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# Challenges and lessons for resilience from the UK covid experience

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# UK Context

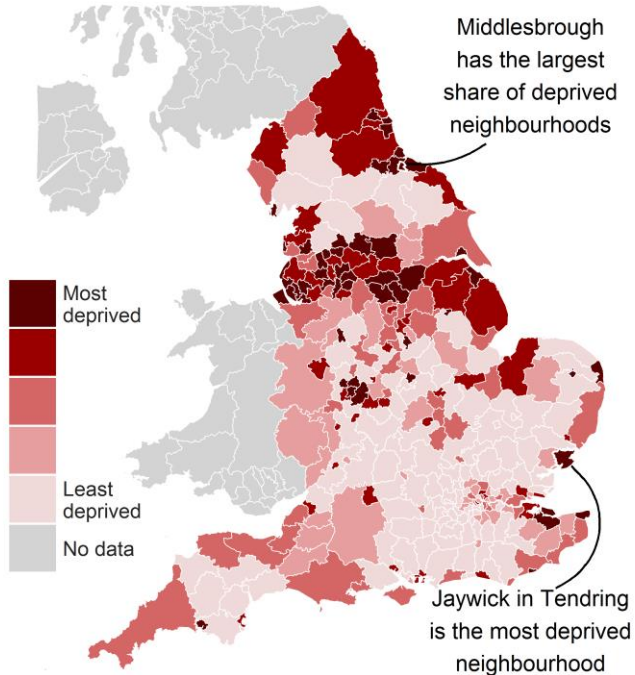
- Four countries with devolved governments
- Population 66million
- Ethnically diverse
- Brexit – intense political focus during 2019 culminating in change of government
- Withdrawal from EU Jan 2020



# Health Inequalities

## Deprivation across England

Indices of multiple deprivation 2019



Source: MHCLG

BBC

- Life expectancy
- Healthy life expectancy
- Avoidable mortality
- Infant mortality
- Mental ill health
- Access to care and experience of care
- Low quality crowded housing

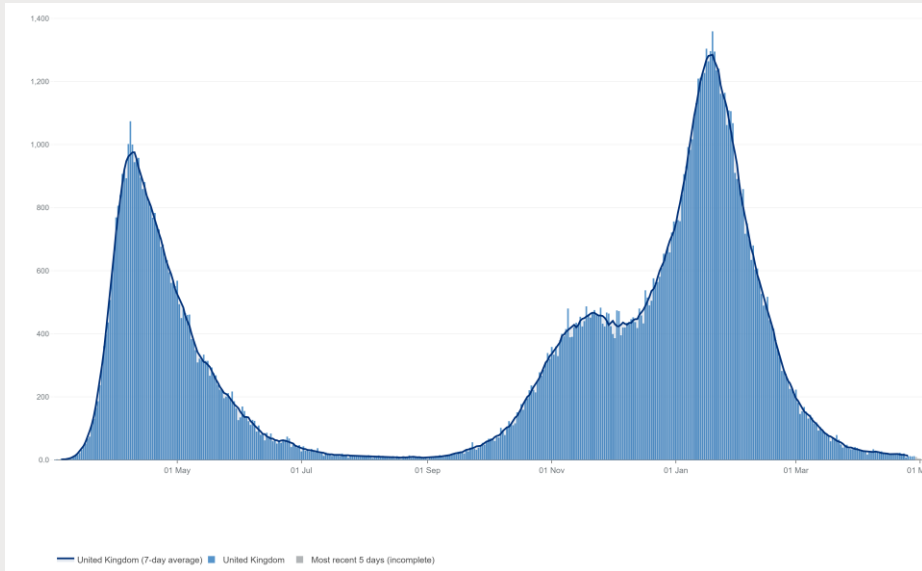


# National Health Service

- Care is free at the point of service, funded by taxation
- Biggest employer in Europe
- Highly rated for safety and efficiency
- Low number of ICU beds – 7 per 100k compared to Germany 33 per 100k
- Longstanding shortage of 40,000 nursing staff
- Decade of austerity from 2012 reduced budget by £1 billion, downgraded public health infrastructure and leadership, and local services

# COVID experience

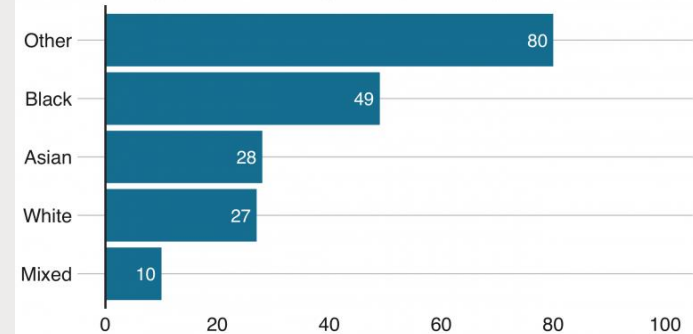
Long societal shut down and 3<sup>rd</sup> highest death rate in the world  
Total deaths >127,000



In deprived areas people are 4 times more likely to die than the least deprived areas

## Hospital deaths by ethnicity

Per 100,000 population in England up to 21 Apr



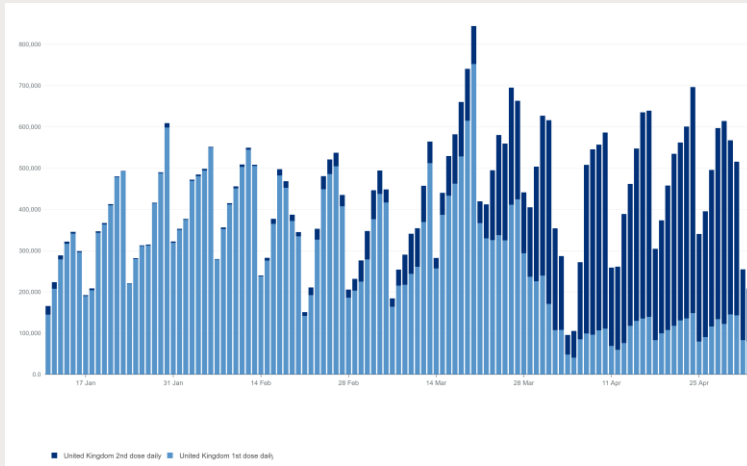
Ethnicity of 10% of victims unknown

Source: NHS Digital and 2011 Census

# Vaccination programme success



Margaret Keenan, 91 years old, became the first person in the world to be vaccinated on December 8<sup>th</sup>, 2020



Public Health England

COVID-19 cases and deaths reported on Tuesday 04 May across the UK

**1,946** new positive cases

**4** deaths within 28 days of a positive test

A total of **34,667,904** people have now received the first dose of a vaccine

**15,630,007** people have now received the second dose of a vaccine

Coronavirus (COVID-19)

More info: [coronavirus.data.gov.uk](https://coronavirus.data.gov.uk)

# Covid response

- Central co-ordination through series of Special Advisory Groups for Emergencies SAGE – mostly modellers and epidemiologists, few with public health experience
- Responses slow, confused and ineffective –
  - Reliance on social responsibility and voluntary action
  - Reluctance to develop central policy responses
  - Lack of co-ordination across 4 countries
  - Lack of protection for staff
  - Chaotic attempts to develop testing, tracing, isolation
  - Later responses contradictory, constantly changing, lacking evidence

# Covid response

- 7 emergency Nightingale hospitals – London Excel centre – 4k ICU beds – built in 9 days – lack of staffing – most closed
- Hospital wards turned into extra ICU capacity
- Staff redeployed, staff-pt ratios decreased, tasks/teams reconfigured
- Other care suspended – long waiting lists
- Acceptance of remote consultations
- Vaccines -
  - Investment in development
  - Early approval and ordering
  - Diversity – type and supplier
  - 2<sup>nd</sup> dose delay to maximise number receiving 1<sup>st</sup> dose



# Lessons for Resilient Health Care

- Confirmation of core concepts
  - Policy “work as imagined”
  - Hindsight bias
  - Effect of uncertainty and complexity on decision making - policy trial and error, trade offs, value judgements
  - Scales of activity and resilience interact – situated, structural, systemic
  - Outcomes emergent and unpredictable – eg primary care availability,

# Lessons for Resilient Healthcare

- Highlighted difficulty and importance of
  - Identifying and framing the problem correctly
  - Knowing who to listen to - diversity of expert views
  - Need to construct the ability to anticipate, respond, monitor, learn
  - Human ability to co-ordinate and organise socially – not only technical problem solving – need for a fifth potential – co-ordination
  - Mitigating adverse effects of trade-off decisions – eg staff well being
  - Understanding the impact of system degradation, drift into danger zone not clear in the absence of disasters

# Lessons for Resilient Health Care

- Recovery – NHS waiting list hits 14 year record high of **4.7 million people**
  - > £8 billion investment in expansion of services
  - Targets for waiting lists
  - Staff recruitment drive

Thank you

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