



Inequality

The IFS Deaton Review

Health and inequality

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Introduction

Income and health are closely related: the poor tend to be in worse health and live shorter lives than the rich. But what is the causal relationship between health and inequality? Does bad health lead to economic inequality or does income inequality cause bad health? In particular, is the recent run-up in income inequality in some countries responsible for widening socio-economic disparities in health status? And if so what policies can help to mitigate the impacts of income inequality?

This commentary addresses these questions. It is not intended as an overview of the literature, which is vast. The positive relationship between health and income is taken as a given and the focus is on key pieces of evidence that have a bearing on the central questions. On balance, the evidence shows that bad health causes economic inequality, but whether economic inequality has negative effects on health depends on the policy environment. There is much that governments can do and have done to improve the health of the poor and reduce the relationship between income, income inequality and health.

Does bad health lead to economic inequality?

Of the questions posed here, this is the simplest to answer. There are many examples of health shocks that lead to reductions in income for affected individuals. For example, Smith (1999) uses the US Health and Retirement Survey to look at people aged 55 and older after they received a new diagnosis of a chronic condition. He finds a sharp drop in labour supply, leading to lower incomes. Moreover, there is a drop in wealth that is greater than can be accounted for by either out-of-pocket medical costs or reduced work effort, and which may reflect greater non-medical consumption necessitated by illness (e.g. higher transportation costs). More recently, Blundell et al. (2021) have looked at older adults in both the US and England and find that declining health explains up to 15% of the decline in employment between ages 50 and 70. They find that these effects are larger in the US and among less-educated workers.

Moving from older adults to the very young, we also know that health shocks *in utero* or early in childhood have negative long-term effects including reductions in adult income. This literature is voluminous and has been extensively surveyed (see, e.g., Almond and Currie, 2011; Case and Paxson, 2011; Almond, Currie and Duque, 2018). The types of health shocks that have been shown to have long-term effects include nutritional deprivation, exposure to pollution, exposure to infectious diseases such as influenza (and perhaps COVID-19), maternal stress, and lack of access to healthcare. Much of the literature focuses on the potential effects of these shocks on children's cognitive abilities – but there is also a direct pathway from childhood health to adult health. A common finding is that health shocks in early childhood increase the probability of disability and reduce future labour force participation.

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The discussion so far suggests that it is possible to harm a young child so that they become a less productive adult, and that older people who have a negative health shock may be forced to withdraw from the labour market leading to lower incomes. Less is known about how frequently health shocks are responsible for loss of income among prime-aged workers. But there is reason to believe that losses in this age group are considerable, especially when we include the impacts of mental health conditions as well as physical health conditions on earnings.

For example, Biasi et al. (2020) use Danish administrative data and show that the onset of depression, bipolar disorder and schizophrenia are associated with earnings reductions of 34%, 38% and 74%, respectively. Once again, much of the effect is through reduced participation in the labour market. Because conditions such as depression are extremely common (affecting about 12% of American adults at any point in time), the negative impact of poor health on income is likely to be correspondingly large. However, in their data, Biasi et al. show that the employment and wage penalty associated with mental illness has grown smaller over time. This positive development may reflect a combination of better treatments and legislative changes that increasingly protect people with mental illness from discrimination.

Does income inequality harm health?

Material deprivations – such as hunger or poor food quality, lack of medical care, lack of heat in winter, lack of cooling in hot weather, inadequate clothing, infestations of vermin, and other types of substandard housing conditions, such as lead paint – can all harm people's health, both directly and through raising stress levels. Places with more income inequality tend to have higher levels of material deprivation among their poor, which leads to greater health inequality. Yet there is a conceptual distinction between places with high levels of material deprivation and places with high levels of inequality. In principal, one could start off with a society in which everyone was perfectly comfortable and increase inequality by giving more to some people. Would that harm the health of those who found themselves at the bottom of the new income distribution?

The leading hypothesis about why inequality per se might matter is that people compare themselves to a reference group and are stressed if they have low status relative to this group. Still, Deaton and Paxson (2001) argue that there can be no presumption that the effect of such comparisons is always negative. Everyone except for the lowest person in the distribution can compare themselves to someone even lower in the ranking rather than someone who is higher. Hence, individuals may see their relative status as either better or worse than that of relevant others. Moreover, if my reference group is people of my own cohort and the data are aggregated to the cohort level, then even if income strongly predicts health at the individual level, only income inequality will predict health in the aggregated data. Using US data, Deaton and Paxson show that between 1975 and 1995 inequality rose but mortality fell. Over the same period, the positive correlation between levels of income and health remained strong. They conclude that income matters for health, but that inequality per se is not an important determinant of health. In further work, Deaton and Lubotsky (2003) found that when they controlled for the fraction of Black people, there was no relationship between mortality and income inequality at the state, city or county level in the US. This suggests that racism, and the resulting inadequacies of the US safety net, is a more important cause of ill health than income inequality in the US.

Case and Paxson (2011) re-examine data from the famous Whitehall II study spear-headed by Sir Michael Marmot. Along with the original Whitehall study of British civil servants, this research showed that people in higher job grades were healthier in ways that could not be explained by observable health behaviours and medical risk factors. These findings are often interpreted as evidence that a person's ranking in a social hierarchy matters for their health. In their re-analysis,

Case and Paxson showed that healthier people were more likely to be placed in a higher job grade to begin with and were also more likely to be promoted. They found little evidence that job grade affected subsequent health conditional on a person's early health.

These findings point to the out-sized impact of material deprivation when it occurs in early life. Case, Lubotsky and Paxson (2002) document that, in the US, the positive relationship between child health and family income is present at birth but strengthens as children age. Currie and Stabile (2003) examine the mechanisms underlying this steepening gradient using Canadian data. They show that the relationship between income and child health is weaker in Canada than in the US, but still present. In Canada, this pattern emerges because poor children have more negative shocks. Condliffe and Link (2008) show that poor US children not only suffer from more health shocks but also recover from each one more slowly, which likely contributes to the stronger income–health gradient for US children.

This comparison between the US and its close neighbour Canada suggests that the policy environment can mediate and mitigate the relationship between income and health. In Canada, universal health insurance likely results in flatter income–health gradients and more rapid recovery from episodes of bad health among the poor. Similarly, US expansions of public health insurance for children under the Medicaid program have been associated with a flattening income–health gradient among children over time (Currie, Decker and Lin, 2008) and with falling inequality in mortality among children since 1990 (Currie and Schwandt, 2016).

The idea that public health insurance can help to protect against the health consequences of low income offers a possible explanation for the paradox posed in Banks et al. (2006), who show that adult Americans are in worse health than adult Britons even though the British smoke and drink more and are almost as likely as Americans to be overweight. Possibly Britons are protected by having had access to medical care through the National Health Service (NHS) from an early age. Many currently middle-aged and older Americans did not have this protection.

To summarise, there is strong evidence that material deprivation, especially in early life, can cause reductions in income primarily by increasing disability and reducing work. There is little evidence that inequality per se, unaccompanied by deprivation, has negative effects on health. And there is evidence, discussed further below, that the negative health effects of low income can be offset, at least to some extent, by social policies such as public health insurance.

Have recent increases in economic inequality led to a surge in deaths of despair?

The preceding review brings us to the most topical and controversial question posed here, which is whether the run-up in income inequality in recent decades has led to the surge in deaths of despair that we are currently witnessing in countries such as the US and the UK? It seems clear at this point that there is no systematic contemporaneous relationship between income losses and deaths of despair. If deaths of despair simply reflected contemporaneous economic status or one's place in a ranking of socio-economic status, then it would be puzzling that African–Americans have been less affected than non-Hispanic white people until quite recently, given historically higher rates of poverty and unemployment among African–Americans.

There should be no presumption that contemporaneous income inequality and health inequality always move in the same direction. As discussed above, US mortality rates continued on their downward path through the mid-1990s even after several decades of rising income inequality and stagnating wages at the bottom of the income distribution. And inequality in mortality fell

sharply for children between 1990 and 2010, even while it increased for adults (Currie and Schwandt, 2016).

Another striking example is the former East Germany, where mortality rates fell dramatically after German reunification even though income inequality increased equally dramatically – though income levels in the East also rose considerably relative to incomes in the West (Redler et al., 2021). Banks et al. (2021b) discuss the fact that mortality rates continued to fall in Europe and to converge to rates much lower than in the US through the Great Recession, despite increases in income inequality driven by huge employment losses in countries such as Spain and Portugal.

There are cases such as the Czech Republic that experienced spikes in mortality among middle-aged men following the Velvet Revolution, which brought the fall of communism (Bertoli and Grembi, 2021). Because income inequality also increased, one might argue that the increase in income inequality caused the increase in mortality. But surely this would be simplistic, given that the cohorts who saw increases in mortality also endured the sudden collapse of society as they knew it. It could not have been easy to pivot from decades of life under communism to finding a place in a new free market system. Younger cohorts did not experience this dislocation and showed improvements in their health despite rising income inequality.

In their pathbreaking book, *Deaths of Despair and the Future of Capitalism*, Case and Deaton (2020) highlight exactly this mechanism: social disintegration among those who are moving downwards through the income distribution leading to deaths of despair. They point to the loss of social connection, identity and feelings of self-worth among people affected by decades of losing ground to rising inequality. In a sense, income inequality is a stand-in for a host of societal problems in this narrative. It might take years or even decades for economic disadvantage and socio-economic decline to translate into sickness and death. Several recent studies have taken a longer-term perspective – either by focusing on structural economic changes from import competition and automation or by following unlucky cohorts of people who entered the labour market during recessions. Both approaches find that socio-economic decline is linked to significant increases in mortality over the longer term.

One of the largest sources of dislocation and downward social mobility in the US has been the decline of 'good' manufacturing jobs due to automation and trade. Autor, Dorn and Hanson (2013) focus on import competition from China and show that it led to dramatic declines in US manufacturing jobs. Autor, Dorn and Hanson (2019) find that, over the decades, these reductions in manufacturing jobs increased mortality due to drug and alcohol poisonings. Similarly, Pierce and Schott (2020) show that the US granting of permanent normal trade relations to China in 2000 led to increases in mortality over the next 12 years. These effects are only present for non-Hispanic white people and are stronger for males than females, which is consistent with men being more likely to be employed in manufacturing.

All deaths of despair are important, but in the US the largest contributor is the opioid epidemic. Mortality from opioid overdoses is so great that without these deaths, US life expectancy would have continued to rise after 2014 instead of falling for three years in a row (Currie and Schwandt, 2021). Again, there is little evidence that contemporaneous economic shocks predict opioid deaths: the opioid epidemic first gained a foothold in the US in the prosperous period prior to the recession of 2008. The Great Recession itself had almost no impact on the death toll. Unemployment was at its lowest level in decades as the epidemic peaked in 2017–18 (although it has reached new peaks in the current pandemic). Currie, Jin and Schnell (2019) do not find any evidence of a negative contemporaneous relationship between employment and the prescribing

of prescription opioids in the US between 2006 and 2014 in quarterly models that include county fixed effects.²

Charles, Hurst, and Schwartz (2019) use shift-share instruments to analyse the longer-term impacts of all of the shocks that affected U.S. manufacturing activity and find significant effects on drug abuse and overdose deaths. Adda and Fawaz (2020) document increases in illness and chronic pain in addition to increases in mortality. Venkataramani et al. (2020) found that areas where car plants had shut down experienced increases in opioid overdoses that became statistically significant by five years after the closing. They argue that it is the persistence of these structural economic shocks over long periods of time that makes them deadly.

It is clear that manufacturing decline led to deaths of despair, and especially to overdose deaths. But is that the whole story? Pierce and Schott's (2020) estimates imply that a shift from the 25th to the 75th percentile of trade exposure can explain only up to 11.5% of overall drug overdose deaths in 2017.³ Charles et al. (2019) caution that there may be confounding factors that they do not account for in their estimates. Ruhm (2019) does examine the role of confounding factors in estimating the relationship between economic decline and rising opioid deaths at the county level. He finds that after adding controls for counties' age and education structure, long-term changes in economic conditions explain at most one-ninth of the growth in overall drug-related mortality rates.

Also looking specifically at US opioid deaths, Bloom et al. (2019) show that the west coast and New England benefited from Chinese import competition, but New Hampshire and Massachusetts have still been hit hard by opioids (Stopka et al., 2019). The opioid epidemic has not been limited to areas experiencing negative structural change but has also raged in other parts of the country.

Schwandt and von Wachter (2020) find that cohorts who entered the labour market during recessions (and can therefore expect to have lower future earnings) initially have lower mortality because they have fewer traffic deaths and workplace accidents (see also Ruhm, 2000; Miller et al., 2009; Strumpf et al., 2017). But around 15 years after labour market entry the effects of entering during a recession on mortality turn positive: There is a 2% increase in deaths of despair for every one percentage point increase in the unemployment rate at a labour market entry. The results are reminiscent of those of Sullivan and von Wachter (2009) who also showed that men who lost their jobs due to plant closings had higher rates of deaths of despair over the long term.

However, while economically important, the impacts of entering the labour market in a recession can explain only a small share of the overall increases in drug overdose deaths. Even if all cohorts experienced a strong recession at labour market entry, Schwandt and von Wachter (2020) calculate that the resulting increase in opioid mortality would account for only an eighth of the increase in overall opioid mortality over the past two decades. Clearly, other aspects of the policy environment have played an outside role in the US opioid epidemic, as discussed below.

² These results differ from some previous studies. Hollingsworth, Ruhm and Simon (2017) and Carpenter, McClellan and Rees (2017) both find positive effects of unemployment on opioid fatalities in models with fixed effects but neither deals with the possibility of omitted variables bias.

³ Pierce and Schott (2020) find that an interquartile shift in trade exposure is associated with an increase of 2.5 drug overdose deaths per year. Overall age-adjusted US drug overdose mortality was 21.7 in 2017.

What aspects of the policy environment matter?

There are many policies that have improved the health of younger cohorts of Americans relative to older ones. For example, the long and many-pronged fight against smoking in the last decades of the 20th century is expected to yield health benefits in the affected cohorts that will last for decades (Preston, Gleit and Wilmoth, 2009). This past success makes the rise of youth vaping in the US in the past ten years all the more disappointing (Wang et al., 2020).

Similarly, the Clean Air Act of 1970 ushered in an era of environmental regulation that has seen huge improvements in air quality, with many attendant public health benefits. Isen, Rossin-Slater and Reed Walker (2017) use US administrative records on the earnings histories of young adults and identify individuals who benefited from pollution reductions in their county of birth because of the implementation of the Clean Air Act. They find that cleaning the air young children were exposed to increased their labour force participation and earnings as young adults. These findings about the long-term effects of early life exposure to pollution complement research about the morbidity and mortality effects on adults (see Zivin and Neidell, 2012; Derygina et al., 2019).

The role of the safety net

In the US, the two age groups that have continued to see mortality declines since 2010 are those aged over 65 and the very young, which may point to more specifically targeted policies. These are, for instance, the two groups who have the most extensive public health insurance coverage under the Medicare and Medicaid programs, respectively.

Expansions of public health insurance to pregnant women and children over the 1990s and 2000s led to immediate declines in infant and child mortality (Currie and Gruber, 1996a,b). Cohorts who became eligible for Medicaid *in utero* or in early childhood have been healthier as young adults than slightly older cohorts who were ineligible. Eligible cohorts have higher educational attainment, earnings and self-reported health, and lower mortality and hospitalisation rates (Levine and Schanzenbach, 2009; Cohodes et al., 2016; Wherry and Meyer, 2016; Miller and Wherry, 2019; Brown, Kowalski and Lurie, 2020). New mothers who were covered by Medicaid as infants because of the expansions are giving birth to healthier children today (East et al., 2017). Studies of the initial 'roll-out' of Medicaid find that there were large initial mortality declines (Goodman-Bacon, 2016). Fifty years later, rates of disability were lower and labour force participation was higher in the affected cohorts (Boudreaux, Golberstein and McAlpine, 2016).

Medicare, which provides universal coverage for the elderly in the US, has also had positive effects on health. For example, Card, Dobkin and Maestas (2009) exploit the sharp discontinuity in Medicare eligibility at age 65 and show that among severely ill patients admitted to hospital, there is a 20% drop in mortality in the group just above the 65-year threshold compared with patients just below that threshold. This mortality reduction persists for at least nine months after the admission, which indicates that the additional services paid for by Medicare are successful in saving the lives of critically ill people. McWilliams et al. (2009) report that differences between Black and white Americans, and between less-educated and more-educated adults in systolic blood pressure and haemoglobin A1c levels (used to track diabetes) also narrow after age 65. These findings suggest that universal health insurance among those aged 65 and over helps to narrow disparities in health between individuals.

Finkelstein (2007) investigates the effects of the introduction of the Medicare programme in 1965 on the entire system of medical care. She suggests that the market-level effects are much

greater than those that would be predicted by looking at the effects of health insurance coverage on individuals. These larger effects are due to provider responses to increased demand. Once every elderly adult became a 'paying customer' it increased the incentives of providers to offer services for them.

Evidence about the effectiveness of health insurance for prime-aged people is more ambiguous. Sommers, Gawande and Baicker (2017) offer a succinct summary of the recent literature focusing on the US Affordable Care Act's 2014 expansions of public health insurance to non-elderly adults. There were clear improvements in the use of screening and in the treatment of chronic conditions, improvements in mental health, and improvements in self-reported health, but little evidence of effects on health markers such as blood pressure. Courtemanche and Zapata (2014) focus on the earlier Massachusetts healthcare reform, which achieved almost universal coverage through mechanisms similar to the Affordable Care Act. Using data from the Behavioral Risk Factor Surveillance System, they also show improvements in self-reported health and utilisation of care. However, in addition, they find improvements in several markers of physical and mental health, including reductions in functional limitations, joint disorders and body mass index. These health improvements were strongest in the groups who were most likely to gain coverage, including those with low incomes, non-white people, near-elderly adults and women, suggesting that the health insurance expansions reduced health inequalities.

There is also extensive evidence that broader expansions of the social safety net to families with young children through programmes such as Food Stamps, the Earned Income Tax Credit and high-quality pre-school have both improved child health in the short term, and had longer-term effects on adult health as the children aged.

For example, Almond, Hoynes and Schanzenbach (2011) investigate the roll-out of the Food Stamp programme between 1961 and 1975. Using county-level variation in when the programme was introduced they find that women exposed to the programme in the last trimester of pregnancy had babies with higher birth weight births. The largest gains were at the lowest end of the birth weight distribution, reducing inequalities in this important index of newborn health. Hoynes, Schanzenbach and Almond (2016) follow the affected cohorts using data from the Panel Study of Income Dynamics. They link adult health and economic outcomes to information about where people lived in early childhood. They find that early childhood access to food stamps reduced later adult metabolic syndrome, a cluster of disorders linked to higher morbidity and mortality.

Hoynes, Miller and Simon (2015) investigate the effects of cash transfers to families under the Earned Income Tax Credit by taking advantage of a programme change that increased payments to some families. They found that the EITC reduced low birth weight perhaps through associated increases in pre-natal care and a reduction in smoking. Again, these changes were largest for those demographic categories that were most at risk for low birth weight births so that health inequality was reduced. Evans and Garthwaite (2014) examine the effect of expansions in the EITC on mothers. Using data from the Behavioral Risk Factors Surveillance Survey, they found improvements in self-reported health. Using data from the National Health and Nutrition Examination Survey, they also found reductions in biomarkers associated with inflammation and future higher disease probabilities.

Campbell et al. (2014) show that, in addition to their documented effects reducing crime, raising earnings and increasing education, high-quality early childhood programmes have important health benefits. They follow children who were involved in the Carolina Abecedarian Project, a randomised controlled trial of an early childhood intervention among disadvantaged children. They found that treated children had a significantly lower prevalence of risk factors for

cardiovascular and metabolic diseases in their mid-30s, especially among males. In particular, adults who received the program as children had lower blood pressure and were less likely to suffer from metabolic syndrome.

These studies lend credence to a really obvious idea, which is that the main reason that life expectancy is low in the US relative to other rich countries is not because there is more income inequality per se, but because the US lacks an adequate social safety net. Canada and most European countries have established welfare states with publicly funded health and social insurance systems that are available to all. Banks et al. (2021b) point out that Norway and Finland have among the lowest and most evenly distributed mortality rates in the world. Butikofer, Karadakic and Salvanes (2021) show that, in Norway, the roll-out of publicly funded infant care centres in the 1960s virtually eliminated inequality in infant mortality rates between rich and poor municipalities. Banks et al. (2021a) find that most reductions in age-specific mortality rates in the UK took place in the first decade of the 21st century, when the UK health system was well funded. In the aftermath of financial crisis and subsequent funding cuts in the NHS, progress in reducing mortality slowed.

It is possible that the most pernicious effects of income inequality per se are in the political realm. If the wealthy can purchase their own schools, medical care, and even communities, they can effectively insulate themselves from the problems of poverty, which then reduces their support for the social safety net. It is probably no accident that US city dwellers overwhelmingly vote Democratic. When rich and poor live side by side, then it is harder to escape the moral imperative to assist poor neighbours and easier to see the benefits of doing so.

Policies that have affected the US opioid crisis

Because opioids play such an out-sized role in generating higher US deaths of despair, and because these deaths have been concentrated in disadvantaged groups and contributed to health inequalities (Altekruse et al., 2020), it is worth including a brief overview of the specific US policies that created this situation. The US leads the world in consumption of opioids, accounting for 72.9% of sales of Oxycodone and similar drugs (United Nations, 2017). Deaths due to drug overdoses, mainly involving opioids, reached 81,000 in 2020. The number of deaths due to opioids dwarfs the toll from previous drug epidemics in the US.

As Case and Deaton (2020) detail, much of the blame can be laid at the feet of aggressive and misleading marketing of opioids to doctors and patients by companies such as Purdue Pharma. But several aspects of the US regulatory environment enabled these practices. The first is weak public oversight of medical prescribing. Any doctor or dentist can prescribe opioids, and the maximum allowable dose is higher than in most other countries. Other countries require special training to prescribe opioids (Japan), require patients to register to use opioids (France, Italy and Portugal), or require doctors to use special prescription pads for opioids (many countries) (Ho, 2019). Some countries with centralised health insurance systems do not cover opioids for non-cancer care, or require pre-authorisation for such uses.

In the US, opioids are commonly prescribed in situations (such as lower back pain) where other safer alternatives are available and where opioids are ineffective over the long term. Patients still frequently receive a 30-day supply of opioids when a three-day supply would likely suffice, creating a risk of both addiction and diversion to the secondary market. In 2016, the Centers for Disease Control and Prevention (CDC) belatedly issued guidelines in an attempt to curb these practices (Dowell, Haegerich and Chou, 2016). But these guidelines are not binding on US physicians.

Why do physicians overprescribe opioids? In some cases, physician pay may be directly linked to patient satisfaction, which may depend on successful pain management (Van Zee, 2009). Patients may be influenced by direct-to-consumer advertising and ask for opioid pain medications – the US is one of only three countries in the world that allow such advertising (Ventola, 2011). Some physicians may also use opioids as a way to compete for patients; taken to an extreme, this could lead to the 'pill-mills' that became a feature of the American addiction landscape in the 2000s (Temple, 2015).

In addition to the CDC guidelines, some policies had shown promise in fighting the opioid epidemic prior to the pandemic. Annual opioid prescriptions peaked in 2012 at 81.3 per 100 people and had fallen to 51.4 per 100 people by 2018.⁴ The first policy is the development of state prescription drug monitoring programmes (PDMPs). These state-wide electronic databases include information about the dispensing of all 'scheduled' drugs including opioids. Buchmueller and Carey (2018), Grecu, Dave and Saffer (2019) and Kaestner and Ziedan (2019) show that making it mandatory for doctors to consult PDMPs reduced opioid prescribing in states where this was done.

While reducing prescribing may prevent new patients from becoming addicted, there is an urgent need for effective treatment of existing addicts. Fewer than 30% of people with a substance abuse problem receive treatment (Center for Behavioral Health Statistics and Quality, 2016) and many US programmes emphasise an 'abstinence-only' approach rather than medication-assisted treatment (MAT). MAT (using drugs such as buprenorphine) prevents deaths more effectively than traditional care. Ironically, while any US doctor can prescribe opioids without special training or oversight, doctors must obtain special licences to prescribe MAT and are restricted in the number of patients they can treat (University of Michigan Behavioral Health Workforce Research Center, 2019). However, the US Department of Health and Human Services has suspended these requirements temporarily during the COVID-19 emergency, which may greatly expand access to treatment.

Naloxone access laws are another bright spot in terms of drug treatment policy. Naloxone is an overdose-reversing drug. These laws permit it to be prescribed to third parties, or make it available without a prescription. Some laws require providers who prescribe opioids to also prescribe naloxone. Rees et al. (2019) show that these laws reduced opioid deaths by 9% to 11%, with the largest reductions coming from deaths due to prescription drugs. Moreover, the laws did not increase the use of opioids as some had feared.

Summary and conclusions

In countries such as the US and the UK, the COVID-19 pandemic has brought inequalities in health and mortality into sharp focus because disadvantaged groups have been disproportionately affected (Schwandt et al., 2022). The pandemic has illustrated the many pathways leading from bad health to greater economic inequality including disability, job loss, loss of savings and housing instability. But the pandemic also highlights the importance of good public policy in determining health outcomes. Post-pandemic, countries with weak safety nets and public health infrastructures will continue to see a much stronger relationship between socio-economic status and health than countries with strong safety nets and universal healthcare.

⁴ See the CDC's National Center for Health Statistics, 'Provisional Drug Overdose Death Counts as of July 5, 2020', <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm> and NIDA (2020) for more background about the US opioid crisis.

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