

Title: UK Personal Independence Payments Analysis

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Summary

The COVID-19 pandemic led to an unprecedented overhaul in the global public health response to disease outbreak. To assess the effect of these policies on various public health outcomes, we have been examining rates of disability in countries with high-quality record keeping. The United Kingdom has a publicly available online archive of monthly trends in the use of various social welfare services offered by the Department of Work and Pensions, including claims for financial support for adults with disabilities. This report captures monthly trends in disability payments awarded in the United Kingdom, known as “Personal Independence Payments” (PIP), over the course of the COVID-19 pandemic. We show that a substantial increase in PIP applications and new PIP entitlements occurred shortly after the beginning of 2021 which cannot be explained by changes in the size of the working-age population, nor by a decrease in the percentage of PIP applications that are rejected. Finally, monthly PIP decisions for new claims are compared to trends in severe COVID-19 infection and vaccination rates. After looking at the totality of the evidence, we surmise that disability rates or disability severity as reflected by the PIP data has increased significantly since the start of the pandemic, with timing that coincides with the start of the vaccination rollout and with the 2020-2021 wave of the COVID-19 alpha variant in the United Kingdom.

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1. Introduction

The start of the COVID-19 pandemic in early 2020 introduced the largest global public health crisis in more than a century. Despite the tendency for the SARS-Cov-2 virus to disproportionately harm the elderly and those with chronic disease ([Grasselli 2020](#)), the fear that gripped the population in many countries led to policies influencing the personal lives and medical choices of every citizen regardless of their own personal risk. Despite far-reaching and long-running lockdowns, millions of vulnerable individuals suffered and died from the novel coronavirus, as medical professionals struggled to develop therapeutic interventions. Even more individuals suffered long term sequelae lasting many months after infection, which many experts believe to be autoimmune in nature ([Son 2023](#)). Toward the end of 2020, several countries had developed immunizations that could induce production of the viral “spike” protein in the recipient, triggering an antibody response against the foreign protein. As research continued, it became apparent that the protein chosen as the viral antigen in most of immunizations was likely responsible for the most destructive symptoms seen in severe infection ([Halma 2023](#)), and passive reporting systems revealed adverse events similar to the effects of COVID-19 itself. Massive politicization of the use of the vaccines led to aggressive censorship campaigns ([Soave 2023](#)), dismissal of serious adverse events (AE’s) despite mounting patient reports ([Postmedia News 2023](#)), and shocking discrimination ([Wilson 2023](#), [NY Post 2023](#)) against those who questioned its safety or appropriateness for all individuals.

Years later, the rapidly-mutating coronavirus still circulates globally in a more contagious and less pathogenic form. Nevertheless, non-COVID excess deaths and disability rates remain elevated above pre-pandemic levels in many countries. The examination of the disability payments in the United Kingdom, a country with a high vaccination rate and that implemented severe lockdowns, provides an opportunity to see how the governmental response affected public health metrics. The monthly data captures a drastic shift in the number of disability payment recipients and calls into question the efficacy of the country’s public health policy decisions during the pandemic.

2. Data and Methodology

The data used for these analyses were collected from Stat-Xplore (<https://stat-xplore.dwp.gov.uk/>), which hosts data and statistics for various social benefits provided by the United Kingdom’s Department for Work and Pensions (DWP). Financial support for working-age adults with disabilities is provided via the Personal Independence Payments system (PIP). The data available from PIP includes disability claim caseload, new registrations, and cases that had been cleared (aka clearances) in that month. “New registrations” data does not provide information on disability type (i.e. disease or condition), but clearance data and total caseload data does provide this information. The only other claimant characteristics provided are sex and 5-year age group.

A person may be eligible to claim PIP if they are between the ages of 16 to 64 and have a health condition or disability that:

- has affected their daily living or mobility for at least 3 months, and
- is likely to continue for at least 9 months (unless terminally ill).

Due to the changes in processing times that were occurring throughout the pandemic, caution should be exercised when attempting to link increases in disability to a specific time period or event. According to the DWP:

“Clearance times for normal rules new claims [...] peaked most recently in August 2021 at 26 weeks ‘end to end’ (from registration to a decision being made) [...], partly because claims that had been allowed a longer deadline for return of PIP 2 form during the period between late February and late May 2021 were reaching clearance, and priority in some areas was given to claims that had been waiting longer for processing due to COVID-19 disruption.”

Source: <https://www.gov.uk/government/statistics/personal-independence-payment-statistics-to-april-2023/personal-independence-payment-statistics-april-2013-to-april-2023>

2.1. Terms, Acronyms, and Definitions

Various terms and acronyms specific to the analysis are described in the following tables.

Acronym	Meaning	Description
PIP	Personal Independence Payments	Current social welfare program in the UK for the support of adults with disabilities who are unable to work.
DLA	Disability Living Allowance	Previous UK disability entitlement system, discontinued in 2013.
DWP	Department for Work and Pensions	A public service department in the UK in charge of disability, pensions, and child welfare.
SREL	Special rules for end-of-life	A category of claim where the claimant has a terminal illness with less than 12 months to live; certain rules for eligibility and application are modified in this category and may be fast tracked.
AP	Assessment Provider	An assessment provider is a DWP employee responsible for holding interviews with the claimant and assessing their eligibility.

Table 1 – Description of relevant acronyms

Term	Description
Cases with entitlement/caseload	Total number of persons with entitlement to PIP at any given time
Registration	The act of applying for PIP.
Clearance	Event describing when the DWP makes a decision to approve or reject a person's claim. Occurs after an interview with the claimant and occurs anywhere from a few weeks to a few months after the person initially registers.
Assessment	An in-person interview between the PIP registrant and a DWP employee to gather detailed information about the person's health status and capabilities.
Normal rules	A claim that does <i>not</i> qualify claimant as eligible for SREL, meaning they do not have a terminal illness.
DLA reassessment	An assessment of DLA recipients to determine their current eligibility and transfer them from the DLA system to PIP (if found eligible).

Table 2 – Description of terms relevant to the PIP analysis.

Unless otherwise specified, entitlements categorized under SREL and normal rules are both included in all analyses.

2.2. Population Estimates

Population estimates for the total population and by age group were downloaded from Stat-Xplore to adjust counts for changes in total population. These estimates were provided by the UK Office for National Statistics (ONS). The latest estimate available is for mid-2021, so the most recent values were carried forward for dates beyond this time point. Prediction of population estimates for 2022 and 2023 using linear regression was considered but ultimately rejected due to a flattening of population growth in 2021 compared to the previous year; if the levelling off reflects a true change in trend, this could lead the population projection for 2022 and 2023 to be over-estimated.

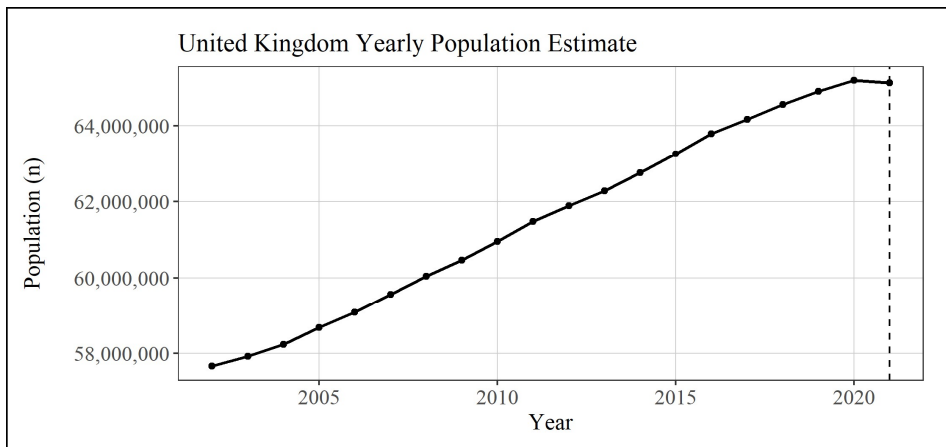


Figure 1 - UK - Yearly population estimates from 2002 to 2021. Source: Stat-Xplore, 2024.

As of the year 2020, the population of the United Kingdom was estimated to be just over 65 million people, with greater variability seen in the younger age groups (Figure 2).

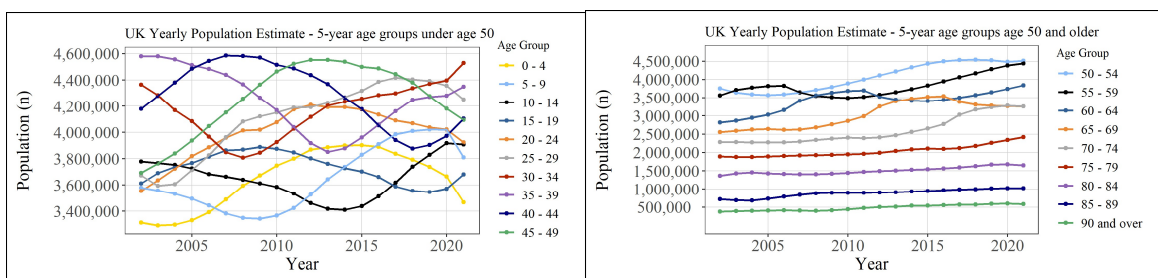


Figure 2 - UK - Yearly population estimates from 2002 to 2021 by 5-year age group. Source: Stat-Xplore, 2024.

In this study we provided both absolute counts as well as counts adjusted for population to ensure that no trends observed are due purely to differences in population over time.

2.3. Population Adjustment

Rates are calculated by simply dividing the number of caseloads, registrations, or clearances in a certain age group over a given month, by the population of the respective age-group in that same year, as shown below:

$$\text{Population adjusted count}(t_i) = \text{Count}(t_i) / \text{Population}(t_i) \tag{Eq. 1}$$

In most cases population adjustment did not make an appreciable difference in the appearance of the trend.

2.4. Excess Disabilities Calculation

Excess disabilities were calculated by first running a simple linear regression on new claim clearance trends from 2016 to 2019 inclusive.

$$y = \text{Population-adjusted clearances} \sim \text{Month}$$

Percent deviation from trend was calculated as:

$$\% \text{ Deviation} = (\text{Actual} - \text{Predicted}) / \text{Predicted} * 100$$

Z-scores were calculated based on the mean and standard deviation of the data points from those years as well.

$$\text{Z-Score} = \text{Population-adjusted clearances} - (\text{mean of 2016-2019 clearances}) / (\text{standard deviation of 2016-2019 clearances})$$

3. Results

PIP displaced the UK’s previous Disability Living Allowance (DLA) system in 2013. As such, a sharp increase in cases/claims was observed in the few years following the initiation of PIP, which has been explained as “capacity issues” by the DWP; for this reason, only data points collected in 2016 and after are included in this set of analyses.

3.1. PIP Caseload Trends

PIP “claims with entitlement” statistics show the total for all entitled cases currently in the system for a particular month, also known as the caseload. It captures both those in receipt of PIP and those with entitlement to PIP where the payment has been suspended (for example, if they are in hospital at that point in time).

As of October 2023, the rate of those with PIP entitlement was approaching 5.2% of the total population (Figure 3) and increased in all age groups (Figure 4). The 1+% increase from the start of the pandemic is composed mainly of new claims, as DLA reassessments (i.e., transfers of claimants from the old DLA system to PIP) were almost completely stopped at the start of the pandemic (Figure 6). The increase in caseload is apparent in both males and females, with females being disproportionately affected (Figure 5).

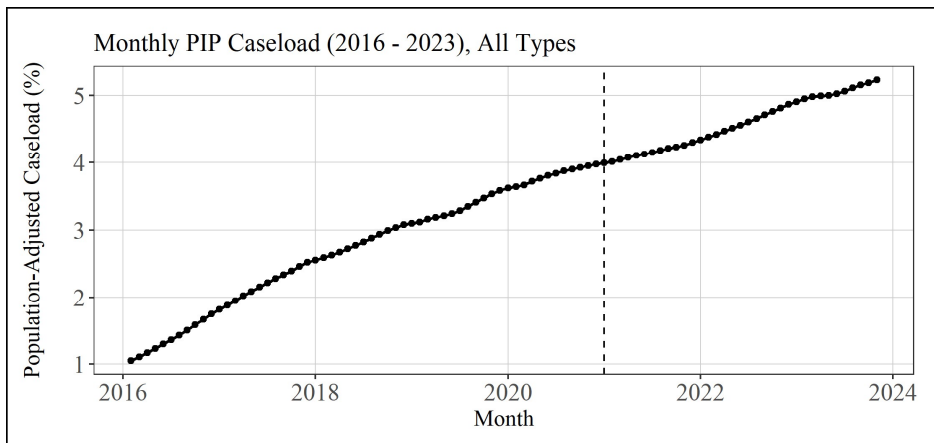


Figure 3 - UK – Monthly total PIP entitlements from 2016 to 2023, normal rules. Source: Stat-Xplore, 2024.

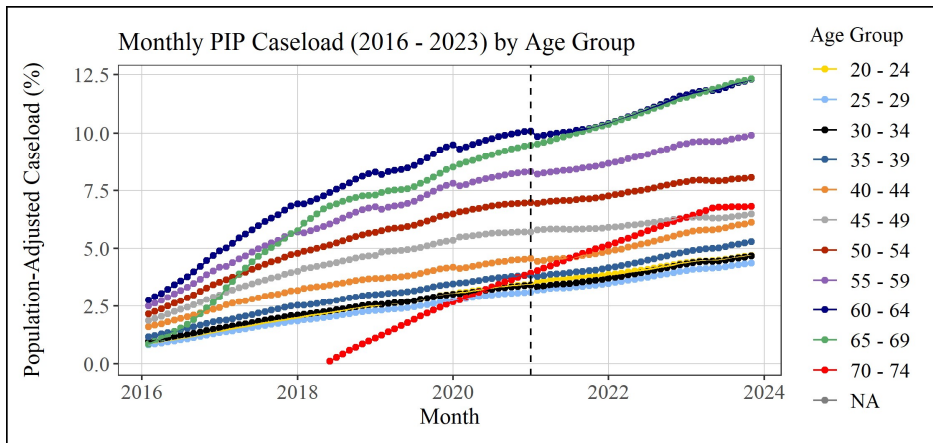


Figure 4 - UK – Monthly PIP entitlements from 2016 to 2023 by age group, normal rules. Source: Stat-Xplore, 2024.

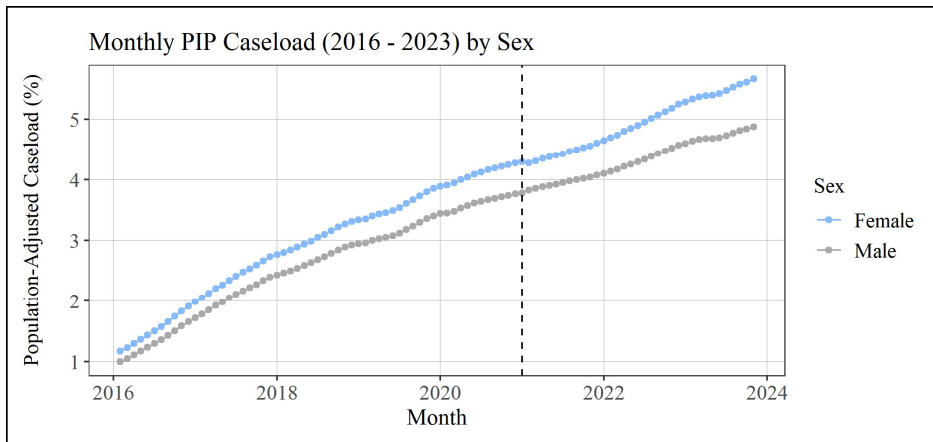


Figure 5 - UK – Monthly PIP entitlements from 2016 to 2023 by sex. Source: Stat-Xplore, 2024.

3.1.1. PIP Caseload - New PIP Claims versus Routine DLA Reassessments

“From late March 2020 onwards, disruption due to COVID-19 affected volumes of clearances for all activities. Operational measures implemented in late March in response to COVID-19 included the suspension of routine re-assessments of disability benefits i.e. DLA to PIP reassessments. Some DLA reassessment activity restarted in late July” ... (of 2022, it is assumed). Source: Stat-Xplore Personal Independence Payment: DLA to PIP Reassessments table annotation under “Known Issues”. The plot indicates that the increase in total caseloads is mainly due to an uptick in new PIP claims (Figure 6).

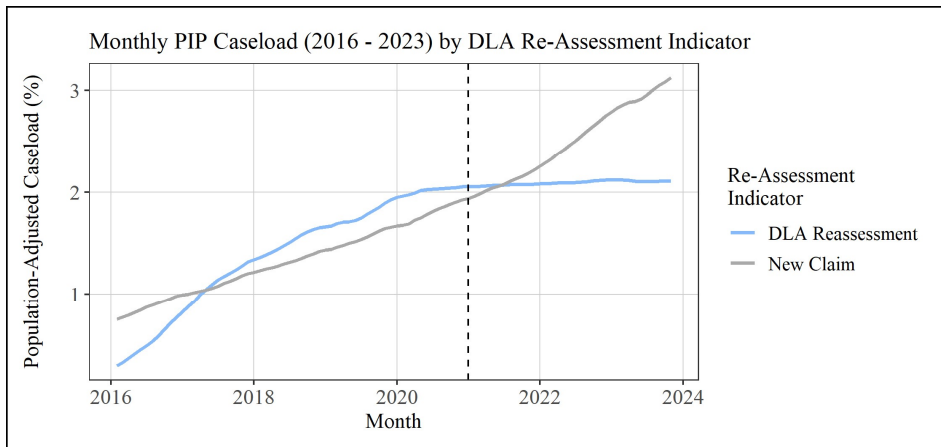


Figure 6 - Monthly PIP entitlements (normal rules) from 2016 to 2023 by claim category, indicating whether the case is a new PIP claim or an existing DLA claim that had been re-assessed and switched over to the PIP system. Source: Stat-Xplore, 2024.

A DLA reassessment is an interview held with a claimant who got their disability payments from the DLA system, prior to the PIP switch in 2013. In this case the claimant would be asked to provide information to allow the DWP to reassess their disability and transfer them over to the PIP system if they were found to still be entitled to benefits.

3.1.2. Caseload by Award Levels

An enhanced level of award indicates that the person’s disability is severe enough to warrant an additional level of support. Prior to 2021, there were always more standard-level awards given; starting in February 2021 the rate of enhanced-level awards surpassed and began to exceed standard-level awards (Figure 7), and the gap between the two has continued to widen since then, with enhanced-level awards making up nearly 53% of newly awarded clearances as of October 2023.

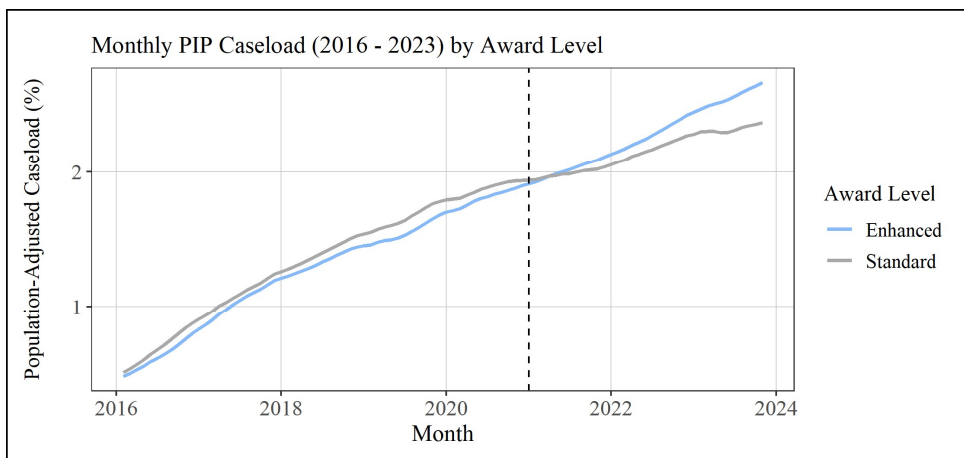


Figure 7 - Monthly PIP entitlements from 2016 to 2023 by award level, an indicator of disability severity. Source: Stat-Xplore, 2024.

This trend was especially apparent in the 20-29 year age group (Figure 8).

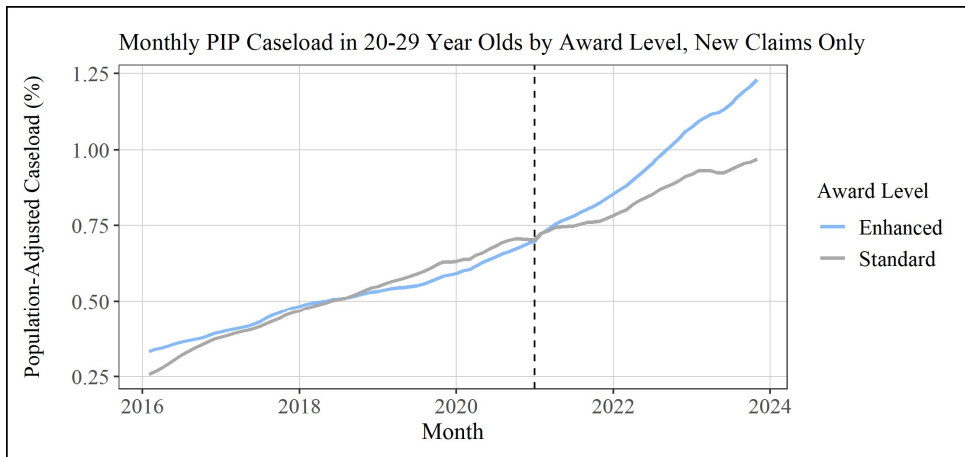


Figure 8 - Monthly PIP new claim entitlements from 2016 to 2023 grouped by award level in 20–29-year-olds. Source: Stat-Xplore, 2024.

It should be noted that these figures include new claims, DLA reassessments, normal rules claims and SREL claims. To determine whether the increased number of enhanced-level awards is due to new claims (as opposed to DLA reassessments) in the 20-29 age group, this same metric was analysed in the clearances data in section 0.

3.2. PIP Registration Trends

Registration trends tend to be more variable than caseloads, and dip predictably before the turn of every year (likely due to the holiday season). Figure 9 reveals a slight but steady increase in registrations and registration rates prior to 2021, with an accelerated increase starting approximately in mid-2021. The drastic dip observed in 2020 may have to do with a delay in initial processing due to the onset of the COVID-19 pandemic, suggesting that the dates attached to these registrations are linked to the time of processing rather than the date of submission. The potential delay in processing should be considered when attaching meaning to the onset of a change in rate.

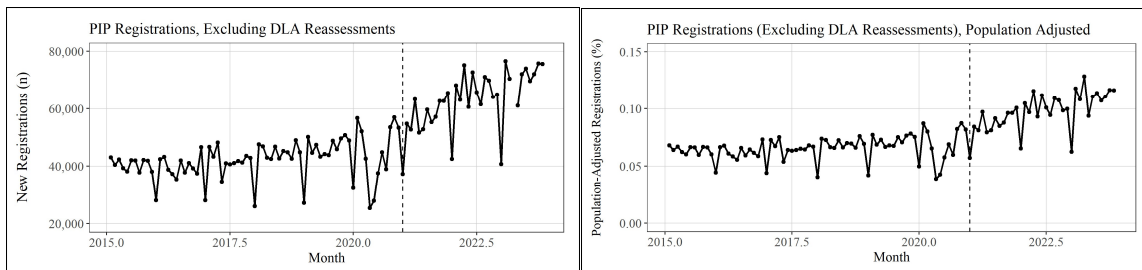


Figure 9 - Monthly PIP registrations from 2016 to 2023, raw counts (left) and population adjusted (right). Source: Stat-Xplore, 2024.

3.3. Clearances (Decisions)

The term “clearances” refers to claims which have been reviewed and for which a decision has been made. ***Please note that it does not indicate whether the claim was approved or rejected.***

Based on the clearance times chart (Figure 10) provided by the DWP, we would expect that roughly 3-5 months to have elapsed between a claim’s clearance date and the actual start date of the person’s disability.

However, it could have been as long as 9 months if the claimant first waited the full 3 months after developing symptoms before applying, and then had to wait the peak time of 6 months for a decision. In cases where the 3-month waiting period isn't enforceable, we suspect most people would not wait this long, but the possibility should be taken into account when considering clearance data.

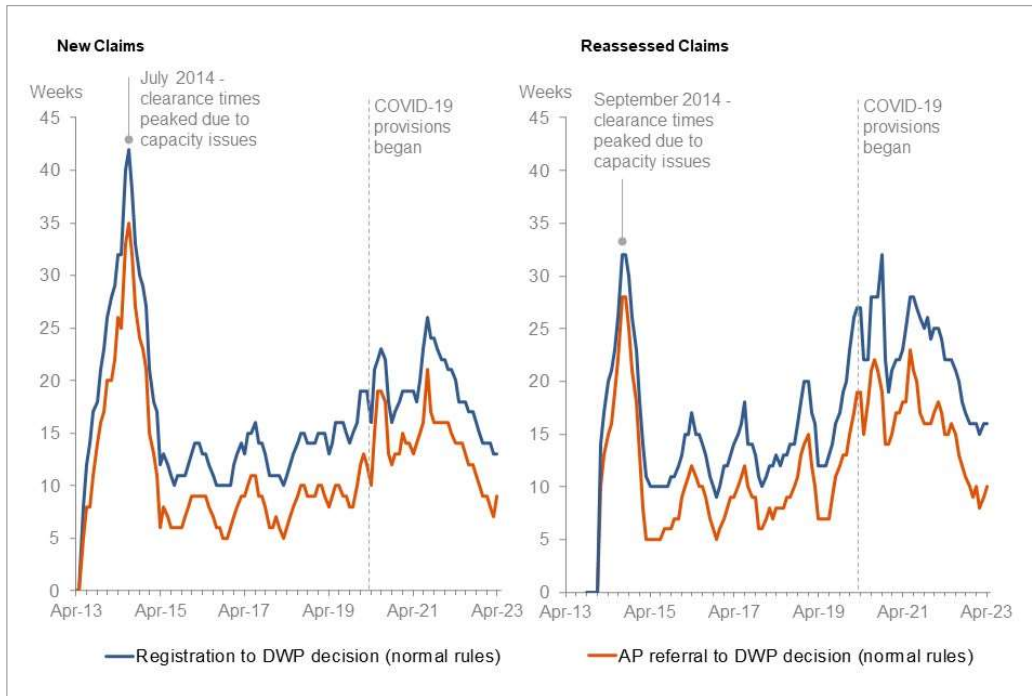


Figure 10 - Monthly PIP clearances times in England and Wales, either capturing end-to-end (from the time of registration to the time a decision is reached, blue) or from the AP referral to the time when a decision is reached (orange), for new claims (left) and DLA reassessments (right), 2013 to 2023. Source: [Personal Independence Payment statistics April 2013 to April 2023 - GOV.UK \(www.gov.uk\)](http://www.gov.uk).

Monthly clearances and clearance rates, excluding DLA reassessments, were examined in Figure 11.

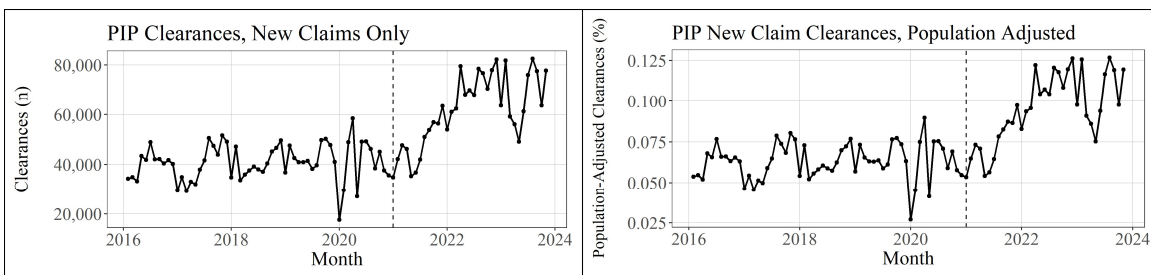


Figure 11 - Monthly PIP clearances, excluding DLA re-assessments, from 2016 to 2023, raw counts (left) and population adjusted (right). Source: [StatXplore, 2024](https://statxplora.com).

For the plot below, the prediction line was calculated using simple linear regression based on the monthly rates from 2016 to 2019 (inclusive).

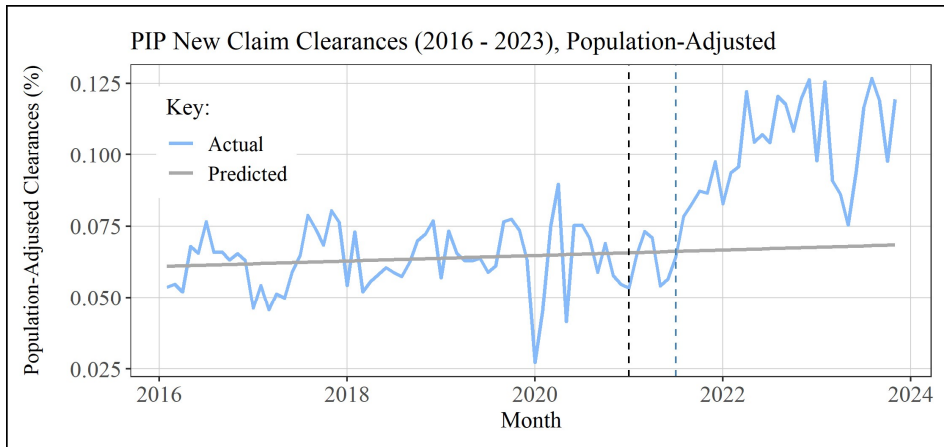


Figure 12 - Monthly PIP clearance rates, excluding DLA re-assessments, from 2016 to 2023, plotted in comparison to the 2016-2019 linear trend prediction. Source: Stat-Xplore, 2024.

A line was drawn at the month in which the vaccine was rolled out, which was early January 2021 for the UK. Based on the conservative estimate that a claim would take up to 6 months to process, a dashed line is also drawn at the point 6 months after the rollout. An event related to long-term effects of COVID would be expected to rise toward the end of 2020, although there was a period of catch-up after the start of the pandemic leading to a brief delay in productivity.

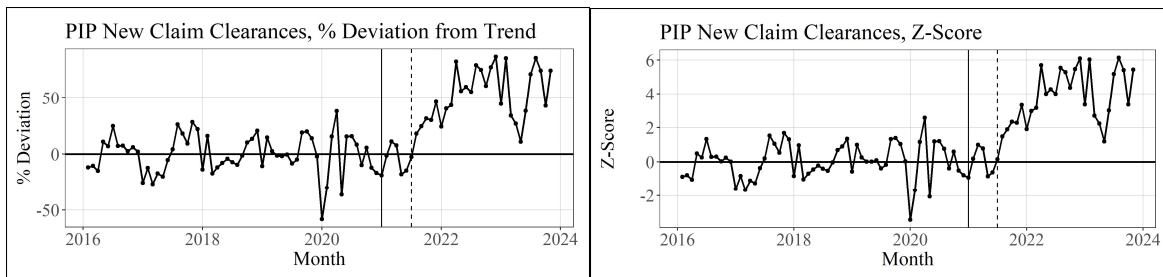


Figure 13 - Monthly PIP clearance rates, excluding DLA re-assessments, from 2016 to 2023, plotted as % deviation from the 2016-2019 linear trend prediction (left) and as Z-Scores (right). Source: Stat-Xplore, 2024.

3.3.1. PIP Clearances by Sex

Monthly PIP clearances were visualized grouped by sex (Figure 14). As of 2016, women make up a larger percentage of new PIP claimants.

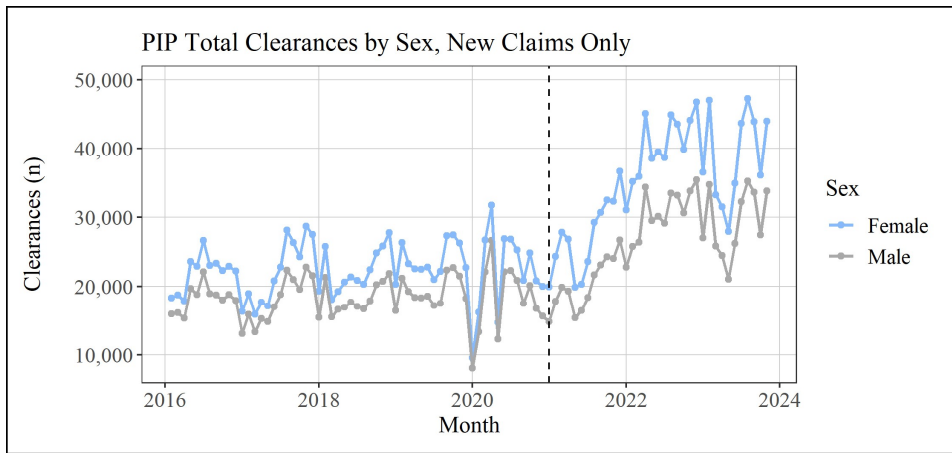


Figure 14 - Monthly PIP clearances from 2016 to 2023 by sex, raw counts (left) and population adjusted (right). Source: Stat-Xplore, 2024.

Although clearances increased for both males and females in 2021, the magnitude of the increase was greater for females, leading to an even greater proportion of new clearances being for female claimants.

3.3.2. Approved vs Rejected Clearances

It is important to examine whether the increase in clearances may be due to an increase in unsubstantiated or ineligible claims. To do this, we calculated the percentage of clearances each month that were rejected, out of those that were either rejected or approved (Figure 15).

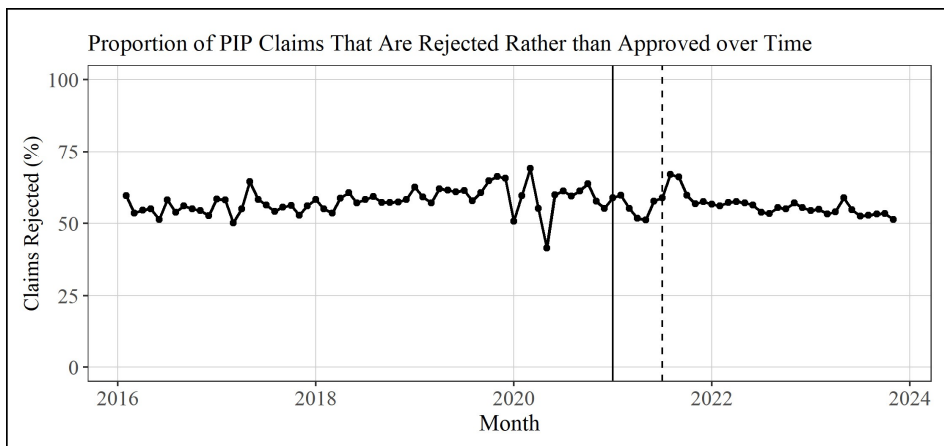


Figure 15 – Monthly proportion of PIP clearances that were rejected from 2016 to 2023, out of those that were either rejected or approved. Source: Stat-Xplore, 2024.

Although there was some variability in the proportion of rejected claims over time, the percentage ranges from 50 to 70% most months, and there does not appear to be any sustained increase or decrease after 2021 that would explain the increase in total clearances observed in those years.

3.3.3. Standard vs Enhanced Clearances in the 20-29 age group

An enhanced level of award indicates that the person's disability is severe enough to warrant an additional level of support. Prior to 2021 there were always more standard-level awards approved; however, starting in February 2021 the rate of enhanced-level awards surpassed and began to exceed standard-level awards, and the gap between the two has continued to widen since then, with enhanced-level awards making up almost 53% of newly awarded entitlements as of October 2023.

In section 0 we observed that the trend of increased proportion of enhanced-level entitlements was especially severe in the age group of 20- to 29-year-olds. Here we also examine the clearance trends in this age group to see if the trend we saw in total caseloads is due to an increase in new enhanced-level claims (Figure 16).

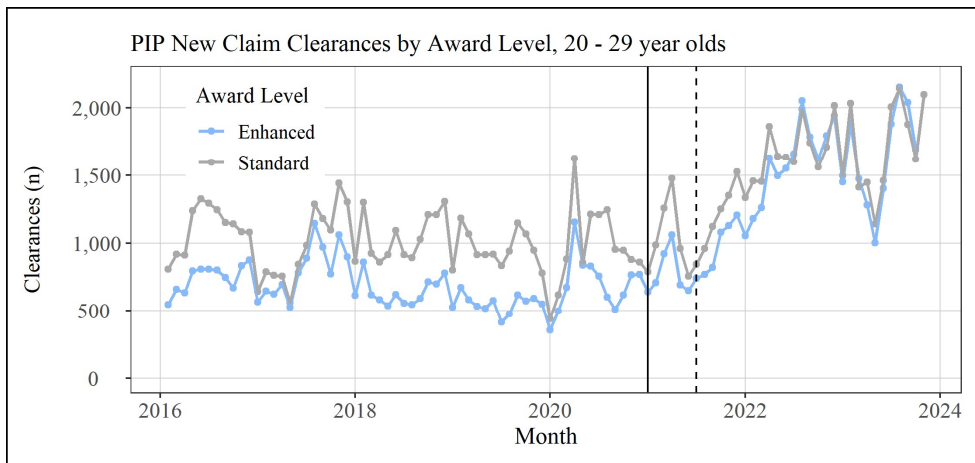


Figure 16 - Monthly PIP new claim clearances by award level in 20–29-year-olds, from 2016 to 2023. Source: Stat-Xplore, 2024.

Again, we see a pattern of standard-level awards making up a larger proportion of clearances than enhanced-level awards prior to 2021, but becoming more and more similar in number after 2021. As of late 2023, enhanced-level clearances make up almost the same proportion as standard-level, a pattern which appears to be most pronounced in this age group.

3.3.4. PIP Clearance Trends Compared to COVID Cases or Vaccination Rates

It cannot be denied that the notable increase in disability clearances in the last few years occurred shortly after the introduction of the COVID-19 vaccine in January 2021, with no increase observed months after COVID-19 first circulated in the UK in mid-2020. Figure 17 shows the % deviation from trend for PIP clearances together with the cumulative % of the UK population that had been vaccinated at that point in time.

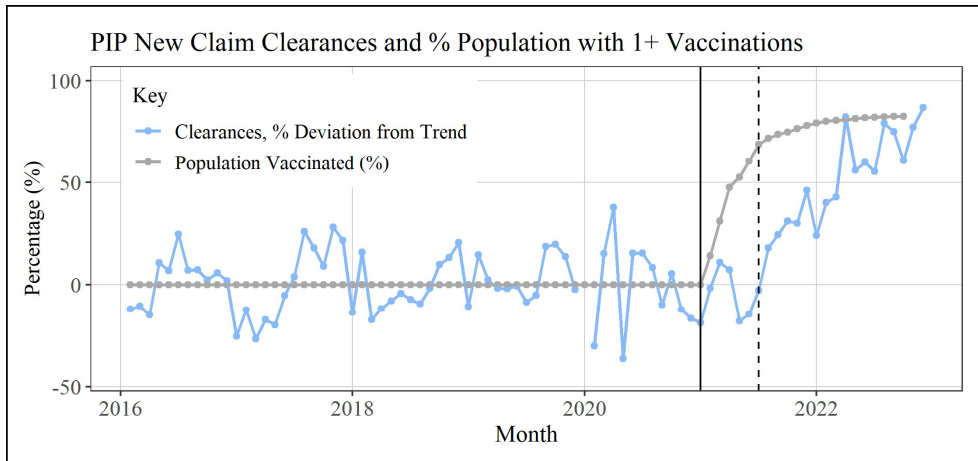


Figure 17 - Monthly PIP new claim clearances from 2016 to 2023 (blue) and % of UK population that had been vaccinated as of that month (grey). Source: Stat-Xplore (PIP clearances), <https://covid.ourworldindata.org/data/ovid-covid-data.csv> (vaccination data).

The rising disability rates have mostly been ignored by the mainstream media, as well as academic and government analysts, but at times when it is addressed, it is commonly argued that the rising disability rates are due to the long-term effect of COVID-19 infection itself. Indeed, COVID-19 has been known to cause a condition characterized by long-standing fatigue and a range of other symptoms long after the virus has been cleared, a condition usually referred to as “long COVID”. Scientists still aren’t certain whether the condition is due to latent infection, impaired detoxification of the Spike protein, or some other mechanism, but the condition appears to be autoimmune in nature. It is well known that infections can trigger autoimmunity, so this hypothesis is worth addressing.

Trends related to COVID-19 ICU patients and monthly vaccine doses given (population adjusted) have been merged below for comparison (Figure 18). Patients in the ICU with COVID-19 (adjusted for population) was used, as ICU rates will more closely track disease severity, a metric which has been correlated with higher risk of long-term sequelae (i.e., “long COVID”).

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9970656/>

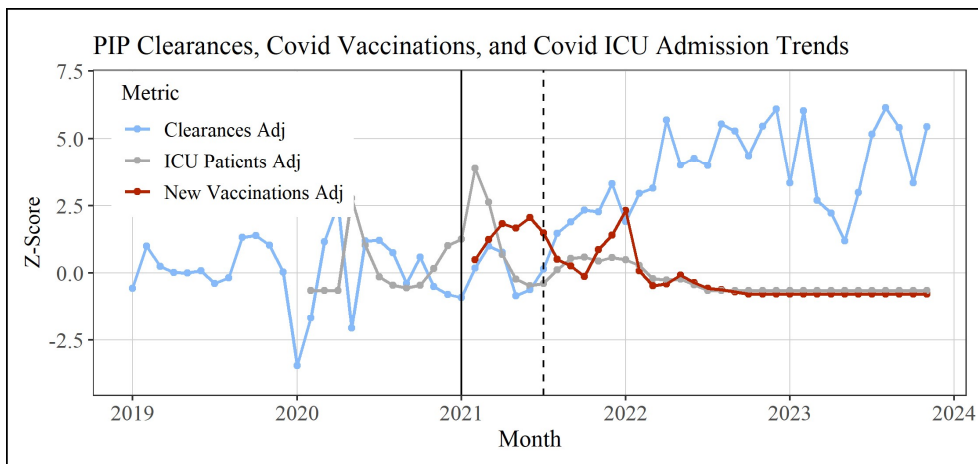


Figure 18 – Z-Scores for monthly PIP new claim clearances (based on 2016 to 2019 data), population-adjusted monthly vaccine doses administered, and population-adjusted number of COVID-19 ICU patients. Source: Stat-Xplore, 2024.

Note that Z-scores for PIP clearances are calculated based on the mean and standard deviation of 2016 – 2019 data (inclusive), whereas the Z-score for the other two metrics was based on the entire time period where data for that metric was available.

Whether or not the rise in total clearances better tracks severe COVID-19 cases or vaccination is unclear, due to the unknown time span between start of symptoms and date of clearance for most claimants. We could attempt to make inferences based on what we know about end-to-end clearance times for that particular month, but we do not have information as to the time people typically wait after symptoms start before applying for PIP. Despite both the Delta variant surge and the booster campaign having dwindled by early 2022, the new claims rates continue at a significantly elevated level.

4. Discussion

There are some caveats to consider for this analysis. According to the DWP: “Operational measures implemented in late March 2020 in response to COVID-19 included the suspension of routine re-assessments and reviews of disability benefits i.e., DLA to PIP reassessments and routine award reviews for those already claiming PIP.” This indicates that some people may have been encouraged to continue their PIP payments after their disability had resolved because award reviews were being suspended. Furthermore, during the beginning of the pandemic in 2020, existing awards due to expire were automatically extended to ensure continuity of financial support. This would only affect the overall monthly caseload, but would not be relevant when looking at new registration or clearances for new claims.

Another aspect to consider is that it is possible for a new claim to be filed by a claimant who previously had PIP if their payments had fully expired before they applied again. This could influence clearance rates if many people filed new claims due to a continuation of symptoms, but would not explain the increase in caseload.

Although this analysis attempts to examine temporal association, there is some variability to be expected in the time between the date of clearance and the start of symptoms. This may vary due to:

- Processing time by the DWP which can be influenced by both staffing and caseload
- Delays in documenting evidence from the medical system and the claimant’s doctor(s)
- Variability in how long after symptoms start or worsen and when the claimant decides to register. Disability with episodic or intermittent symptoms may be harder to identify as a chronic condition.

5. Concluding remarks

In this report we examined the trends in the UK’s Personal Independence Payment data from 2016 to late 2023. Even after adjusting for population growth, we see a clear increase in PIP cases with entitlement, registrations, and new claim clearances starting at the beginning of 2021, and which has been sustained at an alarming rate as of October 2023. While the causative factor cannot be concluded using these data, the breadth and magnitude of the disability is significant by any measure, and cannot be readily explained by factors related to lockdown. Whether these conditions are sequelae of COVID-19, adverse effects of the COVID-19 vaccine, or something else entirely, it is clear these health conditions will have wide reaching effects on the economy, public health, and quality of life. These trends need to be carefully examined to determine the causative factor so that steps can be taken to develop effective treatments and to prevent further harm.