Navigating numbers: Health and well-being

Student toolkit

Explore the importance of health and well-being measures in assessing individual and community health outcomes. Learn about the main concepts and terminology related to health indicators, social determinants of health and health disparities.

Office for National Statistics



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Overview

A health index provides a single value for health and well-being that can show how health changes over time. The Health Index for England is a new composite measure created by the ONS in 2020.

Use the Health Index tool and the real-world raw data used to calculate it to analyse and interpret health and well-being trends and patterns. You can do this within a local area or across different regions and should consider the significance of health as an indicator.





Overview

Featured tools and datasets

Health Index tool: An interactive tool to explore how health changed in different local authorities across England between 2015 and 2021, according to the Health Index. Every local area in England has a health score for each year. The score is made up of measures in different categories including mental and physical health, such as feelings of anxiety and conditions such as diabetes. It also measures local unemployment and road safety, as well as behaviours like healthy eating.

A score higher than 100 means that an area has better health for that measure than was average in 2015, lower than 100 means worse health than the 2015 average.

Health Index data: Underlying data used to construct the Health Index for England, including indicator details. Data have been selected from a wide variety of sources to allow comparisons across time and by geography, down to lower-tier local authority (LTLA) level.



Overview

Additional resources

- Health index methods and development: 2015 to 2021
- Health index contents and definitions
- ONS data and articles about health and social care
- ECHI (European Core Health Indicators) data tool
- <u>The health foundation article: a health index for england:</u> <u>opportunities and challenges</u>
- UK measures of national wellbeing dashboard
- ONS labour productivity data
- ONS economic productivity measures



Geography: Health disparities

Your goal is to map out health disparities within a local area or across different regions. You will explore a range of statistical data related to health and well-being in the UK, such as mortality rates, disease prevalence or vaccination coverage. You can use the data to create graphs, charts and tables that help to identify the main trends and patterns.

Learning objectives

- Understand important concepts related to health disparities, including mortality rates, disease prevalence, vaccination coverage and their significance in public health.
- Develop proficiency in data analysis and create various visual representations of data.
- Understand the geographic factors contributing to health disparities and propose evidencebased solutions to address them, considering socio-economic, environmental and cultural factors.



Geography: Health disparities

Get started:

Examples of questions to answer or hypotheses to test

- How do mortality rates vary between local areas? Do the areas with high rates share any characteristics?
- Are there any correlations between air pollution levels and respiratory health outcomes in various regions of the UK?
- How does vaccination coverage differ across various regions in the UK, and what factors contribute to these differences?

- How do lifestyle factors such as diet, exercise and smoking prevalence correlate with overall health outcomes in different areas?
- Are there any disparities in the prevalence of chronic diseases between urban and rural communities? For example, diabetes or heart disease.
- How do healthcare resources, such as hospitals and clinics, distribute across regions in England, and what implications does this distribution have on health outcomes?



Geography Sociology

Business

Geography: Health disparities

Next steps

You might like to familiarise yourself with the Health Index for England and what it does and does not include.

You could also use Geographic Information System (GIS) mapping tools or online mapping platforms to identify areas with lower scores in different Health Index indicators.





Geography: Health disparities



- Things to think about
- Take the time to conduct thorough research on the topic of health disparities and relevant data sources available in England. Understanding the background and context will help you make informed decisions throughout your project.
- Where will you source additional data if you need it? How will you combine that with ONS data? Find out what data is available and consider its strength before deciding on your question or hypothesis.

- **Do your data visualisations add value?** Make sure your visualisations are clear, concise and easy to interpret.
- Decide on the geographic scope of your analysis. Are you focusing on all of England or a specific local area, city or region? Consider how the geographic boundaries may impact your findings.
- Choose relevant variables and indicators to study health disparities. Consider factors such as age, gender, ethnicity, socioeconomic status and geographic location.

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Business

Sociology: Designing a health index measure

Your goal is to design a comprehensive health index measure that reflects various social determinants of health. You will need to conduct comprehensive research to gain insights into the multidimensional nature of health and well-being.



Learning objectives

- Understand the multidimensional nature of health and well-being, recognising that factors beyond medical care contribute to overall health outcomes.
- Develop knowledge of different health indices and their significance in assessing the overall health and well-being of populations.

Sociology

- Analyse and evaluate the strengths and limitations of existing health indices.
- Learn about assigning weights when creating an index measure.

Sociology Business

Sociology: Designing a health index measure

Background research

You might like to:

- discuss the concept of health indices and their importance in assessing the overall health and well-being of populations
- look at examples, such as the Human Development Index and Bhutan's Gross National Happiness Index, and discuss the pros and cons of what factors they typically do and do not include
- research and examine social determinants of health, such as income, education, access to healthcare, social support networks, employment status, environmental conditions and lifestyle behaviours
- learn about assigning weights to different factors based on perceived importance when creating an index measure





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Sociology: Designing a health index measure

Design your index

Use the existing Health Index data and tools as a starting point for your research. The Health Index is a recent creation by the ONS. When designing your own version of a health index you will need to:

- research and decide what measures you will include in your index and why
- consider how you will weight different data points based on their importance and how the overall score will be calculated
- think about technical considerations, such as the availability of data and frequency of collection



Sociology



Business

Sociology

Sociology: Designing a health index measure





Things to think about

- Think beyond just physical health. Consider mental health, social well-being, environmental factors, access to healthcare and socioeconomic determinants. You will need to decide carefully what to include and what not to include.
- Consider how your index will source relevant data. Is it available from surveys, research studies, government reports and healthcare databases? Be aware of availability bias.
- How will you assign appropriate weights to each component in the index based on their significance?

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Sociology

Business: Using health as an indicator

Your goal is to explore the significance of health as an indicator in business decisionmaking processes and consider how businesses can integrate health-related metrics into their operations.

Learning objectives

 Understand the significance of health indicators in business decision-making processes, and the impact of health on various aspects of business operations.

- Analyse the reasons why businesses might be interested in health indicators, considering factors such as productivity, profitability, reputation and sustainability.
- Explore how the health of employees, customers and communities can influence business operations, both internally and externally.
- Investigate examples of businesses that have successfully integrated health-related metrics into their strategies and decision-making processes, identifying best practices and lessons learned.



Project briefs



Business: Using health as an indicator

Get started

Examples of questions to answer or hypotheses to test

- Can businesses reduce healthcare costs and improve employee retention by investing in health promotion programs?
- Do health-related metrics such as absenteeism rates, healthcare utilisation and employee satisfaction correlate with financial performance indicators?
- Are there specific industries or sectors where integrating health-related metrics into business operations yields the most significant benefits?

 Can businesses effectively leverage technology and data analytics to track and measure the impact of health initiatives on business outcomes?

Sociology

 How do global trends in public health and wellness impact the strategies and priorities of multinational corporations in integrating health metrics?



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Business: Using health as an indicator

Using the tools

Use the datasets to help answer your question or test your hypothesis. You might like to look at trends in population health, such as disease prevalence, mortality rates, life expectancy and overall well-being, and identify the health challenges businesses may face in different areas.

You could also research ONS data on employment, including information on sickness absence rates, occupational health issues and work-related injuries. You could use this data to explore the relationship between workforce health and business performance.





Business: Using health as an indicator



Things to think about

- What are the potential barriers and challenges businesses face? What should businesses consider when attempting to integrate health-related metrics into decision-making processes?
- Do regulatory requirements and industry standards influence businesses' adoption of healthrelated metrics in decision-making?
- What are the ethical implications? When thinking about employee privacy and consent, what are the ethical implications of businesses using healthrelated data to inform decision-making?

Sociology

• Where will you source additional data if you need it? How will you combine that with ONS data? Can you gather any primary data from different stakeholders?