Supplementary Table 1. The sample size of treatment and control groups across four
CHARLS waves (2011, 2013, 2015, 2018).

	2011	2013	2015	2018	Total
Panel A (Major chronic diseases)					
Control group sample size	1,141	1,123	1,104	985	4,353
Treatment group sample size	0	18	37	156	211
Total sample size	1,141	1,141	1,141	1,141	4,564
Panel B (Minor chronic diseases)					
Control group sample size	1,470	1,391	1,285	985	5,131
Treatment group sample size	0	79	785	485	749
Total sample size	1,470	1,470	1,470	1,470	5,880

Specific sets of underlying two-group two-period difference-in-difference (2×2 DID) estimates in the two-way fixed effects (TWFE) model

In the TWFE framework, the core estimated coefficients are a weighted average of multiple
sets of underlying 2×2 DID estimates. They are not actual treatment effects[1]. Specifically,
the core estimators in the time-varying difference-in-difference model under TWFE are the
weighted average of the 2×2 DID estimates for the four types of subsamples: (i) the 2×2
DID estimates obtained by comparing the pre-treatment group with the untreated group; (ii)
the 2×2 DID estimates obtained by comparing the post-treatment group with the untreated
group; (iii) the 2×2 DID estimates obtained by comparing the pre-treatment group with the
post-treatment group; and (iv) the 2×2 DID estimates obtained by comparing the post-
treatment group with the pre-treatment group[2]. Further, the 2×2 DID estimates obtained
based on the fourth subsample category lead to lower estimates of TWFE.

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2. Goodman-Bacon A. Difference-in-differences with variation in treatment timing. *J Econometrics*. 2021;225(2):254-277. doi:10.1016/j.jeconom.2021.03.014