

Supplementary Material to: Koh JJE, Tan YZ, Oh HC, et al. Factors associated with persistent high healthcare service utilisers in eastern Singapore in 2020–2022: A population health analysis. *Ann Acad Med Singap* 2025;54. DOI: <https://doi.org/10.47102/annals-acadmedsg.202543>

Supplementary Appendix S2. Threshold estimation.

The yearly healthcare expenditures of patients who resided in Changi General Hospital (CGH)'s catchment area from 2017 to 2019 were computed by summing gross bills (inclusive of any government subsidies or third-party payments) of all healthcare services offered by private and public hospitals, primary care and intermediate-long-term care providers which had records in DS1.

In this study, all annual healthcare expenditures were adjusted to 2022 Singapore dollars using the healthcare consumer price index reported by the Singapore Ministry of Health.²³ Dates of expenditures for emergency and outpatient services were based on the respective dates of patient attendance, while dates of expenditures for inpatient services were based on the respective dates of patient admission.

Based on these annual expenditures of eligible residents, these residents were further classified into 2 major groups, namely, group 1 (G1) which consisted of residents whose annual expenditures were within the 10th decile in each of the years of 2017, 2018 and 2019 and group 2 (G2) which comprised other residents not in G1. Among residents in G1, 83.8% had expenditures incurred in CGH at least once from 2017 to 2019, and 16.2% did not utilise any services in CGH at all (Fig. S1).