**Method for comparing PIP award rates between providers**

I have used the data from DWP on PIP award rates by local authority to estimate the difference in award rates between areas covered by the two providers: Capita and ATOS.

I have done the following

1. Use this map to create a dataset that identifies all postcodes where Capita is provider. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/610293/personal-independence-payment-postcode-map.pdf>
2. Use a postcode lookup and above dataset to identify which areas are covered by Capita and which by ATOS

<https://geoportal.statistics.gov.uk/datasets/ons::national-statistics-postcode-lookup-november-2019/about>

1. Import data from Stats-xplore on
2. Award rates by local authority and reassessment
3. Proportion of applicants with different disabilities (21 categories) for reassessment cases and non reassessment cases
4. Merge data together
5. Run the following regression separately for DLA reassessment cases, new cases, all cases together.

Where Award\_rate­­­­LA­ is the proportion of total cases which result in awarded Personal independence payments

Disability\_prevalences­LA­ is the proportion of total cases in local authority reporting a given disability. 18 disability categories are included with “Unknown or missing” left out of the regression to avoid multicollinearity. This controls for the fact that people with certain disabilities are more likely to get an award than people with other disabilities.

Capita­LA­ is a dummy variable for whether the area is covered by Capita. can be interpreted as the percentage point difference between Capita award rates and ATOS award rates.

The results are in the table below. The main coefficient is on main\_providerCapita in the Disability controls model.

**R code:**

The R code for the analysis is available here. Everything is in the github that’s needed to run the code is in the github except:

1. The postcode lookup. This is a big file so you will need to download separately: <https://geoportal.statistics.gov.uk/datasets/ad7fd1d95f06431aaaceecdce4985c7e>
2. You will need to get your own Stat Xplore API key which you can get here:

<https://stat-xplore.dwp.gov.uk/webapi/online-help/Open-Data-API.html>

**Full regression table for reassessment cases:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | No Disability Controls | Disability controls | Disability Controls and IMD |
| (Intercept) | 0.71 \*\*\* | -0.31 \*\* | -0.23 \* |
|  | (0.00) | (0.11) | (0.11) |
| main\_providerCapita | -0.01 | -0.04 \*\*\* | -0.03 \*\*\* |
|  | (0.00) | (0.00) | (0.00) |
| cardio |  | 2.19 \*\*\* | 1.08 \* |
|  |  | (0.41) | (0.46) |
| autoimmune |  | -0.01 | 0.48 |
|  |  | (0.80) | (0.80) |
| liver |  | 1.61 | 1.51 |
|  |  | (1.20) | (1.15) |
| endo |  | 1.65 \*\*\* | 0.82 |
|  |  | (0.43) | (0.44) |
| gastro |  | 1.02 | -0.32 |
|  |  | (0.80) | (0.79) |
| genit |  | -0.57 | 0.52 |
|  |  | (0.86) | (0.87) |
| haem |  | 0.25 | 0.79 |
|  |  | (0.97) | (0.91) |
| hearing |  | 0.71 | 0.69 |
|  |  | (0.41) | (0.39) |
| infect |  | 1.72 \* | 1.43 \* |
|  |  | (0.73) | (0.69) |
| malignant |  | 2.91 \*\*\* | 2.23 \*\*\* |
|  |  | (0.41) | (0.44) |
| metabolic |  | -0.13 | 0.99 |
|  |  | (1.16) | (1.13) |
| musc\_gen |  | 1.03 \*\*\* | 1.00 \*\*\* |
|  |  | (0.13) | (0.13) |
| musc\_reg |  | 1.28 \*\*\* | 1.39 \*\*\* |
|  |  | (0.16) | (0.17) |
| neuro |  | 1.13 \*\*\* | 0.97 \*\*\* |
|  |  | (0.12) | (0.13) |
| psych |  | 1.09 \*\*\* | 0.97 \*\*\* |
|  |  | (0.13) | (0.13) |
| resp |  | 0.81 \*\*\* | 1.55 \*\*\* |
|  |  | (0.24) | (0.26) |
| visual |  | 0.79 \* | 1.31 \*\*\* |
|  |  | (0.35) | (0.35) |
| skin |  | 1.64 \* | 2.00 \*\* |
|  |  | (0.73) | (0.73) |
| IMD\_score |  |  | -0.00 \*\*\* |
|  |  |  | (0.00) |
| N | 344 | 344 | 306 |
| R2 | 0.01 | 0.58 | 0.58 |
| \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05. | | | |

**Full regression table for new cases:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | No Disability Controls | Disability controls | Disability Controls and IMD |
| (Intercept) | 0.45 \*\*\* | -0.04 | 0.05 |
|  | (0.00) | (0.06) | (0.06) |
| main\_providerCapita | -0.02 \*\*\* | -0.03 \*\*\* | -0.03 \*\*\* |
|  | (0.00) | (0.00) | (0.00) |
| cardio |  | 1.13 \*\*\* | 0.46 |
|  |  | (0.34) | (0.32) |
| autoimmune |  | 3.39 \*\*\* | 1.29 |
|  |  | (0.95) | (0.82) |
| liver |  | 1.21 | 0.74 |
|  |  | (1.03) | (0.91) |
| endo |  | -0.54 | -0.40 |
|  |  | (0.56) | (0.49) |
| gastro |  | 0.15 | 0.11 |
|  |  | (0.52) | (0.45) |
| genit |  | -0.99 | -0.43 |
|  |  | (0.73) | (0.63) |
| haem |  | 1.97 | 2.39 \* |
|  |  | (1.31) | (1.11) |
| hearing |  | -0.55 | -0.78 |
|  |  | (0.96) | (0.81) |
| infect |  | 0.96 | 1.61 |
|  |  | (1.48) | (1.24) |
| malignant |  | 0.73 \*\*\* | 0.64 \*\*\* |
|  |  | (0.12) | (0.10) |
| metabolic |  | -2.90 | -1.30 |
|  |  | (1.97) | (1.68) |
| musc\_gen |  | 0.85 \*\*\* | 0.65 \*\*\* |
|  |  | (0.11) | (0.09) |
| musc\_reg |  | 0.57 \*\*\* | 0.76 \*\*\* |
|  |  | (0.14) | (0.13) |
| neuro |  | 0.67 \*\* | 0.43 \* |
|  |  | (0.23) | (0.20) |
| psych |  | 0.72 \*\*\* | 0.56 \*\*\* |
|  |  | (0.11) | (0.10) |
| resp |  | 0.14 | 0.97 \*\*\* |
|  |  | (0.27) | (0.25) |
| visual |  | -1.08 | -0.54 |
|  |  | (0.78) | (0.65) |
| skin |  | 0.97 | -0.54 |
|  |  | (0.96) | (0.83) |
| IMD\_score |  |  | -0.00 \*\*\* |
|  |  |  | (0.00) |
| N | 344 | 344 | 306 |
| R2 | 0.07 | 0.49 | 0.55 |
| \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05. | | | |

**R code:**

The R code for the analysis is available here. Everything is in the github that’s needed to run the code is in the github except:

1. The postcode lookup. This is a big file so you will need to download separately: <https://geoportal.statistics.gov.uk/datasets/ad7fd1d95f06431aaaceecdce4985c7e>
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