Research highlights of the year

Developing a more accurate measure of the nation’s health

To develop targeted policies for improving people’s physical and mental wellbeing, governments and local authorities need accurate, ongoing data on the population’s health. With this in mind, the Office for National Statistics (ONS) in 2022 rolled out its Health Index, which provides annual scores for England’s health at national and local authority level. The Turing played a key role in the development of the index, carrying out an in-depth statistical analysis to ensure that it is as accurate as possible.

The index’s annual score is calculated by combining data on over 50 different aspects (‘indicators’) of health, covering specific conditions (e.g. rates of cancer, dementia and anxiety) as well as factors such as air pollution, drug misuse and road safety. The overall score gives a measure of England’s health over time (there are plans to implement the index across the rest of the UK), while the individual scores for local authorities allow the comparison of geographic areas. The score can also be separated into its individual indicators to explore what may be driving a particular health pattern.

The Turing’s statistical analysis, led by Anna Freni Sterrantino, assessed the appropriateness of the indicators selected by ONS, and the methods for incorporating them into the index. ONS took on board the Turing’s recommendations by, for instance, adjusting how each indicator is weighted so that it does not exert too much or too little influence on the overall score. The Turing-ONS team has also engaged with experts on other indices – such as the United Nations Development Programme’s Human Development Index – to gather advice on how results from the Health Index can be communicated to support policy-making.

Read the paper: Assessments and developments in constructing a National Health Index for policy making, in the United Kingdom

“It’s so important that we get the methods behind the Health Index right, and that’s exactly the type of information we got from the Turing’s critical review.”

Greg Ceely
Head of Health Surveillance Analysis, Office for National Statistics