

# Q-STEP SUMMER INTERNSHIPS 2021

## policy@manchester - Health Inequalities

### Organisation and Team

University of Manchester: [policy@manchester](mailto:policy@manchester)

John Owens Building. The University of Manchester.

### Selection Method

Written CV & cover letter followed by an interview

### Application Criteria

#### Essential:

- An interest in public policy, improving inequalities in health, and using data to inform health policy.
- A willingness in developing and applying statistical techniques using data analysis and data visualisation software (one or more of Python, R, Excel, Power BI, Tableau).

#### Desirable:

- Basic statistical understanding and experience in using statistical and data visualisation software (Python, R, Excel, Power BI, Tableau).

### Keywords

Health inequalities, public health, gender, deprivation, ethnicity, protected characteristics, statistics, NHS.

### Support and training

Training in statistical and data visualisation software.

### Practical Considerations

8 week internship

### Project Outline

A Public Health England (PHE) publication (August 2020) on disparities in the risk and outcomes from the COVID-19 virus confirmed the replication of existing health inequalities, and in many cases, increased them. Factors found to increase inequalities are age, gender, deprivation, and ethnicity. Among people already diagnosed with COVID19, 80 year olds and older are 70 times more likely to die than people aged under 40; males have a higher risk of dying than females; people living in more deprived areas have a higher risk of dying compared to people living in least deprived areas; Black, Asian and Minority Ethnic (BAME) groups also have a higher risk of dying compared to White ethnic groups. Age, gender, and deprivation largely replicate existing inequalities in mortality rates in previous years. However, BAME groups have a higher mortality than White ethnic groups compared to previous years.

Policy@manchester also published blogs highlighting the decreased likelihood of LGBT groups accessing healthcare; as well as Black, Asian and Minority Ethnic (BAME) groups presenting later, at a more advanced stage of cancer. Furthermore, access to digital healthcare is also lower amongst people in manual occupations and those who are unemployed due to lower rates of smartphone use (67% in lower (eg. DE) socioeconomic groups compared to 86% in higher (eg. AB) socioeconomic groups).

Successful applicants for the internship will, with the support of the policy@manchester team, acquire an awareness and understanding in health inequalities and will also obtain, analyse and present various factors which exacerbate health inequalities. They will apply a combination of data scoping, data cleaning and processing, and data analysis methods, and present the data using appropriate data visualisation tools. The project will be undertaken using various statistical and data visualisation software (Python, R, Excel, Power BI, and Tableau).