

Healthcare: not sufficiently powerful to correct underlying causes of poor outcomes if delivered too late

Daphne Austin,¹ Greg Fell²

To cite: Austin D, Fell G. Healthcare: not sufficiently powerful to correct underlying causes of poor outcomes if delivered too late. *BMJ Surg Interv Health Technologies* 2020;**2**:e000032. doi:10.1136/bmjst-2020-000032

Received 24 January 2020
Accepted 24 January 2020

The study by Andrea Austin and colleagues, which compares the outcomes of patients with peripheral artery disease in receipt of Medicare and Medicaid with those who only receive Medicare, highlights two important associations between poverty and health.¹ The first is that poverty can have an enduring effect on health outcome. The second is that Tudor Hart's observation in 1971 that 'the availability of good medical care tends to vary inversely with the need for it in the population served' still holds.²

It is well established that health outcomes are closely correlated with socioeconomic status (SES). The reasons why poorer people experience worse health during the course of their lives are complex. For example:

- ▶ Poverty erects educational, cultural, economic and social barriers that prevent individuals and households from adopting healthy lifestyles.
- ▶ Poverty increases occupational and environmental exposure to factors harmful to health.
- ▶ The poor have less resilience to deal with the challenges of life, including illness.

The study's finding that patients with dual eligibility experienced higher mortality and amputation rates compared with 'Medicare only' patients, despite having been matched for both disease stage and treatment, may be surprising, given that the usual explanations for disparities in health outcomes are late presentation and unwarranted variation in healthcare provision.

Such a finding has been observed by others, however. A UK audit, published in January 2020, found that patients who underwent emergency laparotomy had a higher mortality rate if they came from a deprived area even though no differences in the quality of care could be identified and despite the fact that the data had been adjusted to take into account contributory risk factors, although not perfectly.³

These studies add weight to the hypothesis that the effects of poverty are enduring because of harmful developmental programming and epigenetic changes, ongoing detrimental hormonal, immunological and nutritional states and/or other unknown factors. Psychosocial factors such as stress, social isolation and lack of resilience are also likely to exert an influence.

The health trajectory of the poor is not, however, inevitable. Austin *et al* found little difference between the groups at an earlier stage in the disease pathway. This study supports the existing body of evidence that indicates that some of the effects of poverty can be mitigated through early intervention. It would be interesting to know how outcomes varied within the dual-eligible group by comparing those who have had long-term access to Medicare and Medicaid with those who qualified later on in life, having previously had either no insurance, intermittent or good health insurance.

Prior to matching, the dual-eligible group exhibited many of the hallmarks of those coming from a low SES: the group had more comorbidity, were less likely to be prescribed disease appropriate drugs, and presented with greater severity of disease.

All of this leads us back to Tudor Hart's *Inverse Care Law*. While it is true that poor health literacy and health behaviour play a role in people's engagement with healthcare services, there is no doubt that the design of a country's healthcare system either facilitates or deprives/hinders access to some of its population. Obstacles can operate at any level, and even the best designed and funded system is not devoid of them altogether. Inequity, however, is greatest in healthcare systems that rely heavily on commercial models of healthcare provision.

In the USA, the provision of healthcare to the very poor is a positive step in increasing



▶ <http://dx.doi.org/10.1136/bmjst-2019-000018>



© Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

¹Ethical Decision Making (EDM), Worcester, UK
²Sheffield City Council, Sheffield, UK

Correspondence to

Dr Daphne Austin, Ethical Decision Making (EDM), Worcester, UK; daphne@ethicaldecisionmaking.co.uk

access to healthcare. It is also reassuring that, according to this study at least, patients with dual eligibility were found to receive care that appears to be of equal quality. However, the decision of policy makers to impose a time delay of 24 months between the point at which a household qualifies for financial aid and the time individuals can access healthcare represents a systematic bias which sustains inequity. Predictable consequences of this policy are disease progression, due to lack of secondary prevention, and higher rates of crash landing (ie, patients presenting for the first time to health services with late and/or serious complications of a disease).

This 2-year waiting period is an example of healthcare rationing by delay. Many healthcare systems require their patients to wait for a period before accessing outpatient appointments, diagnostic tests and treatments. Waiting times are, however, normally set in such a way as to provide the flexibility needed by providers to run their services but avoid harm to the patients. There are, unfortunately, instances where the duration of the wait is harmful (eg, when there are insufficient clinicians to meet demand and in periods of austerity as demonstrated in the UK during the past decade), but the rationale for *imposing* such a long delay in the USA, as described by Austin and colleagues, is harder to imagine. To an outsider, the delay appears unnecessarily cruel and counterproductive, particularly as there are other ways to control budgets, such as stopping ineffective or poor value healthcare or controlling overtreatment and investigation. These alternative actions would overall provide more benefit to both patients and taxpayers and avoid the harm implicit in the US policy.

Those who are poor need equitable access to good quality healthcare throughout the course of their lives. Furthermore, the poor are likely to need *additional* care and support at certain points in their lives if they are to achieve comparable outcomes to their fellow citizens. This study underscores the fact that primary prevention and early access to good quality healthcare are key to reducing social inequalities in health outcome and mortality.

Each society needs to intermittently reflect on how well its values are reflected in its healthcare system. A society that values fairness would do well to support a system

which delivers universal healthcare throughout life. If the recent polls in the USA are correct, there is now substantial public support for moving to universal provision in that country. Providing equitable access not only demonstrates compassion but also economic savviness because centralised healthcare systems deliver better value and are less profligate. For example, such systems are likely to have the power to negotiate and fix more favourable drug prices, and they apply downward pressure to constrain overtreatment. Equally important, however, is the fact that healthcare provision that is universal and lifelong is the one which is most capable of improving the health of the workforce (both paid and unpaid) and the health and independence of the elderly population, both of which have benefits that reach well beyond that of the individual.

Contributors This editorial was commissioned by Peter McCulloch in order to provide commentary on the paper 'Outcomes After Peripheral Artery Disease Intervention Among Medicare-Medicaid Dual-Eligible Patients Compared to the General Medicare Population in the Vascular Quality Initiative Registry' by Austin and colleagues. Both authors independently identified the key points from the original research paper that stimulated this piece. These key points overlapped. Daphne Austin was responsible for drafting the initial paper, and both authors have contributed to the finished version. The guarantor for this article is Daphne Austin.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Commissioned; internally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

REFERENCES

- 1 Austin AM, Chakraborti G, Columbo J, *et al*. Outcomes after peripheral artery disease intervention among Medicare–Medicaid dual-eligible patients compared with the general Medicare population in the vascular quality initiative registry. *BMJ Surg Interv Health Technologies* 2019;1:e000018.
- 2 Tudor Hart J. The inverse care law. *The Lancet* 1971;297:405–12.
- 3 Poulton TE, Moonesinghe R, Raine R, *et al*. Socioeconomic deprivation and mortality after emergency laparotomy: an observational epidemiological study. *Br J Anaesth* 2020;124:73–83.