Fraud Detection Report

# Potential Fraud - Random Forest

## Top 10 Prescriber to Dispenser Locations

This table shows the top 10 Prescribe/Dispenser locations based on resiude.

fraud\_data\_table

| **PrescriberLocation** | **DispenserLocation** | **HB** | **DispenserLocationType** | **PrescriberLocationType** | **AvgResidual** | **MaxRatio** | **Count** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 16,047 | 16,047 | S08000016 | DISPENSING DOCTOR | GP PRACTICE | 1.5070339 | 3.2038774 | 1 |
| 16,206 | 8,062 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 1.4218205 | 1.5359877 | 2 |
| 16,564 | 8,064 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 1.0618513 | 1.1759977 | 1 |
| 16,550 | 8,056 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.9457952 | 1.0703108 | 1 |
| 16,136 | 8,071 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.8500483 | 0.9507171 | 1 |
| 16,066 | 8,034 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.7195740 | 0.8909697 | 1 |
| 16,136 | 8,009 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.6729405 | 0.7598399 | 1 |
| 16,051 | 8,069 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.6242637 | 0.7164499 | 1 |
| 16,085 | 8,048 | S08000016 | COMMUNITY PHARMACY | GP PRACTICE | 0.6223165 | 0.7371014 | 1 |

## Test Data Graph

This graph shows the output for the random forest model using NHS open data source Prescriber/Dispenser Dataset.

final\_graph

