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** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 62,844 | 3,293 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 1.5583632 | 1.6704357 | 1 |
| 62,991 | 3,084 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 1.3624630 | 1.5332821 | 1 |
| 62,120 | 3,248 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 1.0792197 | 1.1319534 | 1 |
| 62,897 | 3,084 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 1.0299411 | 1.2976109 | 1 |
| 60,088 | 3,370 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.9479546 | 1.1081603 | 1 |
| 63,481 | 3,252 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.8705977 | 0.9293054 | 1 |
| 63,917 | 3,208 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.8406237 | 0.9454204 | 2 |
| 63,527 | 3,173 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7991377 | 0.8811243 | 1 |
| 61,324 | 3,369 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7977104 | 0.8633972 | 1 |
| 61,358 | 3,363 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7955867 | 0.8694027 | 1 |
| 63,890 | 3,108 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7895908 | 0.9287356 | 1 |
| 61,381 | 3,255 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7826520 | 0.9356169 | 1 |
| 63,052 | 3,265 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7536430 | 0.8373651 | 1 |
| 63,033 | 3,265 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7506482 | 0.8489722 | 2 |
| 62,223 | 3,294 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.7099911 | 0.7832552 | 2 |
| 62,897 | 3,205 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.6852578 | 0.8996587 | 1 |
| 63,423 | 3,383 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.6738327 | 0.7261364 | 1 |
| 60,158 | 3,334 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.6332025 | 0.7631728 | 1 |
| 62,219 | 3,294 | S08000032 | COMMUNITY PHARMACY | GP PRACTICE | 0.6180934 | 0.6829106 | 1 |

## Test Data Graph

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

final\_graph

