

Poor thinking

New thoughts needed on the UK health/wealth divide

Werner Heisenberg died, of cancer, in February 1976. It was the month I finally found a practice, so I remember the date. In digs in Cambridge with a student of atomic physics I'd had personal tuition in Heisenberg's 'Uncertainty Principle'. Knowing the speed of an electron meant that also knowing its location was intellectually impossible, and vice versa: one or the other but never both. With what adolescent glee we applied this to Paul's stolen bike. Small consolation, walking to lectures, that he could calculate his bicycle's velocity because he didn't know where it was. But what's all this nostalgic nonsense to do with the poor, with inequality, with health or UK general practice?

My thesis is that a self-serving version of the uncertainty principle is being applied, throughout Whitehall, to inequality and health. We are being told that we must see socioeconomic inequality as a function of speed — are the poor, as a group, catching up or falling further behind? It will do us no good to try to locate deprived individuals: to do so is tantamount to voyeurism and is illegal. Outside the sancta of the Inland Revenue and Social Security there is a compulsory 'confidentiality threshold' for the release of economic data — 16 households or 50 persons being the smallest legal tender. This is perverse polity; whether by cock-up or conspiracy is not my concern. I want to propose that in the UK there is, staring us in the face, a tool for breaking this bureaucratic bulwark, a means of linking actual people to their socioeconomic standing. It is objective, indeed official, and not distastefully obtrusive. I believe it to be a mechanism more suited to general practice rather than is the usual pinched population thinking of public health; Dickens rather than Malthus. It could even lead us out of the 'wonderland' where present resourcing of the NHS guarantees second best for the poor. It deserves thinking about.

When the 'community charge' was introduced, in 1989–1990, as a mechanism for UK local taxation, it was immediately undressed to reveal a reincarnation of that 14th century anathema, the poll tax. Be they aristocrats or peasants, masters or servants, everyone was to be taxed at the same rate. John Citizen hit the streets. The notorious Peasants' Revolt of 1381 was reincarnated and a Prime Minister fell. As a consequence the re-jigged Cabinet approved, in 1992, a new apparatus for Town Hall incomes — the Council Tax.¹

This was to be based on domestic property values. All homes in the UK were allotted an 'open market' value based on size, layout, character and locality, and placed into one of eight 'valuation bands'. The bands were so structured that the most modest homes were in band A, the next group in band B and so on progressively up to the most expensive homes in band H. These bands (CTBs) dictate the amount of the annual tax that all UK local authorities began to levy from 1 April 1993. This instrument has proved to be far less provocative. It has also been popular with local authorities for it is easy to collect and, with predictable income, aldermen are in a comfort zone.² Local authorities were also required to collate and publish lists showing the CTBs of all properties in their jurisdiction and with the technical advances of the last decade these are now available online.³ In other words there is no difficulty, and it is perfectly within the law, when, knowing a specific address, one wishes to link it to its CTB. Here we have, then, a means of disaggregating the UK population to units averaging 2.4 people.

The epidemiological potential of Council Tax Banding occurred to me in 1995. Was this not a marker linking ecology and socioeconomic status? Did not affluent people live in large, detached houses (in CTBs E and above) sporting shiny cars on their drives whereas the

deprived hauled their shopping bags up the fouled concrete steps of their faceless tower blocks (CTBs A & B)? And was there not a general understanding that a few flats in 'Mandela House' created much more general practice workload than a whole crescent of leafy suburbia? Here were make-believes worthy of Baconian investigation and even our very first findings⁴ were encouraging. There was a significant trend towards owner-occupancy and pocketed car keys the higher one travelled up the CTBs. And patients living at CTB 'A' homes engendered twice the clinical workload of those at 'E+' addresses. The study was very small but '*l'appétit vient en mangeant*'. Was this a research theme? Is there an important principle?

Our paper seemed to excite little interest beyond what was negative and disparaging. No-one seemed to latch on to the fact that our new proxy marker was at level of household rather than postcode or Census enumerator zone. Reminders that morbidity is notoriously difficult to measure provoked us into a mortality study. The results⁵ were just as convincing: there was no mirage because of different illness-reporting propensity. Someone also alleged that our project was superfluous because 'Jarman scores⁶ give UK general practice all the information it needs to link deprivation and workload.' At the time this was a serious wrangle but, whatever the current consensus on Roy Carr-Hill's attempt to supersede them, his very mission clearly implies that Jarman's 'UPA8 scores' were found wanting when compensation for differential workload between practices became a live issue in 2003.⁷ In the meantime we were able to show, anyway,⁸ that CTBs were as good a differentiator as UPA8s; better perhaps, since they didn't depend on manipulative weightings of Census area variables. On publication of the paper the silence was deafening.

It was time for a rethink but I couldn't see any means of generating more interest without either doing better studies or chaining myself, naked, to an appropriate public building. The former seemed preferable and a generous BMA award bought me a further research assistant. We launched ourselves at a much bigger database from our practice. In digital camera terms we now had 56 000 pixels where, formerly, there had been 2000. It took us 2 years. The results reflected the increase in resolution and papers were published^{9,10} showing how well CTB predicts GP workload pressure and its commensurate costs. We also had letters published on CTB versus 'smoking' households¹¹ and on CTBs in relation to that running sore in UK general practice — the pesky patients who fail to show for a booked appointment.¹² CTB A and B patients were both the smokers and the defaulters. Now we were confronted by detractors alleging that primary care at Northlands was so idiosyncratic that our findings were not generally applicable. Tiresome though this was, the criticism could have been justifiable. There was really only one answer and I went out looking for less parochial data.

The 'Avon Longitudinal Study of Parents and Children'¹³ is the largest cohort study of child development in the world and has already produced over 200 invaluable papers. Our group were given the privilege of access to the ALSPAC files on breastfeeding; the 14 000 pregnant mothers' attitudes and intentions, and their uptake of the practice as their children were born. We've shown¹⁴ a graduated uptake of breastfeeding that rises from 53% in CTB 'A' mothers to 80% in 'E+' counterparts. Subsidiary information on the mothers also allowed us to test, all against CTB, associated factors such as cigarette smoking, educational attainment, home

overcrowding, and recourse to grants for baby equipment. The expected patterns emerged and all proved to be statistically significant¹⁴ — CTB A mothers were, besides being more likely not to breastfeed, more likely to smoke, more likely to have left school without paper qualifications and more likely to be using, in their cramped homes, baby gear that had been subsidised by the State. In fact, in yet another study¹⁵ we've shown that 46% of CTB A homes in North Wiltshire are supported by means-tested state benefits whereas only 14% of Bs are so endowed, 8% of Cs, and negligible numbers of higher CTB homes. In our latest publication¹⁶ we report on out-of-hours general practice in North Wiltshire where CTB A patients are twice as likely to call at nights and weekends than their E+ neighbours, irrespective of patient age and sex. In other words, the conclusions drawn from county or regional data-sets are just as convincing: time and again we've shown CTB to be a valid proxy marker linking socioeconomic status and primary care activity. And our work has finally been corroborated by an independent research team, from South Wales, who show¹⁷ that CTB is as good a discriminator (sometimes better) of both deprivation and health as is occupational social class and always significantly more sensitive than Townsend score.

So, why is the consistent evidence that CTB is a transparent socioeconomic marker having no impact? Now journal referees are telling us that our research is, in the end, 'unnecessary'. 'Everything we could ever want to know about the UK health/wealth divide is already available and area-based statistics are the gold standard'. This, to me, is a point of departure. The 'knowledge' they cite is all area-based. It is intellectually bereft then to argue that being so well-informed (sic) by medical geography, it is futile to want to know about individuals or households.

This is laziness hiding behind Heisenberg where he doesn't belong.

Tackling Health Inequalities,¹⁸ the latest 'Black Report', was posted, surreptitiously, on the internet on a dreamy day in August 2005.¹⁹ Like all its predecessors, it's again built on the 'area' paradigm. It therefore proposes the parachuting of 'health trainers' into 'disadvantaged areas'. No doubt these missionaries will be sincere, skilled and lycra-positive, consoling the politicians but entirely superfluous to the middle-class mopes who will reap the benefits. I give the scheme 3 years, a time in which the odd deprived family who happen to be isolated in an affluent urban area or the many poor who live scattered across rural 'Eden' are further written off. Area statistics keep the long-recognised 'ecological fallacy'²⁰ alive and well: only rarely will any geographic boundary corral a wholly uniform population. Any 'average' then obscures the extremes: a mean is once-removed. Childhood accidents, fatal heart attacks, cancer mortality, premature deaths,²¹ even the verbal abuse of GP receptionists;²² these, and many other unwelcome measures, are all known to be high in 'areas of deprivation' in the UK. But how high? What are the real rates when 'actual' rather than 'area' deprivation is the discriminator? No-one knows and this latest health inequalities report¹⁸ is forced to concede this point, although it is buried on page 28. Does not the diminution of effect given by area measures hoist our masters on their own petards? After considerable government effort and new investment, the latest indicators show that the health/wealth divide is worsening.¹⁸ Surely this disappointing outcome is because the more that area measures are refined the more they uncover the reality that was there all the time — the actual differences in social groups are much wider than formerly recognised.

If blind obeisance to area statistics continues, the targetting of primary health resources will remain a shambles. Politicians will go on sending barmy ballistics to the front when the infantry could do the job perfectly well if only better supported. We can, and must, reach down into areas and pluck at individuals in their homes. Public health and general practice will then be speaking the same language: they will be able to understand each other. Some practices will be seen to deserve substantially more input than their neighbours even though catchment areas are mix-muddled up. Political advisers will better appreciate what general practice does, and how it can best do it.

My wife and I plan, soon, to move to another house; 'family fold' to 'wrinkly warren'. We may need a bridging loan. When 'grey suit' comes to 'just jot down' our current income, capital assets, regular outgoings and so on, I'll pass across the computed averages for '46UCHY0003'. This is the official 'output area' where we live; some 45 households. I'll be eager to do so, having taken considerable trouble to find out what they are. He will say, of course, that such statistics are meaningless, perverse, a chocolate teapot. He can't possibly make a realistic

assessment of the best way he can lay on the cash. 'But,' I'll protest, 'it may well be poor thinking, but that's how we do it in the NHS.'

Norman Beale

REFERENCES

1. Anonymous. *Local Government Finance Act 1992. Council Tax*. London: HMSO, 1992.
2. Office of the Deputy Prime Minister. *Balance of funding review. Report*. London: HMSO 2004.
3. Valuation Office Agency. Council tax homepage. http://www.voa.gov.uk/council_tax/index.htm (accessed 10 May 2006).
4. Beale N, Baker N, Straker-Cook D. Council tax valuation band as marker of deprivation and of general practice workload. *Public Health* 2000; **114**: 260–264.
5. Beale N, Taylor G, Straker-Cook D. Is council tax valuation band a predictor of mortality? *BMC Public Health* 2002; **2**: 17.
6. Jarman B: Identification of underprivileged areas. *BMJ* 1983, **286**: 1705–1709.
7. BMA. *Investing in general practice. The new GMS contract*. London: BMA, 2003.
8. Beale N, Taylor G, Straker-Cook D. Does council tax valuation band (CTVB) correlate with Under-Privileged Area 8 (UPA8) score and could it be a better 'Jarman Index'? *BMC Public Health* 2001; **1**: 13.
9. Beale N, Taylor G, Straker-Cook D, et al. Council tax valuation band of patient residence and clinical contacts in a general practice. *Br J Gen Pract* 2005; **55**: 32–36.
10. Beale N, Hollinghurst S, Taylor G, et al. The costs of care in general practice: patients compared by the council tax valuation band of their home address. *Fam*

Pract 2005; **22**: 317–322.

11. Beale N, Taylor G. Where there's smoke there's council tax valuation band A. *Br J Gen Pract* 2005; **55**: 233.
12. Beale N, Gwynne M, Peart C. Council tax banding and missed appointments. *Br J Gen Pract* 2004; **54**: 304.
13. Golding J, Pembrey M, Jones R, ALSPAC Study Team. ALSPAC – The Avon Longitudinal Study of Parents and Children. I. Study methodology. *Paediatr Perinat Epidemiol* 2001; **15**: 74–87.
14. Beale N, Kane G, Gwynne M, et al. Council tax valuation band predicts breast feeding and socio-economic status in the Alspac study population. *BMC Public Health* 2006; **6**: 5.
15. Beale N, Taylor G. Does Council Tax Valuation Band predict that a household receives means-tested benefits? *Radical Statistics* 2005; **90**: 28–32.
16. Beale N, Taylor G, Gwynne M, Peart C. Council tax valuation band and contacts with a GP out-of-hours service. *Br J Gen Pract* 2006; **56**: 283–285.
17. Fone D, Dunstan F, Christie S, et al. Council tax valuation bands, socio-economic status and population health: a cross-sectional analysis from the Caerphilly Health and Social Needs Study. *BMC Public Health* 2006; **6**: 115
18. Earwicker R. *Tackling Health Inequalities: status report on the programme for action*. London: Department of Health, 2005.
19. Shaw M, Dorling D, Mitchell R, Davey Smith G. Labour's 'Black report' moment? [letter]. *BMJ* 2005; **331**: 575.
20. Robinson W. Ecological correlations and the behaviour of individuals. *Am Sociol Review* 1950; **15**: 351–357.
21. Beale N. Unequal to the task: deprivation, health and UK general practice at the millennium. *Br J Gen Pract* 2001; **51**: 478–485.
22. Dixon C, Tompkins C, Allgar V, Wright N. Abusive behaviour experienced by primary care receptionists: a cross-sectional survey. *Fam Pract* 2004; **21**: 137–139.