THE AVAILABILITY OF POPULATION HEALTH INDICATORS ACROSS THE EUROPEAN REGIONS

WHY IS IT IMPORTANT

The ability to measure regional health inequalities across Europe and to build adequate population health indices strongly depends on the availability of reliable and comparable data at the regional level. Currently, there continues to be a lack of regionalized, reliable and comparable data on relevant dimensions of population health, which represents a challenge for measuring and monitoring regional health inequalities.1-3

WHAT WE DID

The aim was to assess the data availability of the indicators selected to be included in the EURO-HEALTHY Population Health Index (PHI), a multidimensional measure built to evaluate population health of the 269 NUTS 2 regions of the European Union. The following three tasks were undertaken:

- Verification of the data availability and reliability of the indicators at the regional level for the last year with available data;
- Application of a protocol to overcome the cases of missing data and completing the database, based on three data requirements regarding availability at:
  - NUTS 2 level or another NUTS level,
  - reference year (the last year with available data) or a year prior to that year, and
  - reference data source or a different data source.
- Development of a scoring system ranging from 0 (no data available) to 1 (all data available) to assess the availability of data by indicator and EU region.
WHAT WE FOUND

A total of 14 indicators (out of 80 which were previously selected) were not included in the PHI model due to data constraints, namely lack of accurate and comparable data for all EU28 countries and lack of analytical soundness. The Physical environment area of concern presented the highest number of indicators with major constraints regarding data reliability. Finally, 27 indicators were not selected to be part of the PHI model due to redundancy between the indicators selected.

From the indicators included in the PHI model, the majority presented cases of missing data. Most had been completed with data: i) at NUTS 1 or 0 level (46.6%), ii) from a previous year (16.0%), iii) from a different data source (3.2%), iv) estimated (0.2%) or v) from regions with similar geographic and socioeconomic characteristics (0.1%).

Overall, and despite the identified constraints, the EURO-HEALTHY PHI indicators availability score was high. The mean availability score is 0.8, ranging from 0.46 (worst) to 1 (best). Most of the dimensions present high scores (above 0.90), namely the dimensions of Employment, Education and Road safety. The lowest mean scores were found in the dimensions of Water and sanitation (0.50), Lifestyle and health behaviours (0.69), and Healthcare performance (0.68) (Figure 1). The lowest availability scores are mainly due to missing data at regional level (NUTS 2). In fact, none of the EU regions have all indicators available according to the requested data requirements (Figure 2).

Figure 1. Mean availability score of the EURO-HEALTHY PHI indicators by Dimension.
KEY MESSAGES

- Despite the constraints on compiling data of multiple indicators at the regional level, the construction of a multidimensional database of population health is feasible for the EU28 regions.
- There are significant differences in the data availability across different population health dimensions.
- There is an urgent need for data collection at sub-national data in several domains, namely those associated with Physical environment, Health-care performance and Lifestyle and health behaviours. Moreover, as the data collection process at European level follows EU policy, a clear prior statement on tackling regional inequalities within each policy is essential to leverage the data collection at sub-national level.
- Closing the data gaps between and within countries would greatly benefit from a synchronized and harmonized data collection process covering all the EU territory for the same reference year and from a more coordinated effort between producers of data at the local, regional, national and European level.

REFERENCES


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