## Supplementary paragraph SDI service area methods

The weighted service area level SDI score was created using patient origin data. We first divided the number of patients from each ZCTA going to a health center by the total number of patients served by the health center – this is a weighted average for each ZCTA. Next, we multiplied this weighted average by the ZCTA's SDI score, then added up the adjusted SDI scores for all the ZCTAs with health center patients to calculate a final weighted SDI score for each health center. More information on these methods and their application can be found in Topmiller, et al. 2021 [27].

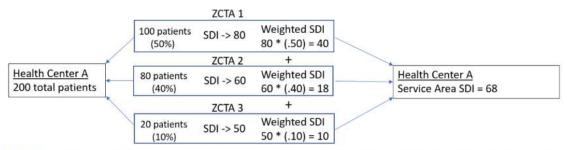


Figure 1 Example of calculating a weighted service area SDI for health centres. SDI, Social Deprivation Index; ZCTA, ZIP code tabulation.

Topmiller M, McCann J, Rankin J, et al. Exploring the association of social determinants of health and clinical quality measures and performance in HRSA-funded health centers. *Fam Med Community Health* 2021;9(3):2000853. http://dx.doi.org/10.1136/fmch-2020-000853.