

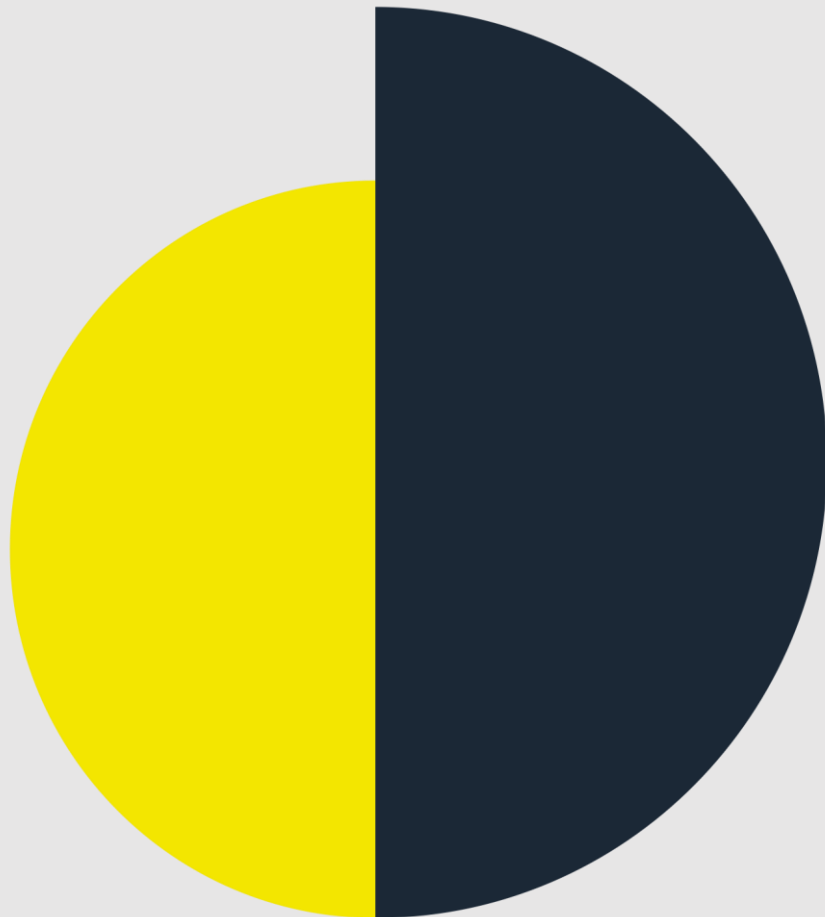
April 29, 2020

Key workers in the UK

Estimating the number of key workers in the UK by critical sector, wage level, region, occupation and sector of employment

Nick Spyropoulos

Sara Laabid



April 29, 2020

Key workers in the UK

Estimating the number of key workers in the UK by critical sector, wage level, region, occupation and sector of employment

Nick Spyropoulos

Sara Laabid

Summary

Using UK Labour Force Survey data, we estimate that almost 1 in 3 workers in the UK are classified as key workers, corresponding to 9.3 million workers in total. The largest category of key workers works in health and social care (3 million), followed by education and childcare (2 million) and food and other necessity goods (1.2 million).

The majority of public sector employees are classified as key workers, while this is true for only 1 in 5 private sector workers.

Key workers are under-represented amongst both the bottom 20% and top 20% of wage earners, and they tend to occupy the central portion of the wage distribution. That said, there are substantial differences between sectors, with health and social care workers much more likely to occupy the bottom 20% and 40% of the wage distribution.

Background

The Cabinet Office and the Department for Education have published a [list of key workers](#) covering 8 critical sectors (health and social care, education and childcare, key public services, local and national government, food and other necessity goods, public safety and national security, transport, and utilities, communication and financial services). The definition of key workers provided in this list is sometimes wide and imprecise, making it difficult to accurately determine the number of key workers in the UK. Based on this list, the [Institute for Fiscal Studies](#) estimated the number of key workers in the UK to be 7.1 million, corresponding to 22% of the workforce, noting that this estimate covers most but not all critical sectors as defined by the government.

Methodology

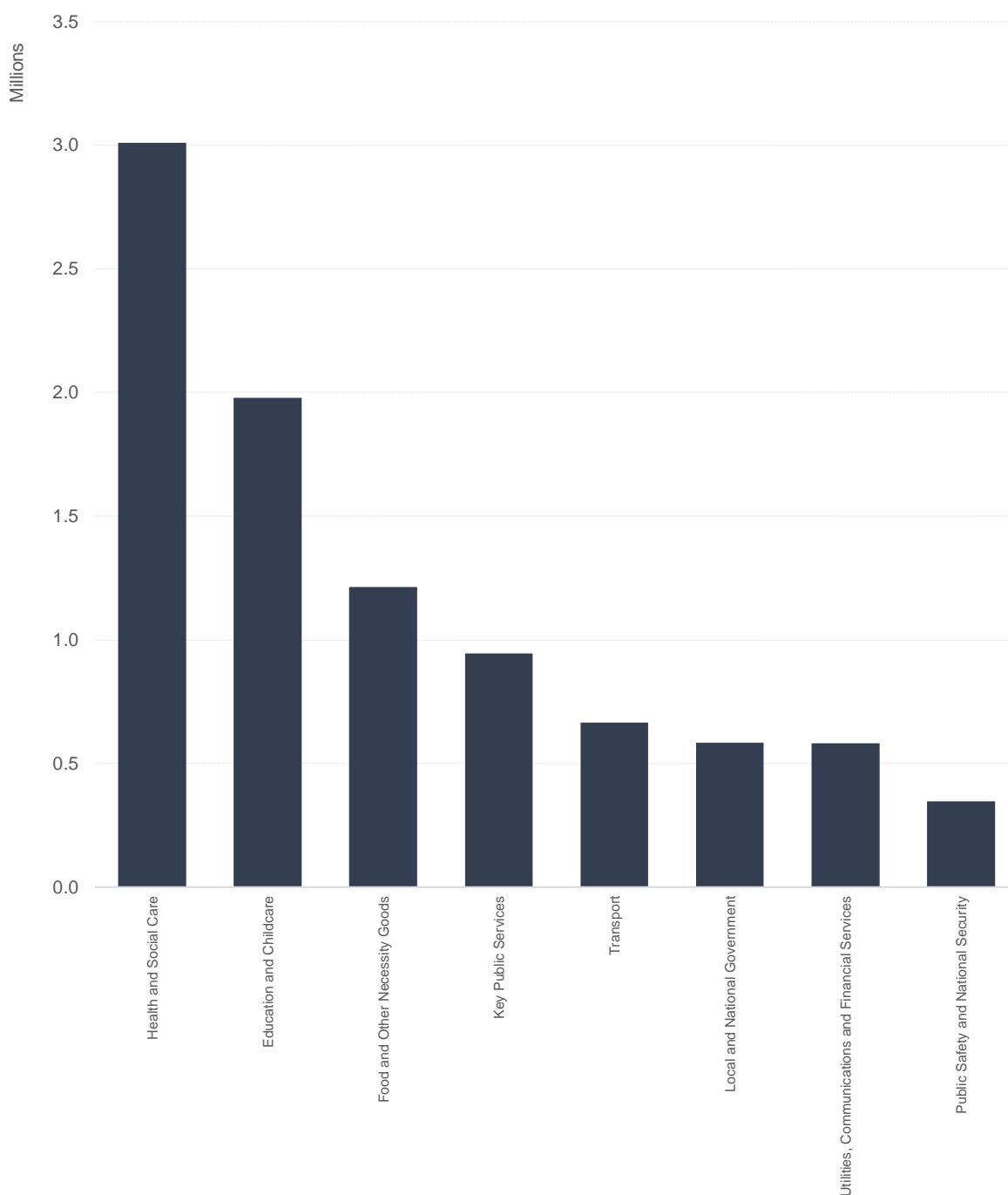
Our approach consisted of the following steps:

- We used a detailed classification of 367 occupations to identify key workers based on the government's definition. In most cases, identifying key workers based on the occupational classification was straightforward. In cases where the government's definition is vague (for example when it mentions workers responsible for the 'provision of other key goods' or workers in 'other national security roles'), we applied judgement to determine whether certain occupations would fall within the government's definition. Finally, when the government refers to key workers only as the workers within an occupation that are essential to the provision of a service (such as in the judiciary), we assume that 50% of workers within those occupations are key workers.
- We combined our classification of key workers with individual-level Labour Force Survey data containing detailed information on workers' industry, occupation, region, and wages. We subsequently utilised the combined dataset to generate estimates of the number of key workers by critical sector, wage quintile, region, occupation and sector of employment.
- Our focus is exclusively on workers' main jobs, and we do not attempt to identify those who could be key workers in their additional jobs.

Results

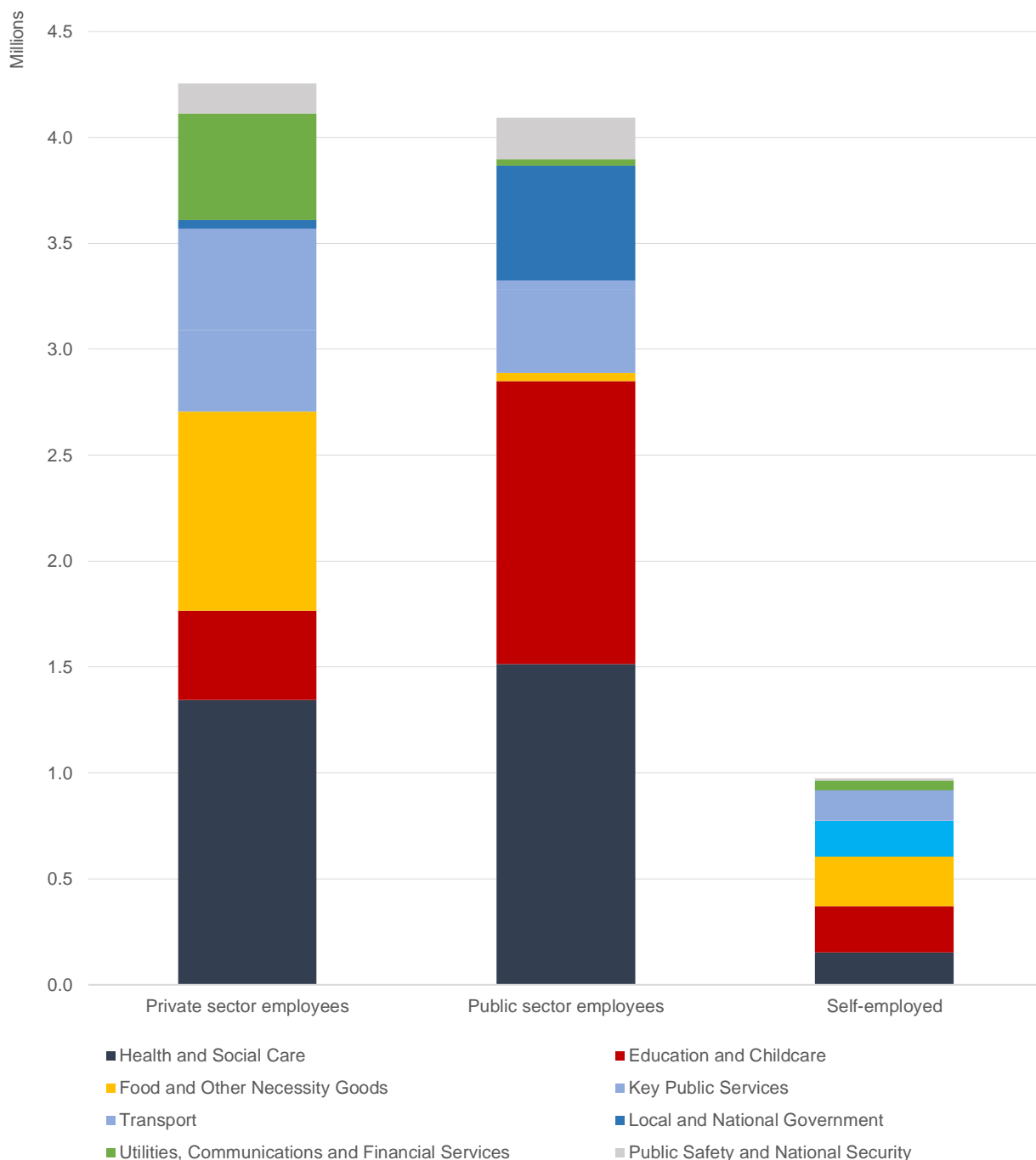
We estimate the number of key workers to be 9.3 million, corresponding to almost 1 in 3 workers in the UK, or 1 person in every 7. We estimate the health and social care sector to be the largest critical sector in the UK with 3 million key workers, followed by the education and childcare sector (2 million key workers) and the food and other necessity goods sector (1.2 million key workers).

Number of key workers in the UK, by critical sector



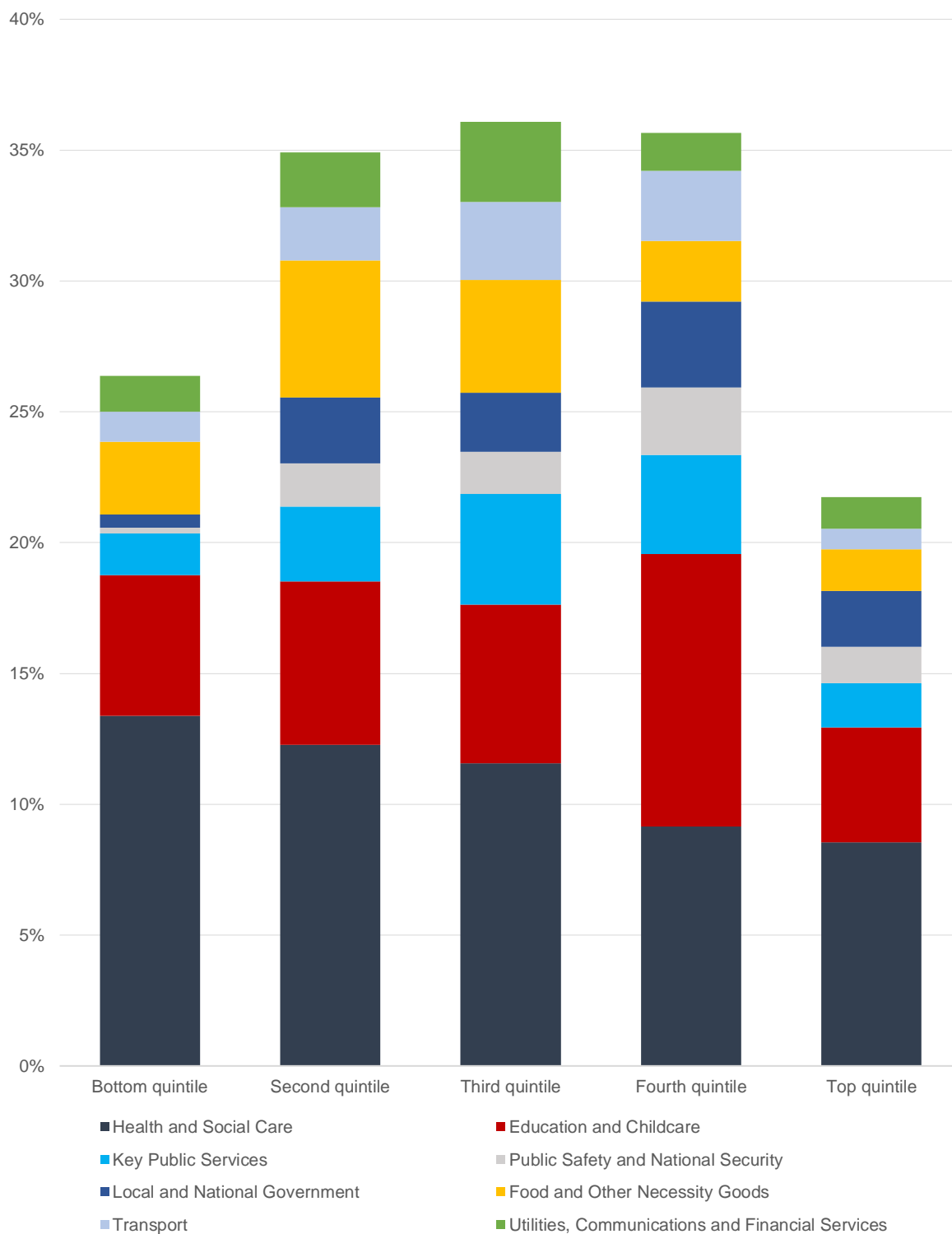
The majority of workers in the public sector are classified as key workers, while this is true for only 1 in 5 private sector workers. In total, there are around 4.1 million key workers in the public sector and 5.2 million key workers in the private sector, of whom close to 1 million are self-employed.

Number of key workers, by sector



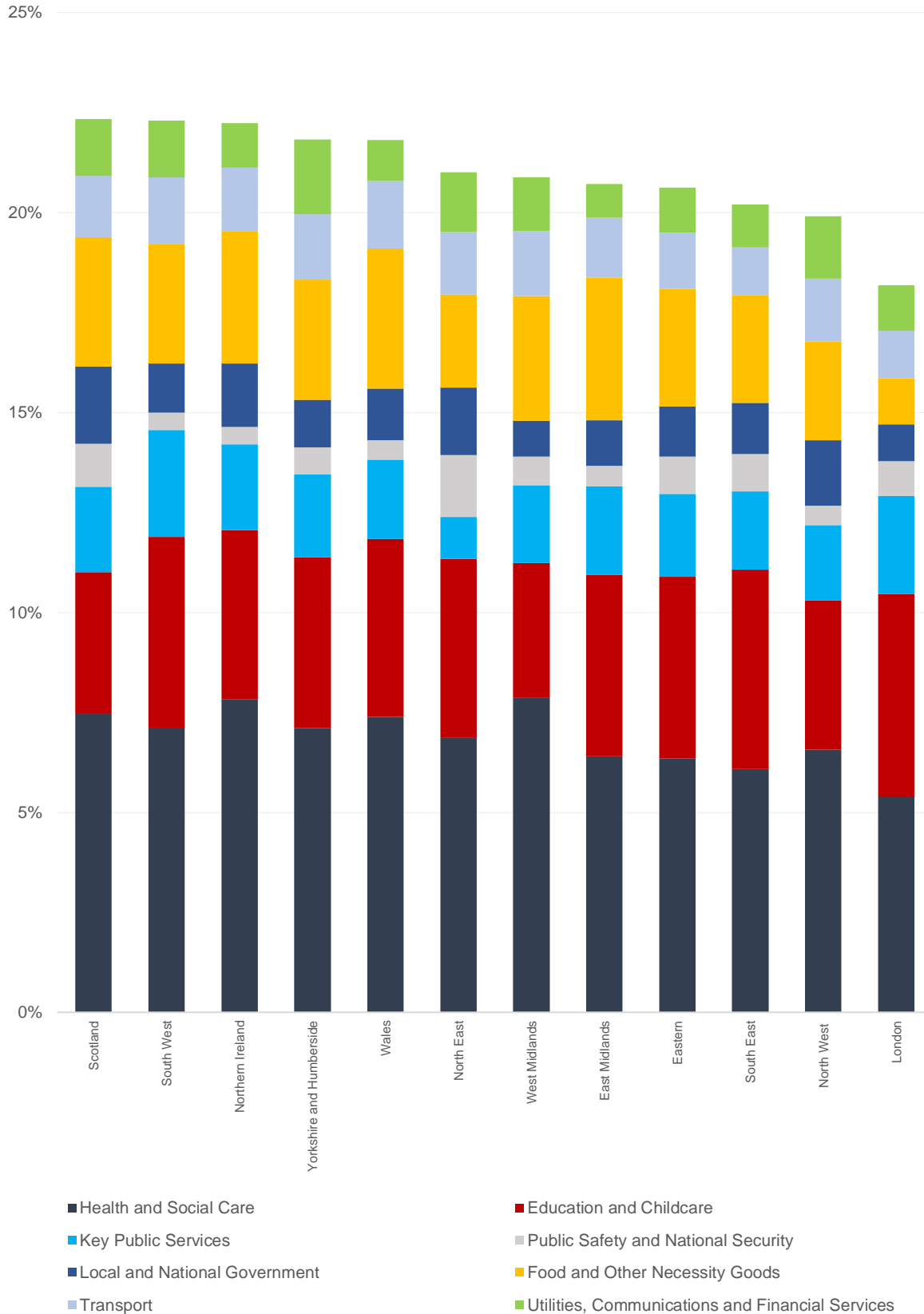
Key workers are concentrated towards the centre of the wage distribution, and they are underrepresented amongst both the bottom and top 20% of wage earners. That said, there are substantial differences between sectors – for example, most health and social care workers occupy the bottom wage quintile, followed by workers in the 2nd and 3rd quintiles.

Percentage of key workers, by wage level



In all UK countries and English regions, key workers make up around 20% of the working age population. Scotland has the most key workers as a percentage of its working age population, and London the fewest.

Key workers as % of working age population, by region



Over half of key workers are in a professional or service occupation. Although key workers can be found across many occupations, workers in each critical sector tend to be concentrated in just a few occupations. For example, nearly 90% of health and social care workers are in a professional or service occupation, while over 60% of key workers in the food and other necessity goods sector are in elementary or managerial occupations.

Number of key workers, by occupation

