

## GP workforce, analysed by deprivation.

Further analysis required on the 2019 GP workforce survey by Carey Lunan and Stewart Mercer on 29/10/21

Accepted as an Information Request, and completed on 07/12/21 by Aidan Morrison of Public Health Scotland (PHS)

This secondary analysis explores the Headcounts and Whole Time Equivalents of general practice staff reported in the 2019 GP Workforce Survey, broken down by deprivation quartile

Data sources used:

- General Practice Workforce Survey 2019;
- National Primary Care Clinician Database (NPCCD);
- Community Health Index (CHI) Database;
- Scottish Index of Multiple Deprivation 2016 (SIMD)

Considers GP, nurse, other clinical, and non-clinical staff

In calculating deprivation<sup>1</sup>:

- Practices were assigned a Deprivation Quartile by ranking the practices primarily on the percent of the list size living within the top 15% most deprived datazones (the same methodology used to define the 'Deep End' practices) and secondarily on the average SIMD rank of the list size
- All practices in Scotland were ranked according to the above criteria and split into Quartiles based on an equal share of the proportion of the population (25% within each quartile)
- Data were then filtered to include only the 403 practices with WTE data from the 2019 GP workforce survey

**This shows a general trend towards fewer clinical staff in deprived practices** – also represented on the attached slides

We never had information before on staff other than GPs so this adds a new dimension to the inverse care law.

We know from other data that patients in deprived areas consult more frequently, and that there is a large level of unmet need as indicated by the higher levels of complex multimorbidity, mental health problems, premature mortality etc. so this has additional workforce information has important implications

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<sup>1</sup> Additional detail on methodology used:

Population weighted deprivation quartiles:

1. Using the CHI database, a table with the following variables was calculated:

GP Practice	Proportion of Patients in 15% top deprived datazones	Average patient SIMD rank	List Size
...	...	...	...

2. The table was then sorted primarily by the *Proportion of Patients in the most deprived areas*, and secondarily on the *average patient SIMD rank*. This was to distinguish between practices which had the same proportion of patients living in the most deprived areas. Therefore, the least deprived practices were at the top of the table, and the most deprived at the bottom.

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3. A rolling *cumulative list size* was calculated, along with the *cumulative list size as a percent of the entire Scottish list size*.



<i>GP Practice</i>	<i>Proportion of Patients in 15% top deprived datazones</i>	<i>Average patient SIMD rank</i>	<i>List Size</i>	<i>Cumulative List Size</i>	<i>Cumulative List Size as a Percent of the Scottish List Size</i>
...	...	...	...	...	...

4. The Deprivation Quartile was then calculated from this final column, *the Cumulative List Size as a Percent of the Scottish List Size*.

I.e. if the value of the cumulative percent was under 25%, the practice was placed in Deprivation Quartile 1 and so on.

This methodology ensures a similar proportion of the patient population to fall in each deprivation quartile.