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** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 76,211 | 2,067 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 1.3333747 | 1.4253681 | 1 |
| 76,194 | 2,479 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 1.0438883 | 1.1146497 | 1 |
| 78,241 | 2,524 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.9446534 | 0.9897353 | 1 |
| 76,029 | 2,541 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.8434414 | 0.9105255 | 1 |
| 70,164 | 2,595 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7979772 | 0.8732250 | 2 |
| 70,906 | 2,573 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7557378 | 0.8045701 | 1 |
| 71,420 | 2,552 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7551704 | 0.8961273 | 1 |
| 78,010 | 2,464 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7529510 | 0.8120008 | 1 |
| 70,376 | 2,526 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7432773 | 0.7774916 | 1 |
| 76,180 | 2,567 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.7110481 | 0.7932464 | 1 |
| 70,573 | 2,229 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6748561 | 0.7252555 | 1 |
| 77,111 | 2,578 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6603000 | 0.7099736 | 1 |
| 78,429 | 2,589 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6230093 | 0.6735440 | 1 |
| 77,074 | 2,575 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6122545 | 0.6936714 | 1 |
| 76,103 | 2,482 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6040961 | 0.6520432 | 1 |
| 76,161 | 2,567 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6012203 | 0.6959296 | 1 |
| 76,071 | 2,482 | S08000024 | COMMUNITY PHARMACY | GP PRACTICE | 0.6011061 | 0.6466406 | 1 |

## Test Data Graph

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

final\_graph

