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** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 25,065 | 6,704 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 1.0063753 | 1.0985063 | 1 |
| 25,135 | 6,699 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.9332533 | 1.0404658 | 3 |
| 25,210 | 6,725 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.8903698 | 0.9657102 | 1 |
| 25,084 | 6,726 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.8147709 | 0.9175306 | 1 |
| 25,135 | 6,135 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6972613 | 0.7427948 | 1 |
| 25,121 | 6,649 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6892157 | 0.8042247 | 1 |
| 25,313 | 6,700 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6570374 | 0.6992947 | 1 |
| 25,173 | 6,723 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6332089 | 0.7061645 | 1 |
| 25,243 | 6,688 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6256611 | 0.7003700 | 1 |
| 25,968 | 6,717 | S08000019 | COMMUNITY PHARMACY | GP PRACTICE | 0.6222830 | 0.7702306 | 1 |

## Test Data Graph

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

final\_graph

