Inequality and the NHS hospital crisis: why social disadvantage needs attention

Social inequality plays a pivotal role in generating the emergency hospital admissions and bed-blocking that are paralysing NHS hospitals. To curb growth in emergency admissions, hospital staff must do more to help coordinate follow-up care for socially disadvantaged patients.

The rise and rise of emergency admissions

Emergency hospital admission rates have been rising for decades in all high income countries (Jones, 2011), leading to perennial 'crises' of emergency medicine (Institute of Medicine Committee on the Future of Emergency Care in the US Health System, 2006). Current overcrowding of English accident and emergency departments is generating ongoing media interest, centring around breaches of a national target for 4-hour patient waiting, as is the follow-on problem of 'bed-blocking' by older patients with no appropriate care at home as a result of cuts in adult social care budgets. Examining the pivotal but under-appreciated role that social deprivation plays in generating emergency hospital admissions will lead to a better understanding of these twin problems and may uncover novel solutions.

Some of the pressure from increased accident and emergency attendance is the result of patients bypassing primary care services for more immediate management (Cowling et al, 2014). Less well known, however, is the greater increase in emergency admission of patients for inpatient hospital treatment (Blunt, 2013). According to the National Audit Office, the 'conversion rate' from accident and emergency attendance to hospital admission rose from 19% to 26% from 2002–3 to 2012–13, and emergency admissions accounted for 67% of hospital bed days in 2012–13 at a cost of £12.5 billion (Morse, 2013).

Potentially avoidable admissions

Some of this growth in emergency hospital admissions is an unfortunate and unavoidable side effect of social and medical progress that allows us to live longer into old age. However, some of the growth is potentially avoidable by improved ambulatory care outside the emergency hospital system. Rates of emergency hospitalization for chronic conditions such as cardiovascular and respiratory diseases, diabetes and dementia are sensitive to the quality of ambulatory care (Purdey and Huntley, 2013).

The social gradient in health emergencies

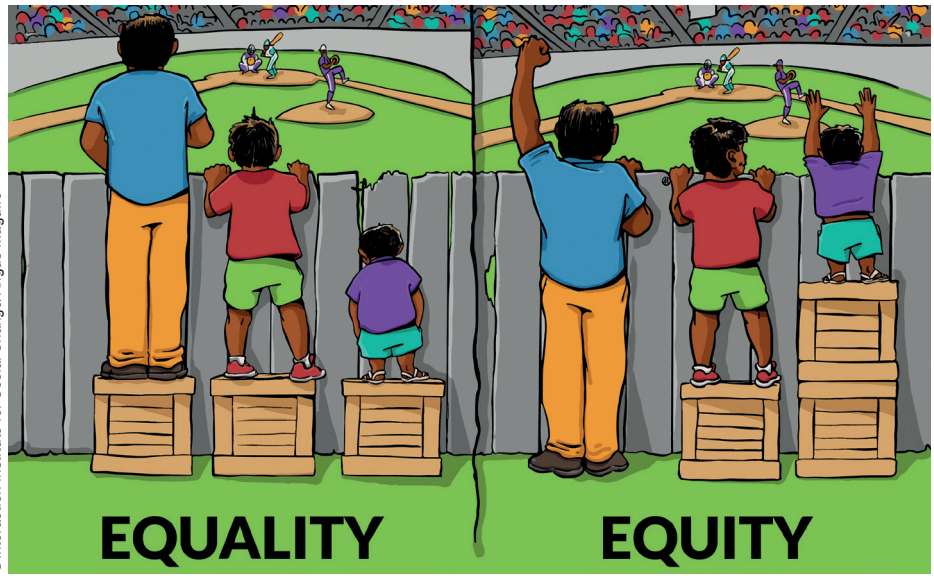
People living in the most deprived fifth of neighbourhoods in England suffer nearly 2.5 times as many potentially avoidable emergency admissions for chronic conditions as people living in the least deprived fifth (Asaria et al, 2016). This phenomenon is not unique to the poorest in society – the middle fifth of neighbourhoods experience 40% more emergency admissions than the richest fifth. There is a 'social gradient' whereby people further down the social spectrum are more likely to suffer an emergency admission at any given age.

People at the top of the social scale are better at caring for themselves – they have access to better information, stronger informal support networks and home environments more conducive to recovery from illness; they also have the 'sharpest elbows' for navigating through the bureaucratic jungle to receive the best care (Cookson et al, 2016b). Proportionately, those lower down the social scale need more support to achieve the same health outcomes. As illustrated in *Figure 1*, equity in health care thus requires 'proportional universalism': not just making the same 'one-size-fits-all' medical services freely available to all on a reactive basis, but making additional investment in the proactive coordination and delivery of ambulatory care in proportion to need to ensure everyone is equally able to make effective use of medical services.

Coordinated care

The paradigm of coordinated care and proactive support for self-care is an attractive

Figure 1. Equality *vs* equity.



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way of reducing emergency admissions. Patient education, rehabilitation programmes and individualized care plans have been tried as ways of encouraging people to better self-care, although the results are patchy (Purdey and Huntley, 2013). Other initiatives such as 'safer, faster, better', the Better Care Fund and the Vanguard sites all seek to improve care coordination although none specifically address the issues of social inequality (Shortell et al, 2015).

Local initiatives in specific disadvantaged groups could be another answer. One promising initiative, for example, is the Kings Health Partners Pathway Homeless Team (2014) which has delivered hospital-based integrated care services for homeless people in London since 2014. Affiliated with the homeless charity, Pathway, this links health care with housing advocacy services, drawing on skills from GPs, nurses, occupational therapists, social workers and mental health practitioners.

Cloud-based information technology may also play a useful role in facilitating coordinated care. For example, Liverpool has piloted a 'delivering assisted living lifestyles at scale' (DALLAS) programme that combines telemonitoring in the home with structured case management and coaching delivered by a multiprofessional support team (Devlin et al, 2016). And in 2015, London started piloting a '111 Patient Relationship Manager' system that shares patients' care planning information with clinicians operating the non-emergency NHS telephone service.

Mirror, mirror on the wall – whose model of care is fairest of all?

Local experimentation of this kind is an excellent opportunity to identify cost-effective ways of reducing hospital admissions among socially disadvantaged patients. But lessons will only be learned if the impacts of initiatives are quantified rigorously, using control groups of similar local areas and paying careful attention to social gradients in hospitalization. NHS officials responsible for planning health services have a statutory duty to consider reducing inequalities in health-care outcomes. To discharge this duty, they need to start monitoring inequalities within local areas and evaluating the impact of local actions on local inequalities. This requires better integration of local patient information between primary, secondary and social care, with specific attention to deprivation.

NHS England has now started producing local indicators of inequality in potentially avoidable emergency hospitalization that could be used routinely to find out whether local initiatives are making a difference to local health inequalities (Cookson et al, 2016a). These indicators show how well each local NHS area is doing at tackling inequality in avoidable admissions compared with other similar NHS areas. Further information including tools for looking at individual areas can be found at www.york.ac.uk/che/research/equity/monitoring/.

Can hospitals afford to ignore health inequality?

During the 2000s, investment in primary care strengthening led to improved outcomes across all socioeconomic groups, particularly among the poorest (Asaria et al, 2016). Although the inequality reductions in potentially avoidable hospitalization and mortality were modest, they can be seen as an achievement against the continuing rise in income inequality during this period.

Today's austere funding climate may encourage clinicians and managers to see investment in coordinated care as unaffordable, and health inequality as a third order concern meriting lip-service only. However, that perception would be a mistake: the truth is that health services cannot afford not to invest in new initiatives for reducing hospital admissions, and in so doing cannot afford to ignore the central role of inequality in driving increased pressures on health service finances. By prioritizing prevention of costly health emergencies linked to social deprivation, costs, quality and equity could all be addressed. **BJHM**

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KEY POINTS

- Emergency admissions and bed-blocking are inextricably linked to social inequality.
- Someone living in the most deprived fifth of neighbourhoods in England is 2.5 times more likely to suffer potentially avoidable emergency hospitalization than someone living in the least deprived fifth, after allowing for age and sex.
- Hospital staff cannot eliminate social inequality, but they can do more to improve follow-up ambulatory care for socially disadvantaged patients at risk of avoidable admission.
- NHS England has published new local equity assurance indicators for clinical commissioning groups that show how well or badly each local NHS area is doing in tackling health inequalities compared with similar local areas.
- By prioritizing prevention of costly health emergencies linked to social deprivation, costs, quality and equity could all be addressed.

Asaria M, Ali S, Doran T et al (2016) How a universal health system reduces inequalities: lessons from England. *J Epidemiol Community Health* **70**(7): 637–643. https://doi.org/10.1136/jech-2015-206742

Blunt I (2013) *Focus on preventable admissions: Trends in emergency admissions for ambulatory care sensitive conditions, 2001 to 2013.* Nuffield Trust, London

Cookson R, Asaria M, Ali S et al (2016a) Health Equity Indicators for the English NHS: a longitudinal whole-population study at the small-area level. *Health Services and Delivery Research* 4.26 https://doi.org/10.3310/hsdr04260

Cookson R, Propper C, Asaria M, Raine R (2016b) Socioeconomic inequalities in health care in England. *Fiscal Studies* **37**(3-4): 371–403. https://doi.org/10.1111/j.1475-5890.2016.12109

Cowling TE, Soljak MA, Bell D, Majeed A (2014) Emergency hospital admissions via accident and emergency departments in England: time trend, conceptual framework and policy implications. *J R Soc Med* **107**(11): 432–438. https://doi.org/10.1177/0141076814542669

Devlin AM, McGee-Lennon M, O'Donnell CA et al; dallas evaluation team (2016) Delivering digital health and well-being at scale: lessons learned during the implementation of the dallas program in the United Kingdom. *J Am Med Inform Assoc* **23**(1): 48–59. https://doi.org/10.1093/jamia/ocv097

Institute of Medicine Committee on the Future of Emergency Care in the US Health System (2006) *Hospital-based emergency care: at the breaking point.* National Academies Press, Washington, DC

Jones R (2011) Bed occupancy: the impact on hospital planning. *British Journal of Healthcare Management* **17**(7): 307–313. https://doi.org/10.12968/bjhc.2011.17.7.307

Kings Health Partners Pathway Homeless Team (2014) *First year report 2014.* Healthcare for Homeless People Pathway, London

Morse A (2013) *Emergency admissions to hospital: managing the demand.* National Audit Office, London

Purdey S, Huntley A (2013) Predicting and preventing avoidable hospital admissions: a review. *J R Coll Physicians Edinb* **43**(4): 340–344. https://doi.org/10.4997/JRCPE.2013.415

Shortell SM, Addicott R, Walsh N, Ham C (2015) The NHS five year forward view: lessons from the United States in developing new care models. *BMJ* **350**: h2005. https://doi.org/10.1136/bmj.h2005