

Indicator specification:

PLDR collection of population health indicators

GP practice characteristics – GP practice network distances (GPP_3_04)



Version: 1.00

Date: June 2023

Authors: Konstantinos Daras & Benjamin Barr

Overview

Indicator title

GP practice characteristics – GP practice network distances (GPP_3_04).

Indicator family name

GP practice characteristics.

Summary

This indicator measures the average network distances and times to the nearest GP practice across Lower Super Output Areas in England since 2011.

Technical description

GP practice addresses of openly available monthly data acquired from the NHS digital (<https://digital.nhs.uk/data-and-information/publications/statistical/practice-level-prescribing-data>) and NHS Business Services Authority (<https://www.nhsbsa.nhs.uk/prescription-data/prescribing-data>) services. Next, the GP practice address data transformed to active GP practice addresses (GP practices that written NHS prescriptions in England and dispensed in the community) for each year since 2011. Using the active GP practice addresses for each year, network distances to the nearest GP practice by year derived for each postcode (National Statistics Postcode Lookup (NSPL) - <https://geoportal.statistics.gov.uk/datasets/national-statistics-postcode-lookup-august-2020-1/about>) in England using the Routino open source software (<https://www.routino.org>). Routino is an application for identifying the shortest path National Statistics Postcode Lookup (NSPL) - <https://geoportal.statistics.gov.uk/datasets/national-statistics-postcode-lookup-august-2020-1/about> between two locations using the Open Street Map transport network and considers directional restrictions on roads as well as attached labels of speed limits and barriers. The network distances/times between each postcode and the postcode of the nearest GP practice have been aggregated from postcode level into the Lower Super Output Area (LSOA) level by taking the average of network distances/times across the postcodes (mean value).

Unique Identifier

GPP_3_04

Presentation

Breakdowns

Time period

Yearly data: 2011 – 2020

Demographic

Distance-Time

Geographic

Lower Super Output Areas (LSOA) level in England

Disclosure control

This indicator has been produced using only publicly available datasets.

Output: GPP_3_04_GPP_network_distances_LSOA11.csv

Column name	Description
lsoa11	Lower Super Output Area code
mean_dist	Average network distance to nearest GP practice by car (km)
mean_time	Average time to nearest GP practice by car (minutes)
year	Year

Revision history

Version	Date	Summary of changes
1.00	Jun 2023	First release