the characteristics of a practice population is to collect data about the actual populations of the practice—presumably by a survey. This will be inaccurate as it will be subject to sampling variation—that is, chance. Thus the prediction of the proportion of elderly people in a practice population of 10 000 in which the actual percentage is suspected to be 10% will be in the range 8-12% for 95% of the time if 796 people were sampled (EPINFO version 5.01). Whether this is accurate enough is again a matter of judgment. Furthermore, this sample will be subject to non-response bias that is unquantifiable. To repeat this process across 73 practices, in the authors' case, would be a major undertaking. There is no gold standard in the derivation of data about populations, and safety lies in comparing data from a variety of sources. It is too early to dismiss linkage of census data to practice populations.

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Reducing number of postcodes that cannot be ascribed would increase validity of method

EDITOR,—Glen Scrivener and David C E F Lloyd conclude that allocating census data to general practice populations is not sufficiently accurate for the purposes of explaining variations in prescribing despite their finding correlation coefficients of up to 0.84 from two of their methods.¹ They acknowledge that perfect correlation is impossible in an ecological comparison. Nevertheless, the correlation coefficients might have been higher if the 11 710 patients (3.2%) whose postcode could not be matched had been included in the analysis. This proportion of postcodes that could not be ascribed is fairly high. We have developed a link between enumeration districts and general practices in West Glamorgan to study variation in use of hospitals as well as drug prescribing; only 1% of postcodes held on the West Glamorgan Family Health Services Authority's register cannot be matched on the Post Office address file (personal communication, Royal Mail address manager, Post Office). Local inquiry shows that many of the mismatches are due to keying errors when data are input and can be corrected.

Scrivener and Lloyd suggest that time and effort should be spent on collecting data at the level of individual patients. It is axiomatic that the benefits of collecting additional information should outweigh the costs. Unfortunately, unless very large samples are collected all that will happen is that one type of error (that due to the ecological fallacy) will be replaced by that due to the imprecision of estimates based on small sample size: a sample of around 3000 is required to be 95% confident of acquiring an estimate of $\pm 1\%$ around an expected rate of permanent sickness of about 8%. Apart from the logistic difficulties and cost of collecting such an amount of data in practices, the validity of the data might be questionable if prescribing budgets were to depend on the results.

While the correlation coefficients between census variables and practice populations are not perfect, in the absence of better indicators they are sufficiently high to be used in practice. In our county, estimates of practices' rates of long term limiting illness (based on enumeration district) and the Townsend index of deprivation explain a quarter of the rates of use of hospitals after adjustment for age (unpublished data). If such factors were not included in resource allocation

formulas there would be a substantial transfer of resources from the more deprived to the more affluent areas of our county. Whose interest would this serve?

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Fall in birth weight of third generation Asian infants

EDITOR,—S Dhawan reports that the birth weight of the infants of second generation Asian women in Bolton is significantly higher than that of the infants of first generation Asian women.¹ This increase was not found when a much larger sample of Asian women in Leicestershire was compared during 1991-3—in fact, the converse was found when data on Asian Muslim women were selected from the data.

A total of 4562 Asian women delivered a singleton liveborn infant in Leicestershire during 1991-3. The ethnic group, place of birth, religion, age, parity, and marital status of the mother and birth weight and gestational age of the infant were noted from computerised birth notification data. The woman's weight is not available from this source of data. The table shows the data for the women in Leicestershire in a similar format to that used by Dhawan; it compares the birth weights of the children of first generation and second generation Asian women by potential confounding factors (with the exception of maternal weight). This table shows that in Leicestershire there is no significant effect of maternal generation on the birth weight of the infants, although the potential confounding factors have a significant effect on birth weight as expected.

As Leicestershire has a different ethnic mix from that of Bolton, with only one third of the Asian births being to Muslim women, we looked at the

overall birth weights of singleton liveborn infants of first and second generation Muslim women. The unadjusted birth weights of the infants of second generation Asian Muslim women were on average 76 g lighter than those of their first generation counterparts. The lower parity and younger age of the second generation Muslim women could, However, have accounted for this difference. Nevertheless, our results suggest that it is not an increase in the birth weight of Asian infants that accounts for the reduction in perinatal mortality observed in Leicestershire over 1976-85.²

Further work is being carried out in this area to investigate the effects of generation on the birth weights of the infants of different Asian cultures and the trends in the birth weights of Asian infants over time.

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Treating temporarily incompetent patients

Competence cannot be determined by reasonableness of patient's decision

EDITOR,—Part of the recent discussion of the two case histories concerning the treatment of temporarily incompetent patients must be questioned.¹ As Petra Wilson suggests, the mental competence required by law for valid consent to or refusal of medical treatment is not clearly defined, but the judge in the case cited analysed the abilities required, which were to comprehend and retain information about treatment, to believe such information, and to weigh the information to arrive at a choice.² If these abilities are impaired by mental disorder or injury then capacity may be

Comparison of birth weights of singleton liveborn infants of first generation and second generation Asian women by potential confounding factors, Leicestershire, 1991-3

Factor	First generation women		Second generation women		Statistical analysis*
	Mean (SD) birth weight (g)	No of women	Mean (SD) birth weight (g)	No of women	
Overall	3044 (504)	3784	3022 (500)	778	$t=1.15, P=0.25$
Parity:					
0	3006 (505)	2460	2992 (515)	549	(a) $F=0.63, P=0.43$ (b) $F=12.74, P<0.0001$ (c) $F=0.01, P=0.99$
1	3110 (501)	1168	3091 (456)	220	
2	3139 (446)	142	3111 (426)	9	
3	3326 (363)	12		0	
4	2845 (290)	2		0	
Women's age (years):					
≤24	2980 (478)	1056	2998 (476)	485	(a) $F=0.38, P=0.54$ (b) $F=10.97, P<0.0001$ (c) $F=0.60, P=0.61$
25-29	3052 (492)	1362	3039 (517)	251	
30-34	3090 (518)	1008	3188 (633)	37	
≥35	3078 (558)	358	3186 (672)	5	
Marital status:					
Single	3020 (451)	161	3076 (512)	70	(a) $F=1.31, P=0.25$ (b) $F=0.01, P<0.90$ (c) $F=1.29, P=0.26$
Married	3045 (506)	3623	3016 (499)	708	
Gestational age (weeks):					
28-32	1523 (526)	39	1524 (569)	7	(a) $F=1.27, P=0.27$ (b) $F=487.8, P<0.0001$ (c) $F=0.4, P=0.70$
33-36	2365 (491)	205	2304 (455)	53	
37-40	3061 (437)	2983	3037 (414)	590	
41-42	3312 (433)	557	3329 (446)	128	
Overall	3060 (504)	1389	2984 (458)	260	$t=2.25, P<0.025$

*(a)=Main effect of group (first generation v second generation); (b)=main effect of factor; (c)=interaction group×factor.