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** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 46,235 | 1,371 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.4059777 | 1.4785252 | 1 |
| 46,201 | 1,258 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.2814454 | 1.3738290 | 1 |
| 43,307 | 1,689 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.2720658 | 1.3057464 | 1 |
| 52,043 | 1,406 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.2221157 | 1.2666238 | 1 |
| 86,285 | 4,796 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.1920700 | 1.3389961 | 1 |
| 43,261 | 1,174 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.1855207 | 1.3133515 | 1 |
| 86,321 | 4,796 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.1415720 | 1.2726599 | 1 |
| 86,271 | 4,796 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.1092269 | 1.2493151 | 1 |
| 49,286 | 1,688 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.0531287 | 1.1356032 | 2 |
| 87,485 | 8,704 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 1.0413904 | 1.2363692 | 1 |
| 46,057 | 1,466 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.9708917 | 1.0168614 | 1 |
| 40,417 | 1,724 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.9488225 | 0.9929939 | 2 |
| 52,185 | 1,545 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.9468893 | 0.9897449 | 2 |
| 86,209 | 4,745 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8946056 | 1.0143766 | 1 |
| 49,751 | 1,667 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8919348 | 0.9201968 | 1 |
| 43,275 | 1,722 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8515173 | 0.8933477 | 1 |
| 46,343 | 1,628 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8327951 | 0.8683635 | 2 |
| 87,432 | 4,538 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8277164 | 0.9489167 | 1 |
| 46,112 | 1,512 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8271282 | 0.8549242 | 1 |
| 52,414 | 1,545 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.8002855 | 0.8583117 | 2 |
| 40,525 | 1,742 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7944578 | 0.8357926 | 2 |
| 87,625 | 4,772 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7686709 | 0.8106689 | 1 |
| 40,421 | 1,766 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7667579 | 0.9134577 | 2 |
| 40,332 | 1,736 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7434807 | 0.7943925 | 2 |
| 40,192 | 1,659 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7219143 | 0.7598684 | 1 |
| 40,722 | 1,766 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.7176740 | 0.7933962 | 1 |
| 87,184 | 4,790 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6870097 | 0.7928650 | 1 |
| 52,260 | 1,311 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6840750 | 0.7240978 | 1 |
| 43,222 | 1,660 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6833339 | 0.7358410 | 1 |
| 46,625 | 1,771 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6491156 | 0.6729426 | 1 |
| 43,557 | 1,590 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6475721 | 0.6995836 | 1 |
| 40,008 | 1,559 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6381990 | 0.6884138 | 2 |
| 49,130 | 1,515 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6253153 | 0.6528107 | 1 |
| 40,084 | 1,768 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6217055 | 0.6516551 | 1 |
| 86,001 | 4,548 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6177252 | 0.6850523 | 1 |
| 49,248 | 1,622 | S08000031 | COMMUNITY PHARMACY | GP PRACTICE | 0.6151365 | 0.6378981 | 1 |

## Test Data Graph

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

final\_graph

