

The NHS crisis is not an equal crisis

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The NHS is in crisis. [1] Primary care is creaking at the seams [2]. More patients are on NHS waiting lists than ever before in England and Wales [3] [4]. Compared to August 2019, average waiting times have almost doubled, and the number of people waiting at least a year is around 300 times higher [3]. As we head towards winter, another concern is a repeat of last year's emergency care crisis [5]. In December 2022, the average ambulance response time for category 2 calls (which include chest pain and suspected stroke) was 1 hour 32 minutes across England— more than five times the target of 18 minutes [6]. The President of the Royal College of Emergency Medicine estimated that there were 500 excess deaths per week last December because of delays in emergency care [7].

However, the NHS crisis is not an equal crisis. Those from deprived communities are overall in poorer health, and therefore require more access to health and social care services [8]. For example, admissions related to cardiovascular disease, coronary heart disease, respiratory disease, and mental health are substantially more common among those from more deprived communities compared to the least deprived [9]. As such, an overburdened NHS, and any healthcare delays will disproportionately affect those who need access to healthcare more. There is also inequality in demand for emergency care, with emergency department attendances for those in the most deprived areas of England twice as high as those in the least deprived areas, [10] meaning that any breakdown in emergency services affects those from most deprived communities the most.

However, there are inequalities beyond the demand for care. For example, those living in the most deprived communities are twice as likely as those in the least deprived communities to wait at least a year for treatment [8]. Patients from more deprived areas are more likely to need to re-attend the emergency department for the same problem within a week.[11] Since 2015, a small but growing gap has also been emerging in terms of how long people have to wait for emergency care, with those in the most deprived areas attending the emergency department in England less likely to be seen within the four-hour target.[12] Most concerning, the likelihood of dying due to delays in emergency care is higher for those from more deprived backgrounds.[13]

Furthermore, inequalities by ethnicity in emergency care may be exacerbated by the crisis, since those from non-white ethnic minority backgrounds have higher attendance rates at emergency departments compared to those from white backgrounds.[14] Of course, this is at least partly due to the fact that individuals from many ethnic minority backgrounds are also more likely live in more deprived neighbourhoods.[15] In routine care, more operations, tests and consultations were “lost” for those in the most deprived groups and for some ethnic minority groups for certain procedures since the start of the COVID-19 pandemic (for

example, Black patients have than expected rates of access to and use of cardiovascular care) [16].

In the absence of a change in policy, the ongoing NHS crisis will keep hitting those in more deprived areas the hardest, exacerbating the widening health inequalities from the pandemic and over a decade of austerity [17]. An increasing number of those able to afford private healthcare are doing so, something that serves only to widen health inequalities further. [18]

We are trapped in a vicious circle. If people from more deprived backgrounds have a greater need for emergency care, and if they have to wait longer to receive that care, then they are more likely to have poorer outcomes post care (in terms of disability or recovery), are more likely to need emergency care in the future, and more likely to experience negative socio-economic outcomes (like unemployment or work absenteeism).[13] On the other hand, unless we can tackle socio-economic inequalities more broadly, pressure on the NHS will only accelerate over the coming years.[19]

To escape this vicious circle requires a complex, coordinated effort at a number of levels. There are some specific and short term interventions that can help as we head into winter—for example, reducing the incidence of respiratory diseases (particularly those caught in health care settings). These can help reduce winter pressure by reducing demand for respiratory illness-related health care, rates of which are higher among those from more deprived communities [21][22]. Such interventions could include requiring well-fitting FFP2 masks to be worn in health care settings by staff, visitors and outpatients; supporting staff to test for covid and stay home if ill with covid, flu or other respiratory viruses; and investing in adequate ventilation in health and social care settings to reduce spread of airborne respiratory illnesses [20].

At the more fundamental level, we cannot escape the fact that the NHS is significantly underfunded and under-resourced. Analysis suggests that the UK has fewer doctors and nurses, less medical equipment and fewer beds per capita, and higher preventable avoidable mortality rates than comparable countries [23]. . As well as adding capacity to the NHS (both in workforce and infrastructure), we need to reduce demand, which requires long term investment in public health and improving housing, sick pay, education, and local environments to address the social determinants of health.

The NHS crisis affects us all, but some are suffering far more than others.

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1. Cooksley T, Clarke S, Dean J, Hawthorne K, James A, Tzortziou-Brown V, Boyle A. NHS crisis: rebuilding the NHS needs urgent action. *BMJ*. 2023 Jan 3;380:1. doi: 10.1136/bmj.p1. PMID: 36596578. (accessed 20 Oct 2023)
2. Spooner S, van Marwijk T, Mcdermott I. GP crisis: how did things go so wrong, and what needs to change? *The Conversation*. 20th June 2023. Available at: <https://theconversation.com/gp-crisis-how-did-things-go-so-wrong-and-what-needs-to-change-208197> (accessed 20 Oct 2023)
3. British Medical Association. NHS backlog data analysis. Updated October 2023. <https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/nhs-backlog-data-analysis> (accessed 20 Oct 2023)
4. Mainwood P. This winter in the UK - what to expect. Mean squared Error (Blog.) Available at: <https://paulmainwood.substack.com/p/this-winter-in-the-uk-what-to-expect> (accessed 6 Nov 2023).
5. Boyle A. Unprecedented? The NHS crisis in emergency care was entirely predictable. *BMJ*. 2023 Jan 9;380:46. doi: 10.1136/bmj.p46. PMID: 36623878.
6. NHS England. Ambulance Quality Indicators Data 2022-23. Available at: <https://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/ambulance-quality-indicators-data-2022-23/> (accessed 20 Oct 2023)
7. PA Media. A&E delays causing up to 500 deaths a week, says senior. *The Guardian*. 1 Jan 2023. Available at: <https://www.theguardian.com/society/2023/jan/01/up-to-500-deaths-a-week-due-to-ae-delays-says-senior-medic> (accessed 6 Nov 2023)
8. Jeffries D. Unpicking the inequalities in the elective backlogs in England. Kings Fund. Available at: <https://www.kingsfund.org.uk/publications/unpicking-inequalities-elective-backlogs-england> (accessed 20 Oct 2023)
9. Asaria M, Doran T, Cookson R. The costs of inequality: whole-population modelling study of lifetime inpatient hospital costs in the English National Health Service by level of neighbourhood deprivation. *J Epidemiol Community Health*. 2016Oct;70(10):990-6. doi: 10.1136/jech-2016-207447. Epub 2016 May 17. PMID:27189975; PMCID: PMC5036206.
10. McCarney G, Hart C, Watt G. How can socioeconomic inequalities in hospital admissions be explained? A cohort study. *BMJ Open*. 2013 Aug 30;3(8):e002433. doi: 10.1136/bmjopen-2012-002433. PMID: 23996814; PMCID: PMC3758975.
11. Turner AJ, Francetic I, Watkinson R, Gillibrand S, Sutton M. Socioeconomic inequality in access to timely and appropriate care in emergency departments. *J Health Econ*. 2022 Sep;85:102668. doi: 10.1016/j.jhealeco.2022.102668. Epub 2022 Aug 3. PMID: 35964420.
12. Nuffield Trust. Poorest get worse quality of NHS care in England, new research finds. Available at: <https://www.nuffieldtrust.org.uk/news-item/poorest-get-worse-quality-of-nhs-care-in-england-new-research-finds> (Accessed 20 Jan 2023).
13. Jones S, Moulton C, Swift S, Molyneux P, Black S, Mason N, Oakley R, Mann C. Association between delays to patient admission from the emergency department and all-cause 30-day mortality. *Emerg Med J*. 2022 Mar;39(3):168-173. doi: 10.1136/emered-2021-211572. Epub 2022 Jan 18. PMID: 35042695.
14. NHS England. Hospital Accident & Emergency Activity 2021-22. Summary Reports: IMD and Ethnicity. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-accident--emergency-activity/2021-22/imd-and-ethnicity> (Accessed 20 Oct 2023).
15. UK Government. People living in deprived neighbourhoods. Published 16 June 2020. Available at: <https://www.ethnicity-facts-figures.service.gov.uk/uk-population->

- [by-ethnicity/demographics/people-living-in-deprived-neighbourhoods/latest#overall-most-deprived-10-of-neighbourhoods-by-ethnicity](#) (Accessed 20 Oct 2023).
16. Nuffield Trust. The elective care backlog and ethnicity. # November 202. Available at: <https://www.nuffieldtrust.org.uk/research/the-elective-care-backlog-and-ethnicity> (Accessed 20 October 2023).
 17. Williams S, McKee M. How austerity made the UK more vulnerable to COVID. The Conversation. 27 July 2023. Available at: <https://theconversation.com/how-austerity-made-the-uk-more-vulnerable-to-covid-208240> (Accessed 30 October 2023).
 18. Campbell D. Record rise in people using private healthcare amid NHS frustration. The Guardian. 24 May 2023. Available at: <https://www.theguardian.com/society/2023/may/24/record-rise-in-people-using-private-healthcare-amid-nhs-frustration> (accessed 6 Nov 2023)
 19. Pagel C. Health Care Isn't the Key to a Healthy Population. Wired. 27 June 2023. Available at: <https://www.wired.com/story/christina-pagel-uk-nhs-social-prescriptions-health-care/> (accessed 6 Nov 2023).
 20. UKHSA (UK Government) Ventilation to reduce the spread of respiratory infections, including COVID-19. Available at: <https://www.gov.uk/guidance/ventilation-to-reduce-the-spread-of-respiratory-infections-including-covid-19> (Accessed 30 October 2023).
 21. Hungerford D, Ibarz-Pavon A, Cleary P, French N. Influenza-associated hospitalisation, vaccine uptake and socioeconomic deprivation in an English city region: an ecological study. *BMJ open*. 2018 Dec 1;8(12):e023275.
 22. Raleigh VS. Ethnic differences in covid-19 death rates. *BMJ*. 2022 Feb 23;376.
 23. Anandaciva S. Kings Fund: How does the NHS compare to the health care systems of other countries? 26th June 2023. Available at: <https://www.kingsfund.org.uk/publications/nhs-compare-health-care-systems-other-countries> (Accessed 30 October 2023).