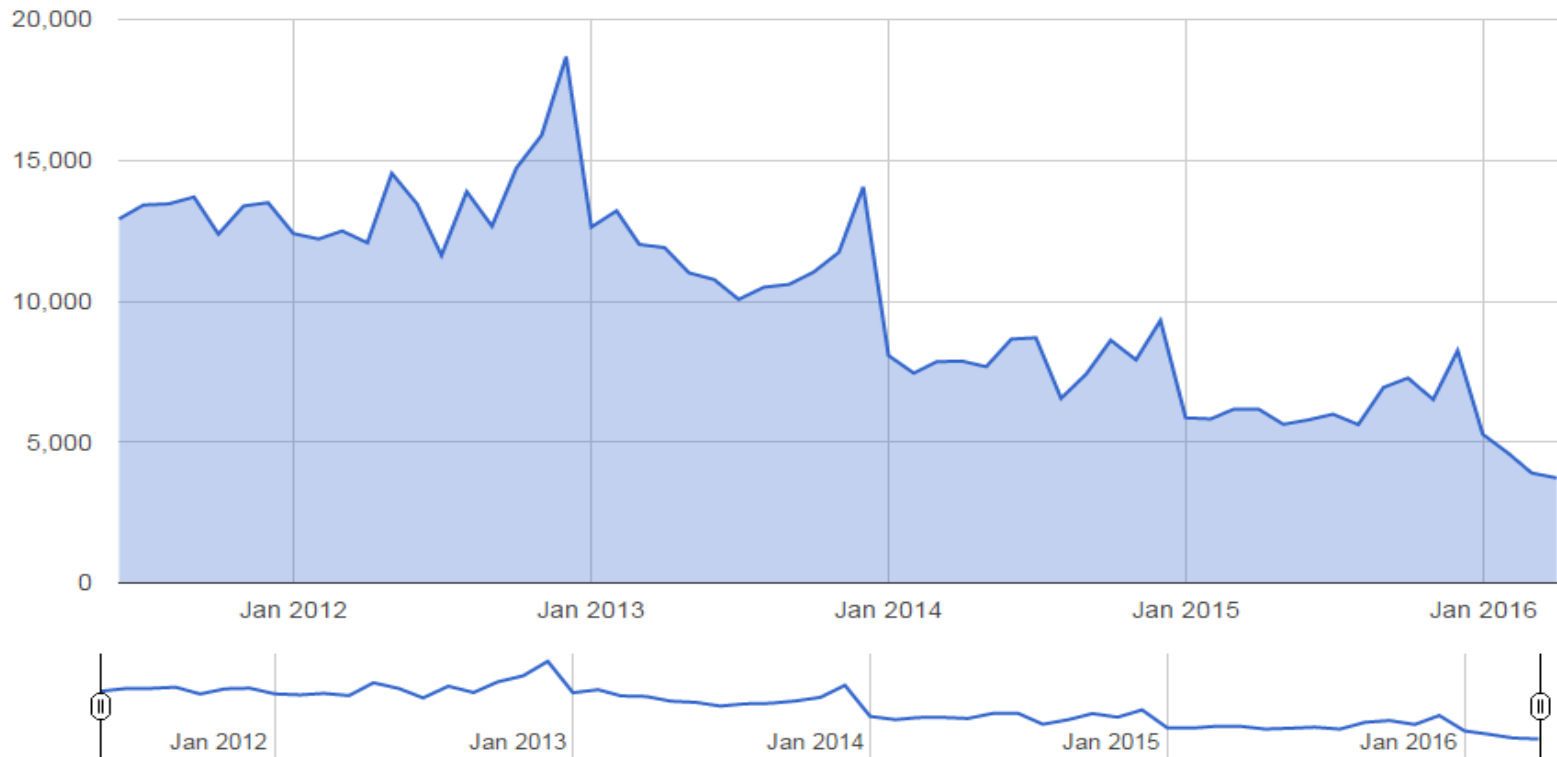
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# MassHealth Narcotic Prescriptions Bracketing Drug Treatment Events

Risk Trend: **148,110** Transactions / **809,193** Risk

[Subscribe](#)



# RBRE Rule Grouping

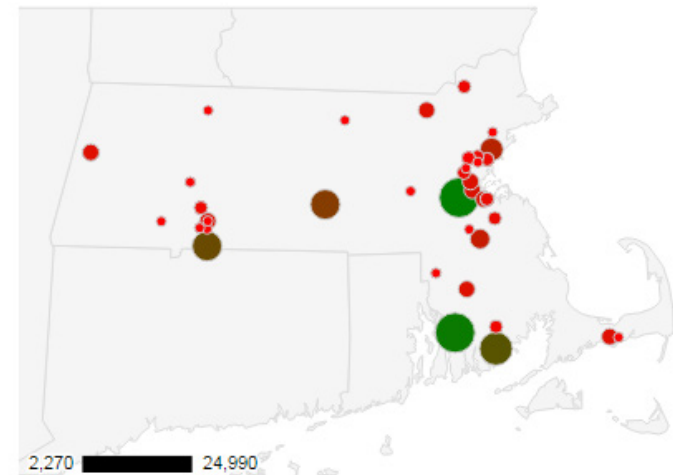
## Results by Rule Group

IGIP - Prescription Series Containing Overdose Event(s)  
(Encounter)

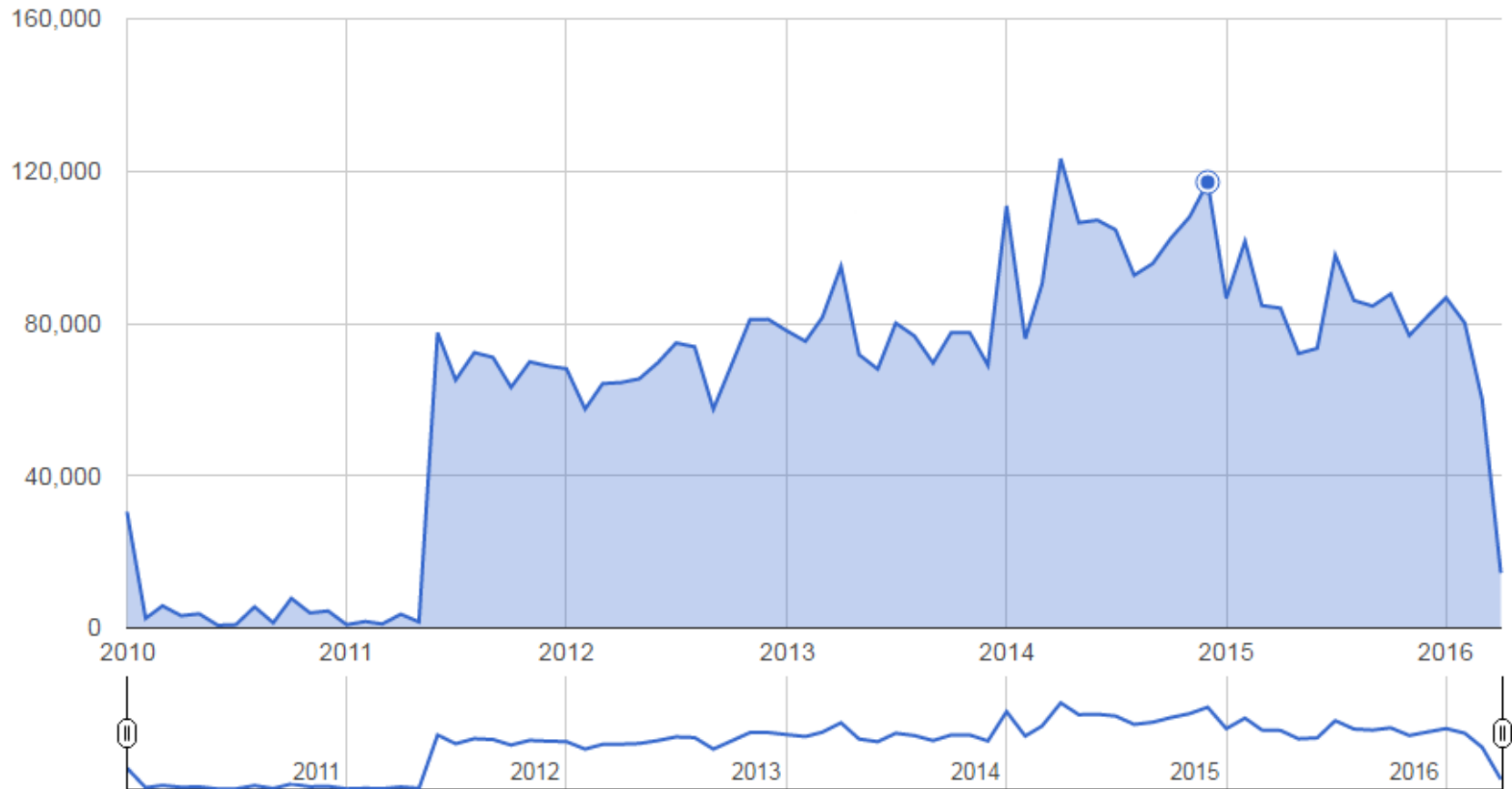
IGIP (Attorney General): MassHealth Narcotic Prescriptions  
Bracketing Drug Treatment Events (Encounter)

IGIP (Attorney General): Narcotics Prescriptions with Refill  
Date 1.5 or More Standard Deviations More Rapid than  
CDE\_NDC Peers (Encounter)

## Rule Group Geographical Relationships-MA



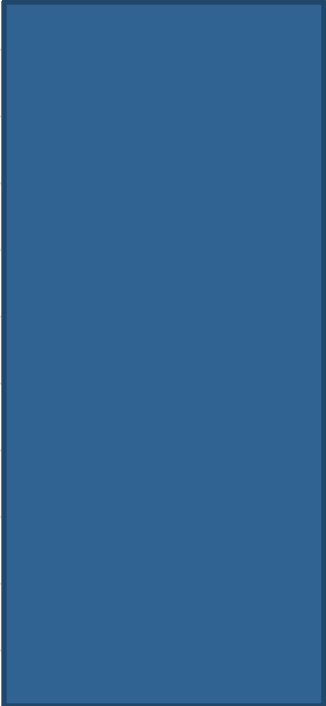
# RBRE Rule Grouping



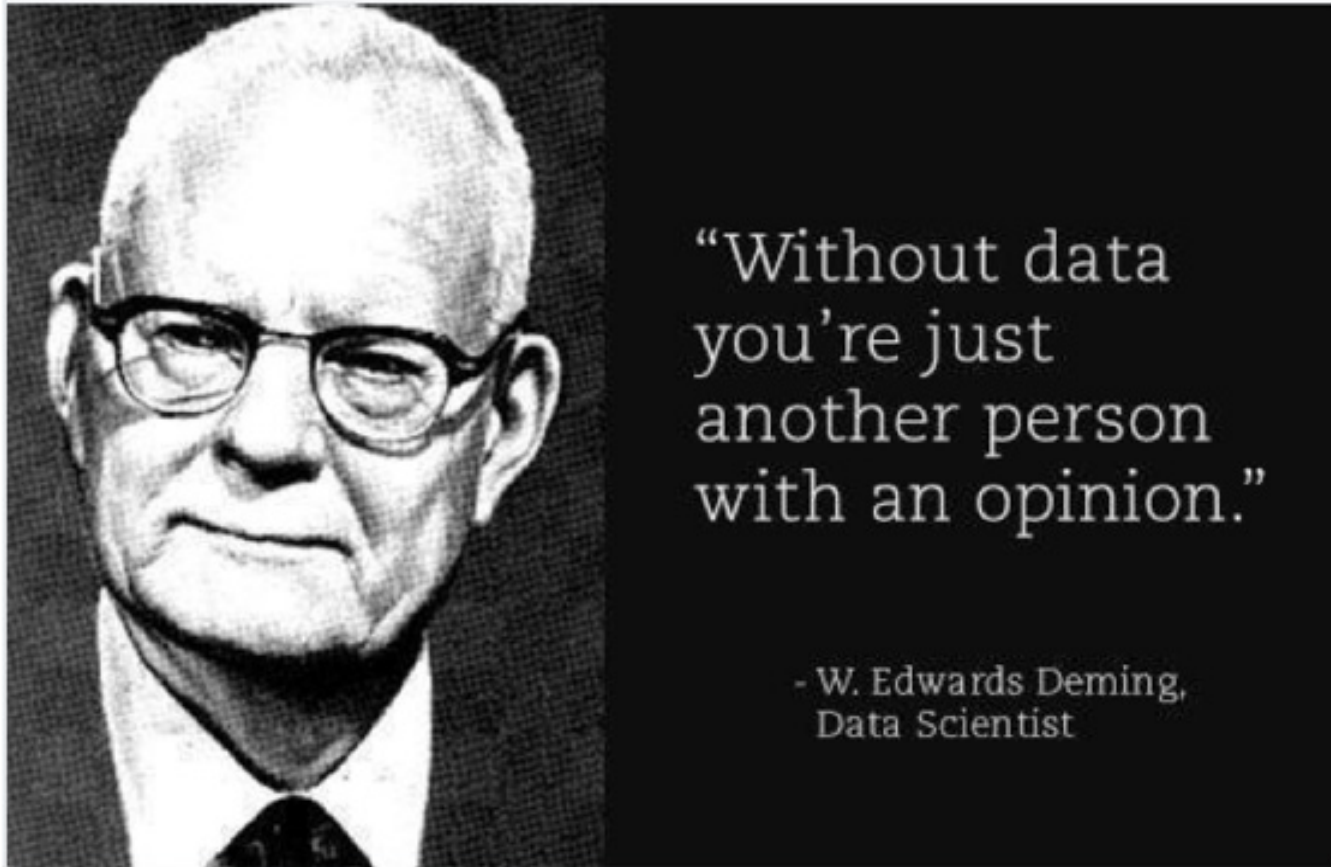
# RBRE Rule Grouping

## Top Risk Entities for Rule

[Refresh](#)

| ENTITY INTERNAL ID | NAME                                                                               | ENTITY TYPE<br>MassHealth Encounter Prescribing Provi ▾ | RISK    |
|--------------------|------------------------------------------------------------------------------------|---------------------------------------------------------|---------|
| 4514230            |  | MassHealth Encounter Prescribing Provider               | 281,837 |
| 4574803            |                                                                                    | MassHealth Encounter Prescribing Provider               | 119,379 |
| 4517983            |                                                                                    | MassHealth Encounter Prescribing Provider               | 75,415  |
| 4574805            |                                                                                    | MassHealth Encounter Prescribing Provider               | 69,428  |
| 4539157            |                                                                                    | MassHealth Encounter Prescribing Provider               | 62,121  |
| 4609641            |                                                                                    | MassHealth Encounter Prescribing Provider               | 58,022  |
| 4558417            |                                                                                    | MassHealth Encounter Prescribing Provider               | 43,905  |
| 4517862            |                                                                                    | MassHealth Encounter Prescribing Provider               | 42,658  |
| 4562044            |                                                                                    | MassHealth Encounter Prescribing Provider               | 40,011  |
| 4607332            |                                                                                    | MassHealth Encounter Prescribing Provider               | 32,311  |
| 4566217            |                                                                                    | MassHealth Encounter Prescribing Provider               | 20,403  |

# Data Analytics: Investigating Public Assistance Fraud and an Overview of the AG's Opioid Task Force Use of Data Analytics



“Without data  
you’re just  
another person  
with an opinion.”

- W. Edwards Deming,  
Data Scientist

# Data Analytics: Investigating Public Assistance Fraud and an Overview of the AG's Opioid Task Force Use of Data Analytics



Questions