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** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 20,729 | 6,200 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.4283292 | 1.5790289 | 1 |
| 21,558 | 6,108 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.2564891 | 1.4534741 | 2 |
| 21,613 | 6,264 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.2101618 | 1.3681564 | 2 |
| 21,101 | 6,194 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.1455757 | 1.2336689 | 1 |
| 20,358 | 6,130 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.0565103 | 1.1296076 | 1 |
| 21,421 | 6,260 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.0453176 | 1.1645676 | 1 |
| 21,505 | 6,257 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 1.0034798 | 1.0918239 | 1 |
| 20,663 | 6,246 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.9997123 | 1.0729466 | 1 |
| 21,153 | 6,275 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.9810941 | 1.0573439 | 1 |
| 21,384 | 6,261 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.9573052 | 1.0712062 | 2 |
| 21,440 | 6,261 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.9352027 | 1.0811890 | 1 |
| 20,856 | 6,269 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.8942742 | 0.9801461 | 1 |
| 21,261 | 6,259 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.8243519 | 0.8967036 | 1 |
| 20,151 | 6,280 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.8108590 | 0.9339708 | 1 |
| 21,204 | 6,235 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.7455153 | 0.8724374 | 3 |
| 21,308 | 6,240 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.7386915 | 0.8119812 | 1 |
| 20,254 | 6,119 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.7167562 | 0.8023660 | 1 |
| 20,254 | 6,063 | S08000029 | COMMUNITY PHARMACY | GP PRACTICE | 0.6355877 | 0.7167711 | 1 |

## Test Data Graph

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

final\_graph

