Office for Health Improvement & Disparities

Session 2A: Data Informed Population Health Improvement

Welcome

LKISEast@dhsc.gov.uk

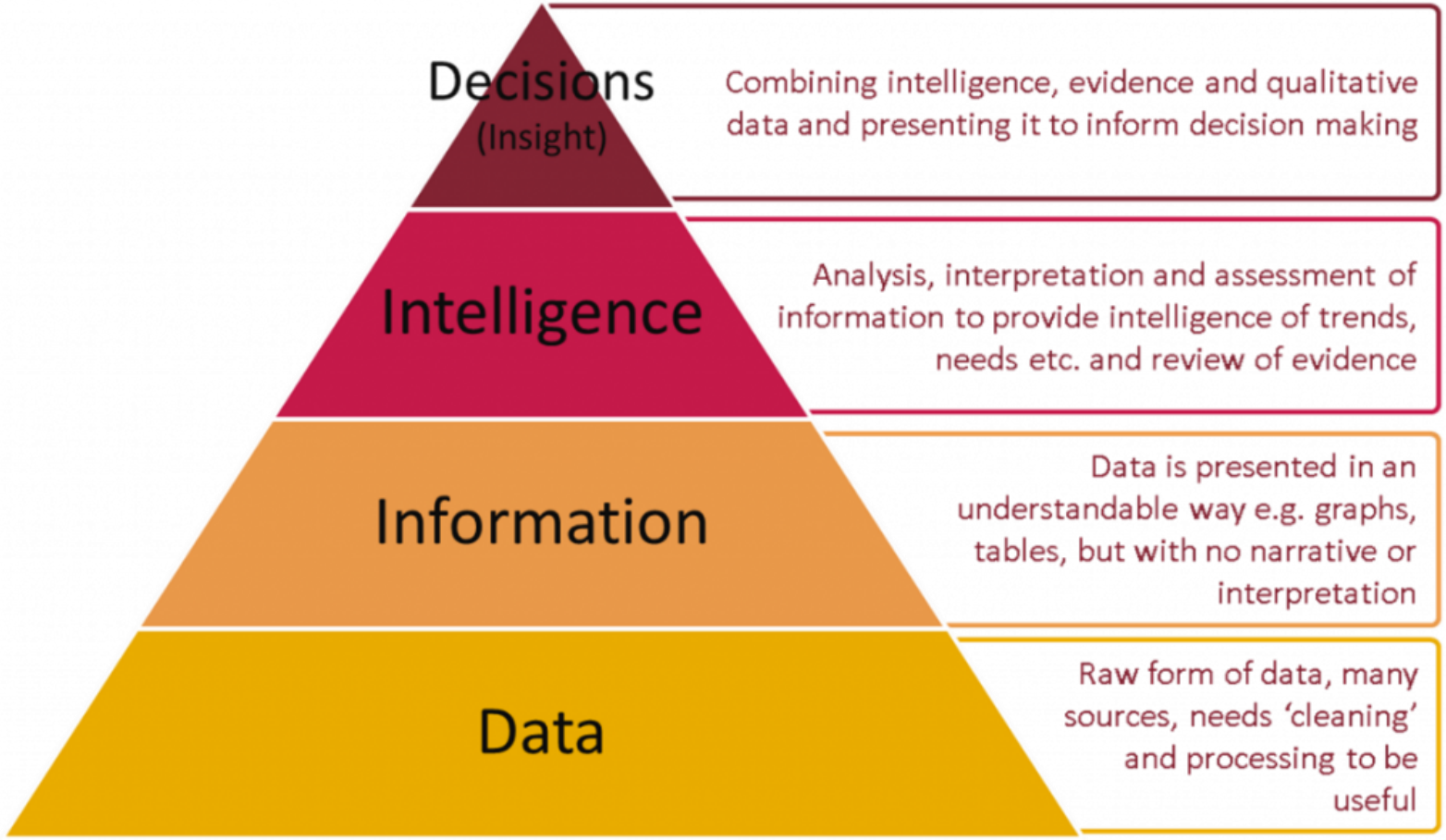
27 October 2023

Content

- Introduction and aims of the session
- Who are LKIS
- Accessing our products
- SHAPE
- Local Health
- Fingertips
- GBD
- Join our mailing list
- Final panel – challenges and opportunities of using PHI in decision making

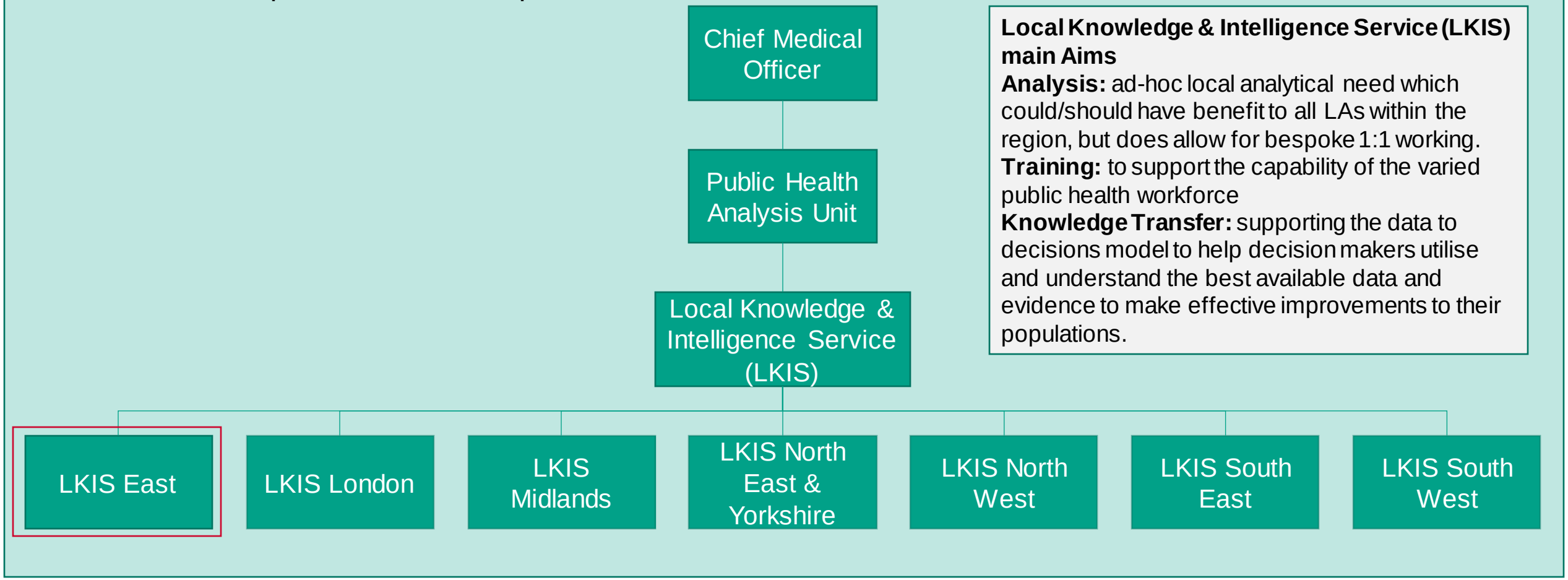
Introduction and aims

In this session we will showcase tools from OHID which support users to answer specific questions about the populations they serve, with a view to making data informed decisions.



Who are we?

Office for Health Improvement and Disparities



Local Knowledge & Intelligence Service (LKIS) main Aims

Analysis: ad-hoc local analytical need which could/should have benefit to all LAs within the region, but does allow for bespoke 1:1 working.

Training: to support the capability of the varied public health workforce

Knowledge Transfer: supporting the data to decisions model to help decision makers utilise and understand the best available data and evidence to make effective improvements to their populations.

All resources and products used today

- SHAPE Place (shapeatlas.net) OHID
- Fingertips profiles (phe.org.uk) OHID
- Local Health (localhealth.org.uk) OHID
- VizHub - GBD Compare (healthdata.org)

Handy overview of tools at OHID and LKIS

- Statistics at OHID (gov.uk)
- Home - OHID National Health Intelligence - Knowledge Hub (khub.net)

Office for Health Improvement & Disparities

The tools

SHAPE (Strategic Health Asset Planning Environment)

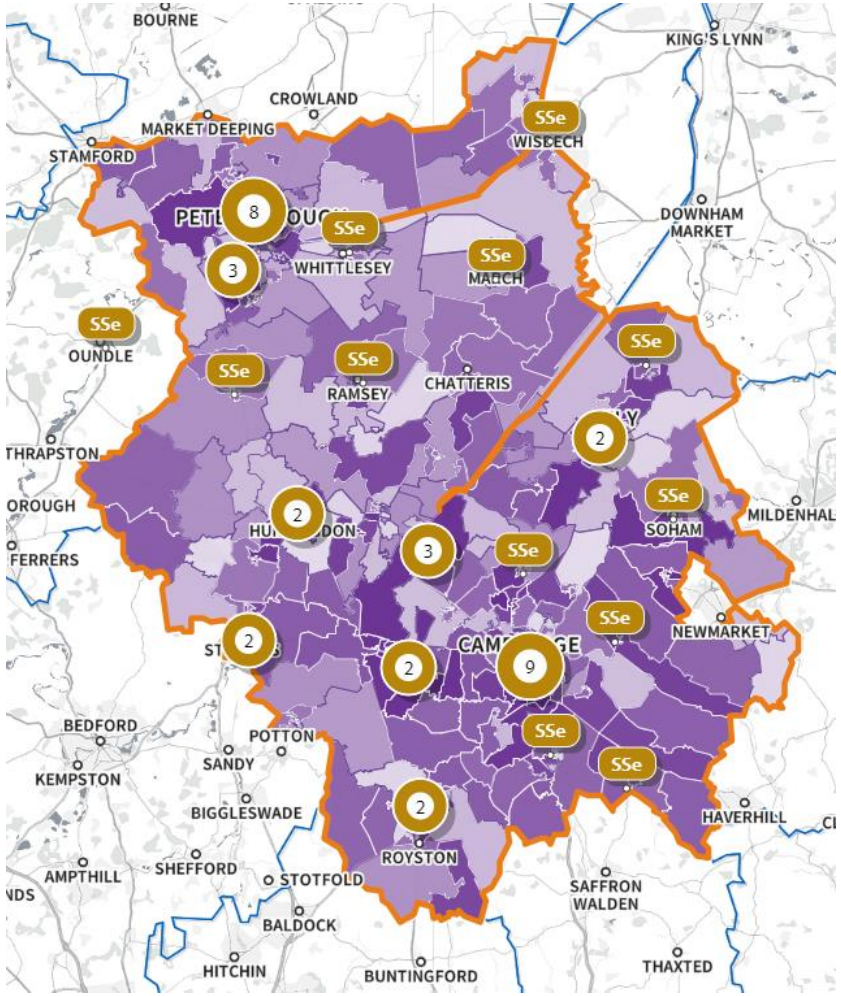
What is SHAPE?

SHAPE is a powerful tool which maps out **assets,** and plots **health, demographic, and infrastructure data** around them.

An asset is a **physical location** of an organisation which **benefits** the population in some way (e.g. a pharmacy, a school, a GP).

SHAPE is useful in understanding **service delivery and utilisation,** and the positioning of assets relative to the need of the population served.

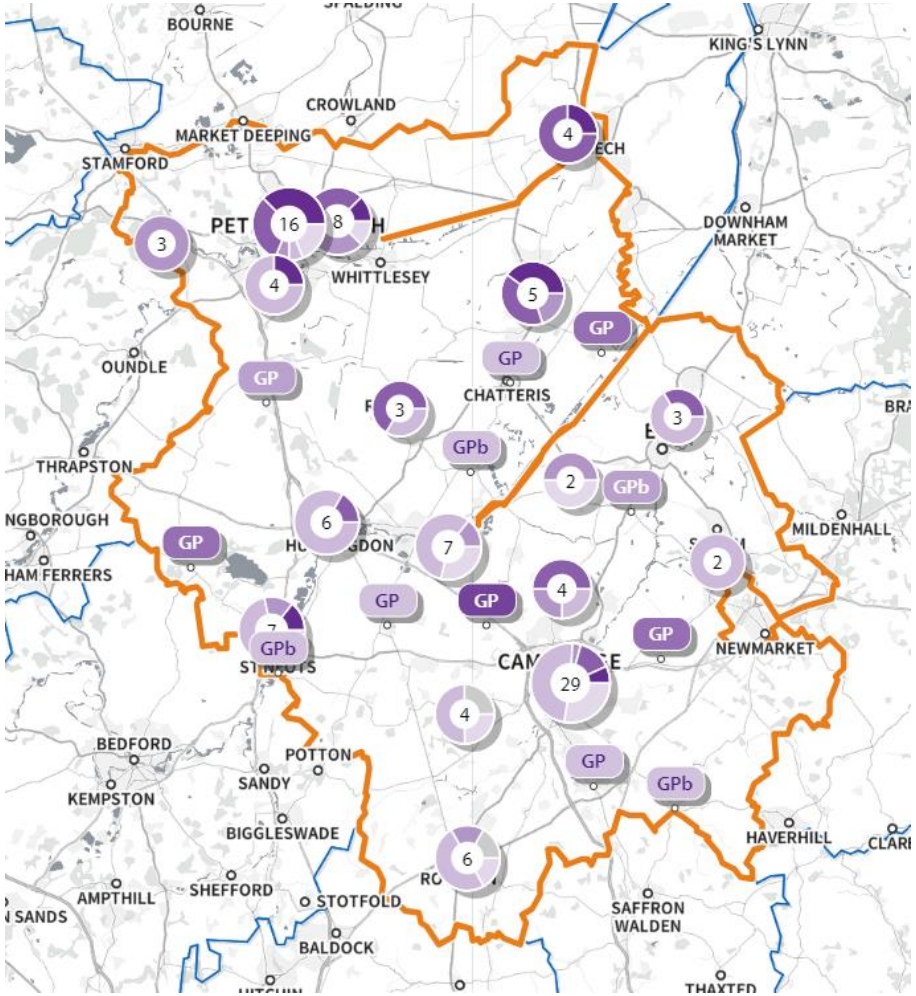
SHAPE offers **travel time analysis** so that users can understand the realities of **access** to services.



SHAPE (Strategic Health Asset Planning Environment)

What it contains:

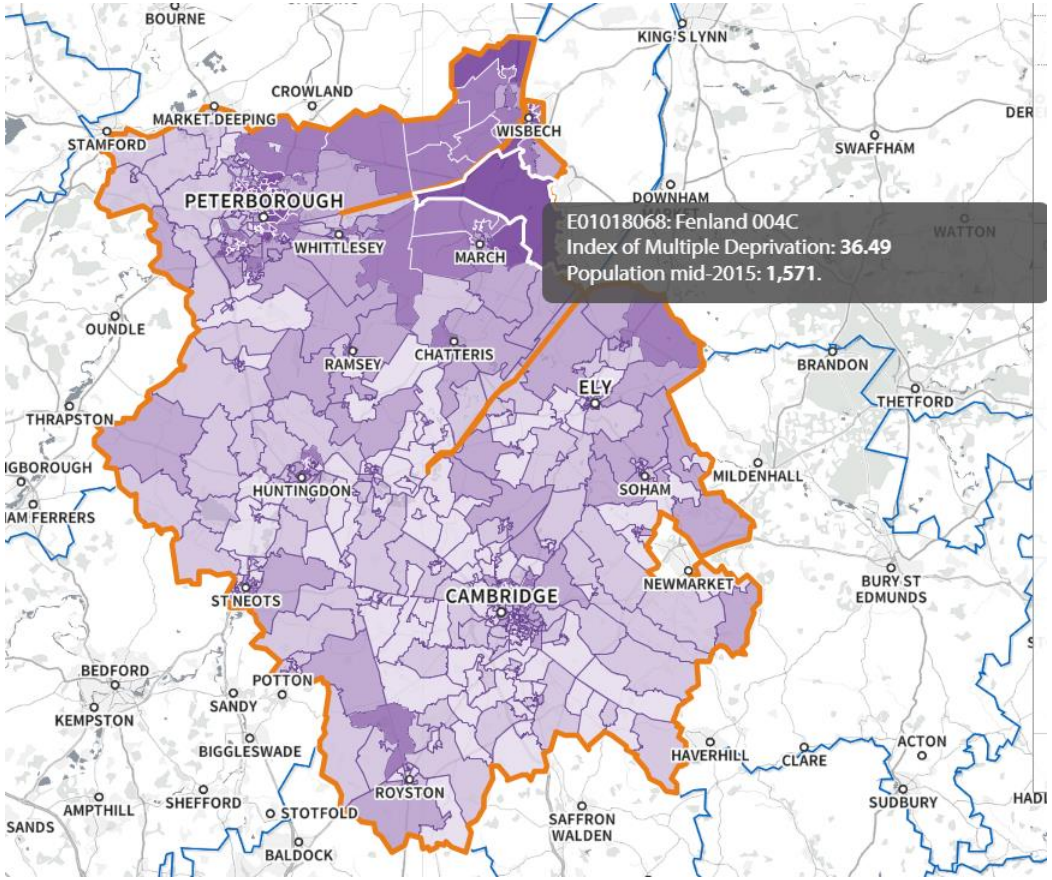
- Data at ICB, Sub-ICB, UTLA, LTLA, and LSOA.
- Health data (QOF), COVID vaccinations, Dementia.
- Environmental data such as air quality and risk of flooding.
- Demographic data including large to small area population pyramids.
- Deprivation information.
- Geographical layers.
- Time travel analysis.
- A variety of health, education, infrastructure assets.



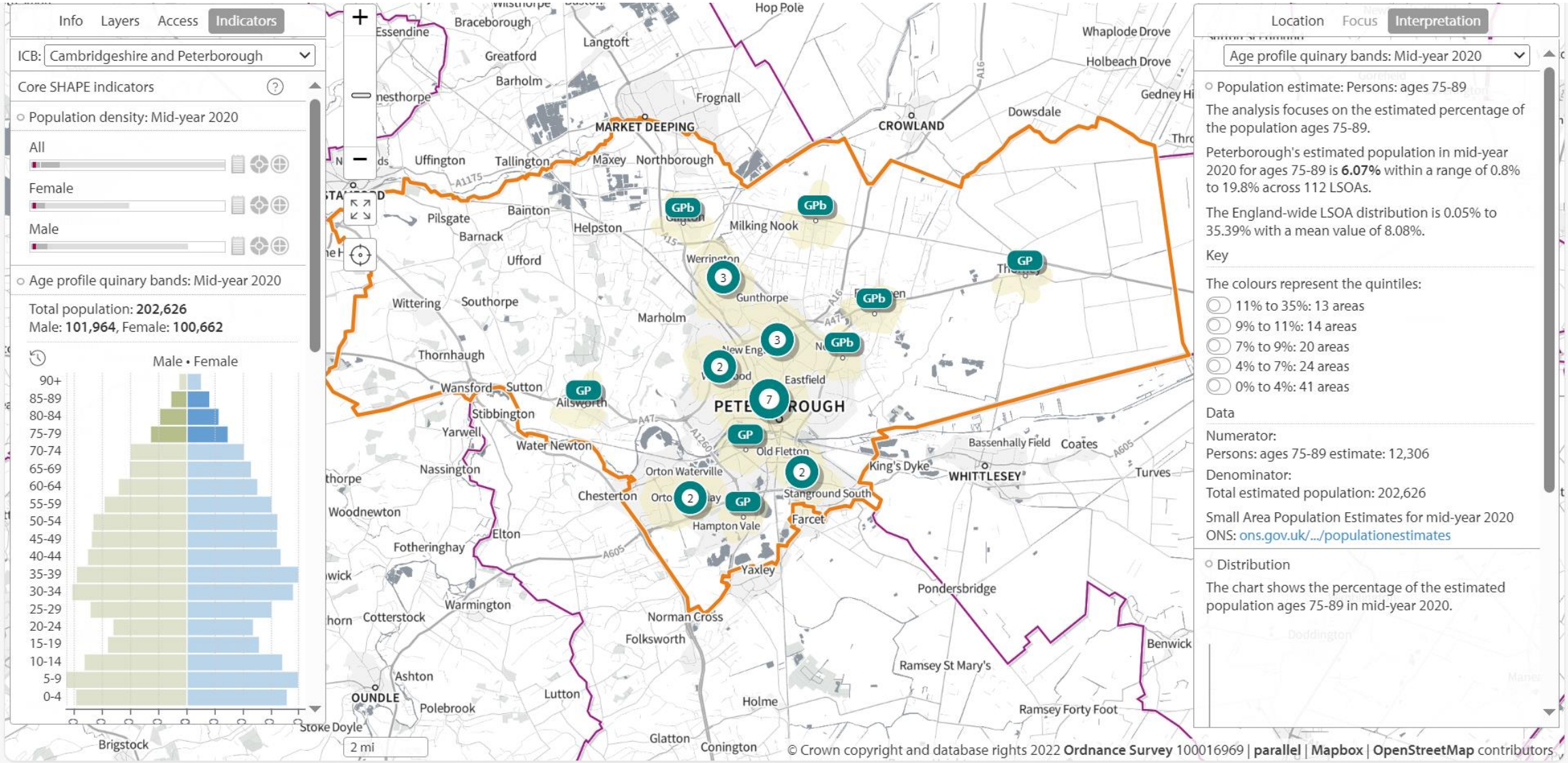
SHAPE (Strategic Health Asset Planning Environment)

Caveats and issues

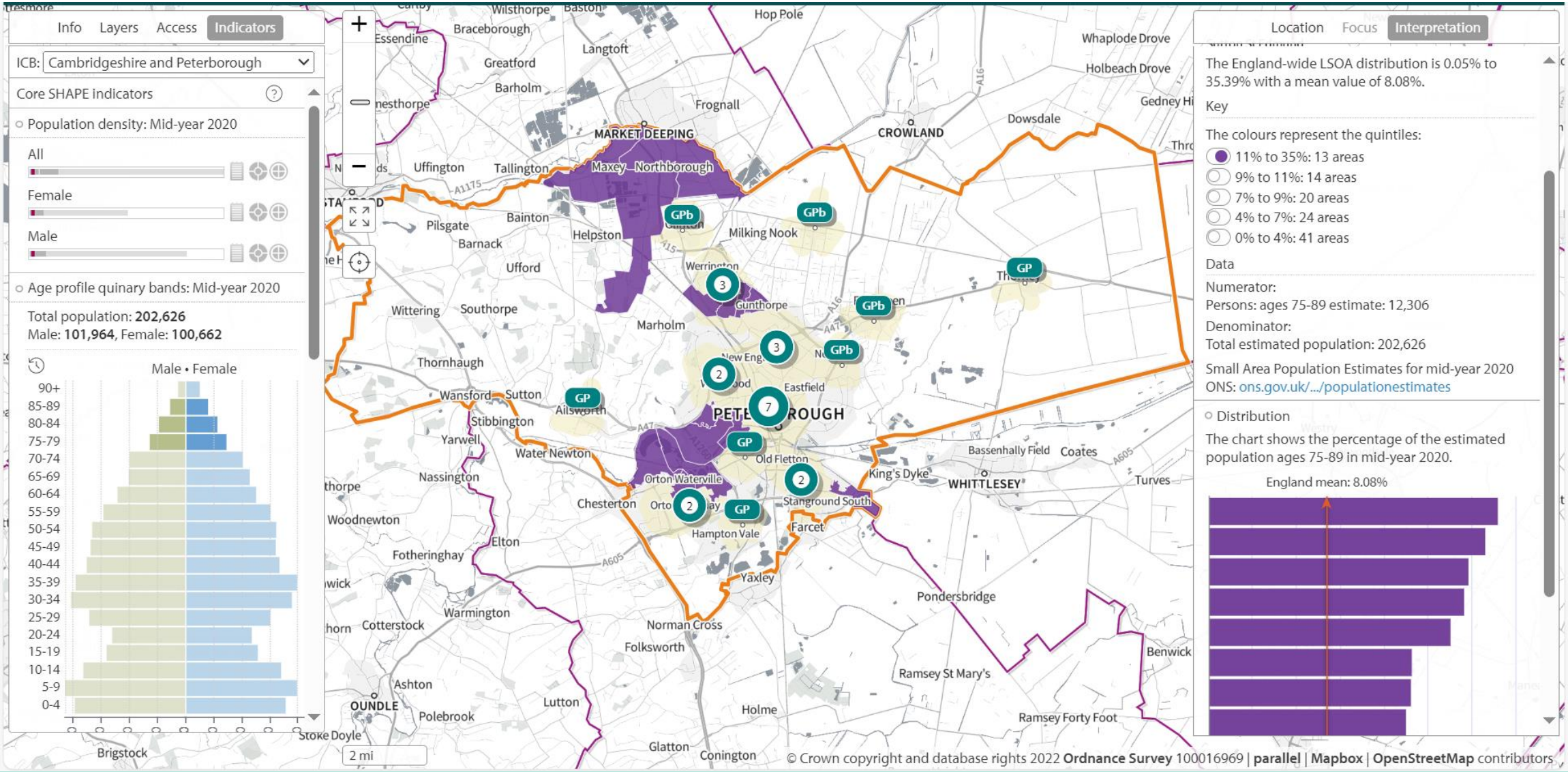
- Requires a login (but open to all .gov, .nhs and 3rd sector).
- Data is tricky to extract and use with other analytical methods (e.g. R or other dashboards).
- Can be tricky to navigate and slightly longer learning curve than other tools.



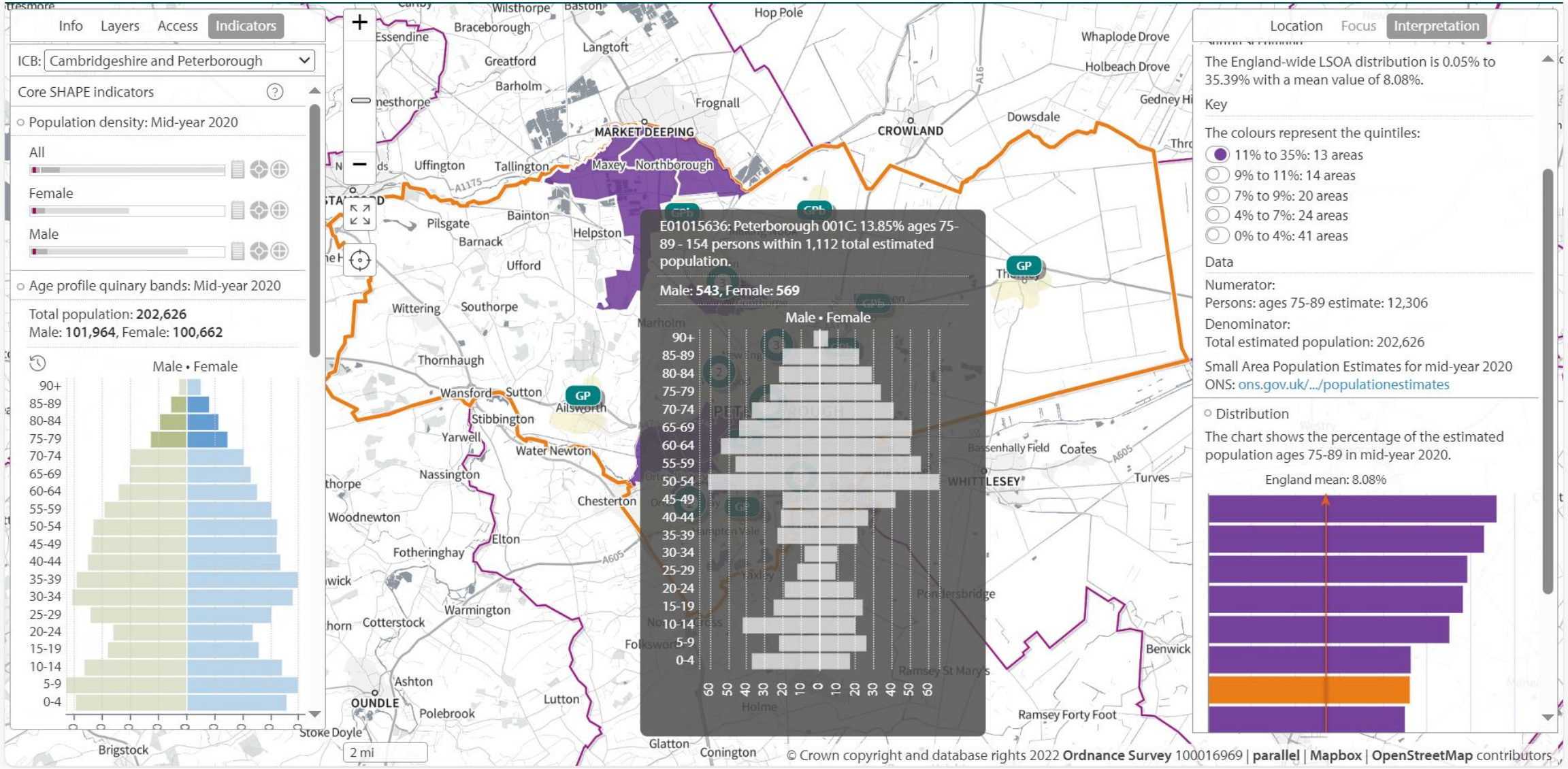
SHAPE (Strategic Health Asset Planning Environment)



SHAPE (Strategic Health Asset Planning Environment)



SHAPE (Strategic Health Asset Planning Environment)



SHAPE questions / demonstration

- SHAPE Place (shapeatlas.net)

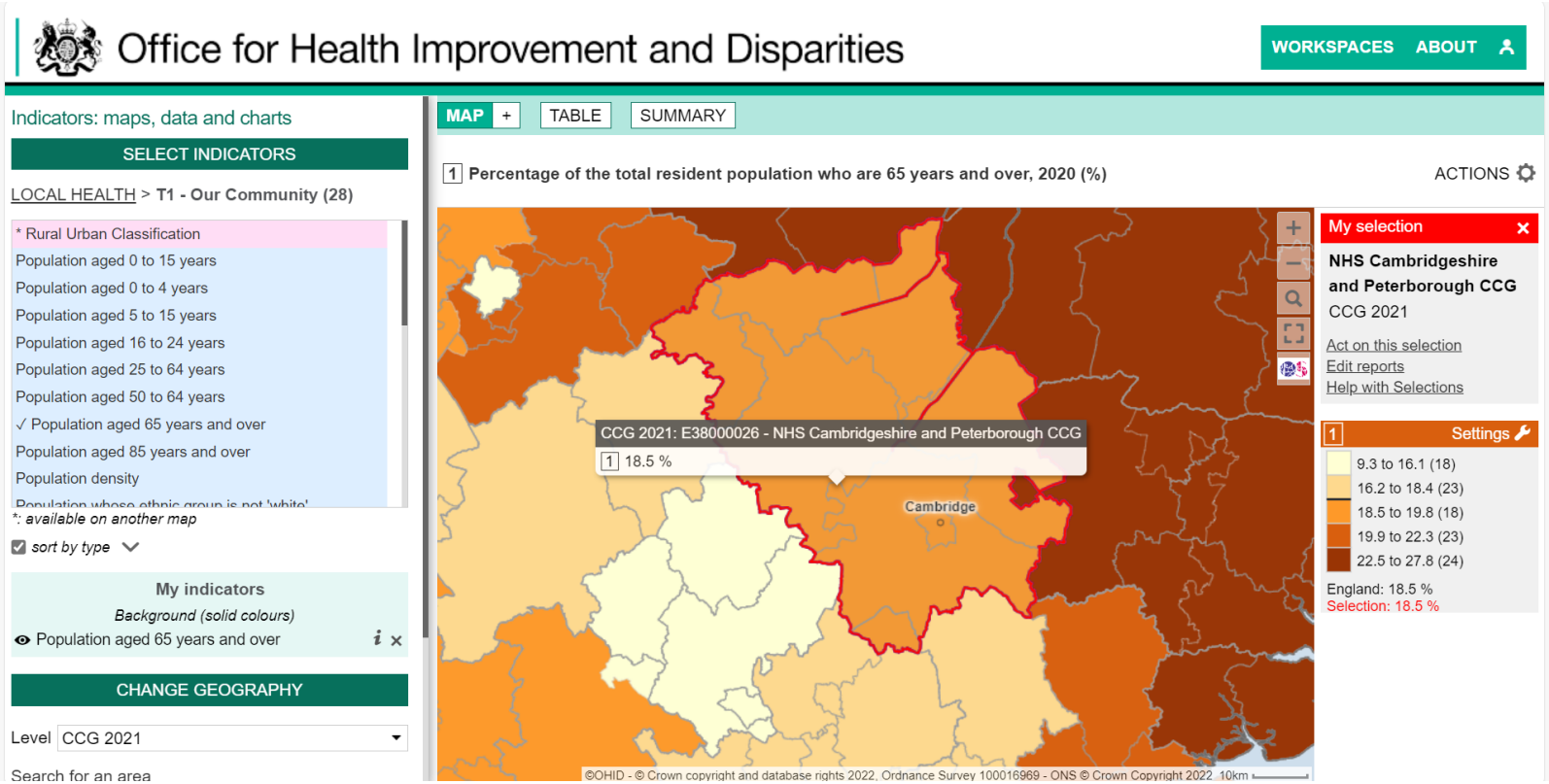
- **How might you use SHAPE in your role?**

Local Health (small area data)

What is Local Health?

Local Health offers health and population data at a variety of geographical footprints. It's primary role is to provide data at **small area** level, particularly **Ward** data.

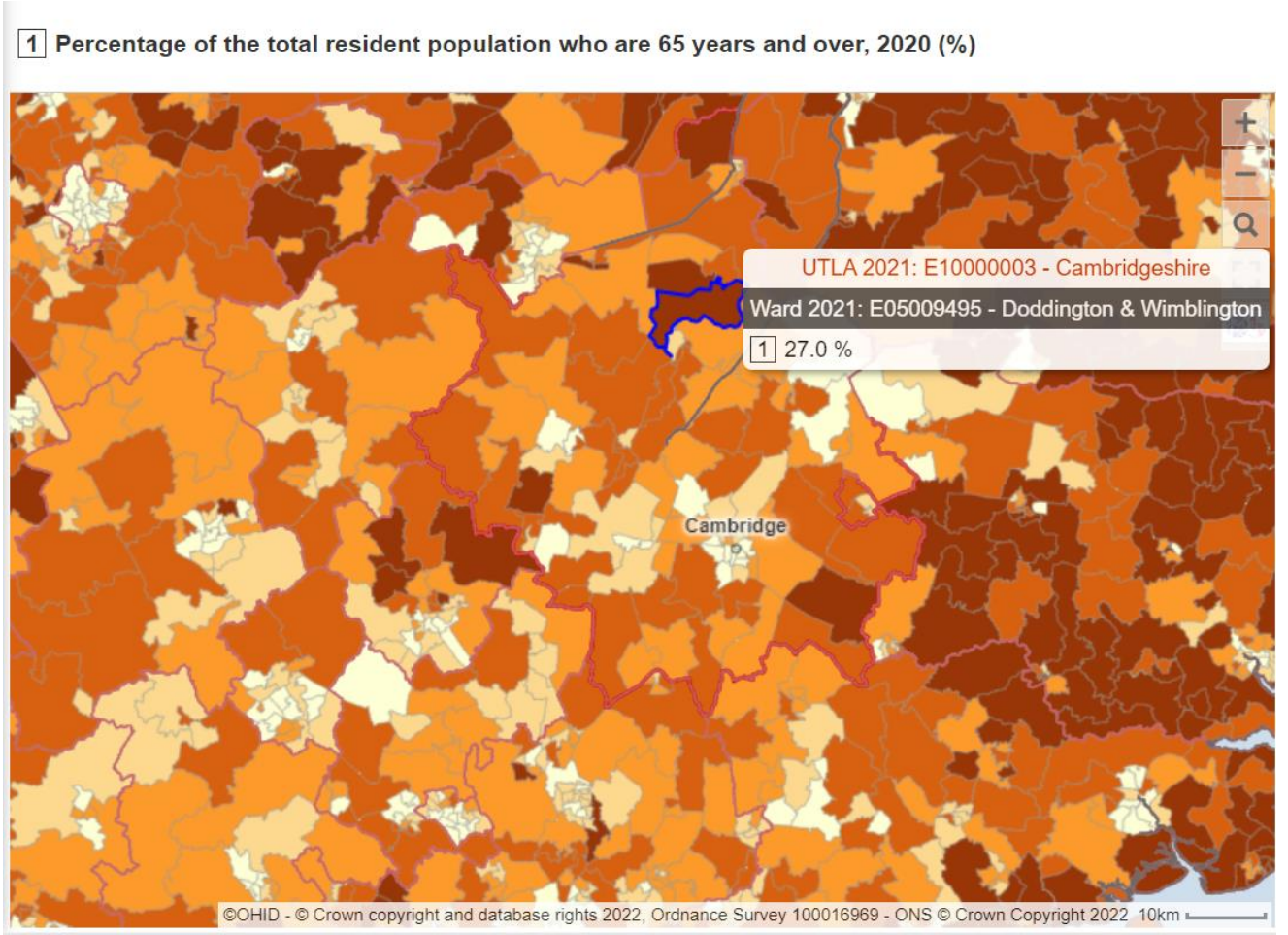
Local Health highlights the **within area variation** of health and is useful for understanding **inequalities** at a small area level.



Local Health (small area data)

What it contains:

- Health and population data. Highlighting demographics, behaviour and lifestyle choices, morbidity, life expectancy and mortality.
- Data available at CCG, UTLA, MSOA, and Ward.
- Fast generation reports detailing the population at each geographical level, and providing useful comparators to parent geographies, and to England.
- The ability to import and map your own data.

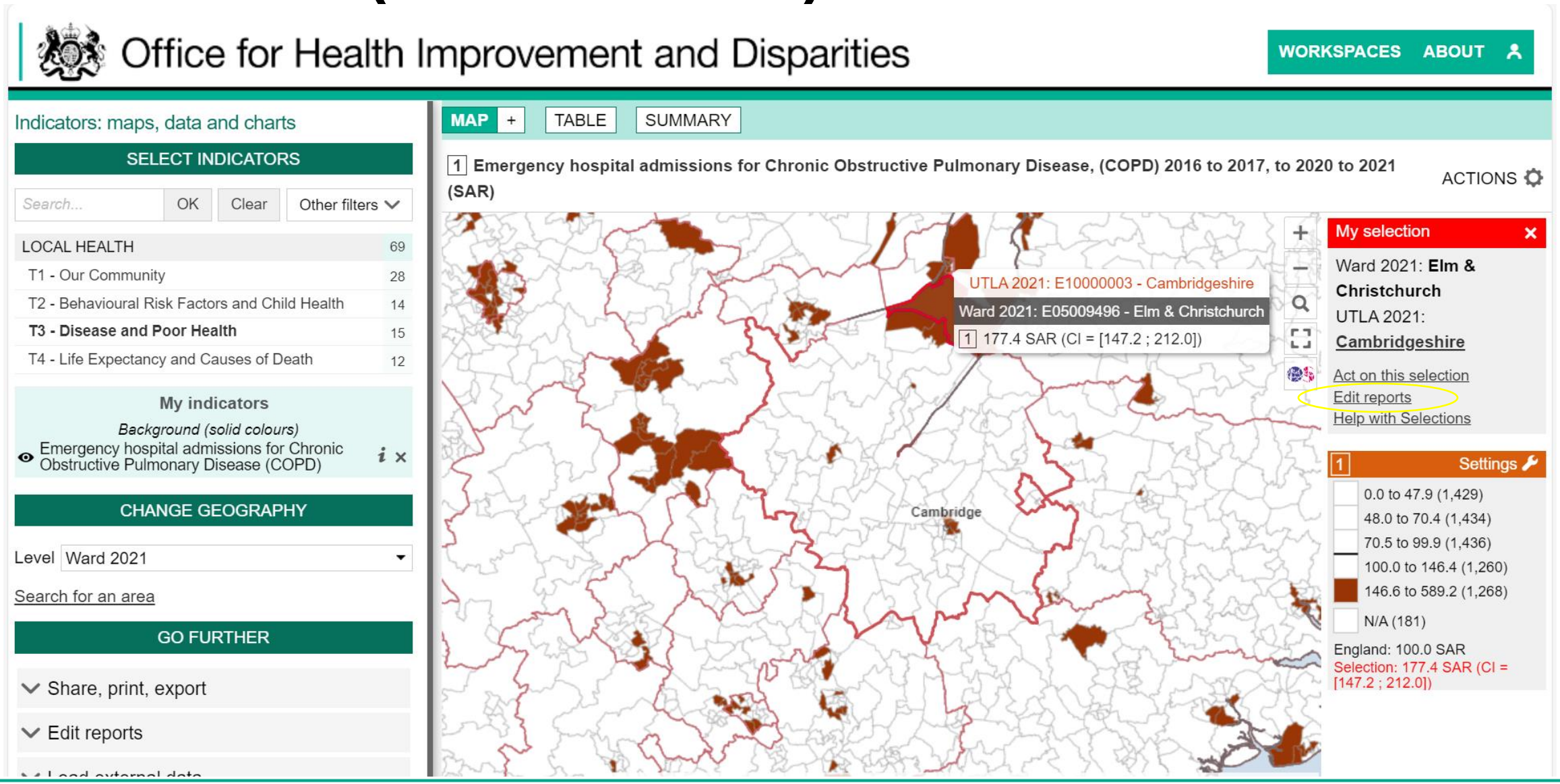


Local Health (small area data)

Caveats and issues:

- Where data isn't available at small area level modelled estimates are used.
- Small area data is often suppressed due to small numbers, or the confidence intervals are very wise creating greater imprecision in the value.
- Often uses values not commonly used in health statistics (standardised ratios) so may be tricky to explain to non-technical users.

Local Health (small area data)



Local Health (small area data)

Office for Health Improvement and Disparities

WORKSPACES ABOUT

Reports: get a dashboard on a custom area

BROWSE THROUGH REPORTS

LOCAL HEALTH: REPORT PART 1
- Population
- Ethnicity & language
- Deprivation
- Housing and living environment
- Employment
- Long-term health conditions and morbidity
- Children's weight (NCMP)
- Children's health care activity
- Child and maternal health
- **Behavioural Risk Factors**

LOCAL HEALTH: REPORT PART 2

DEFINE AREAS

Study area **Elm & Christchurch (Ward 2021)**

To change this zone:

Search Extend Map Bookmarks

Search for a location, a place OK Geolocate

Comparison zone **England**

REPORT MAP

Study area **Elm & Christchurch (Ward 2021)**, compared with **England** ACTIONS

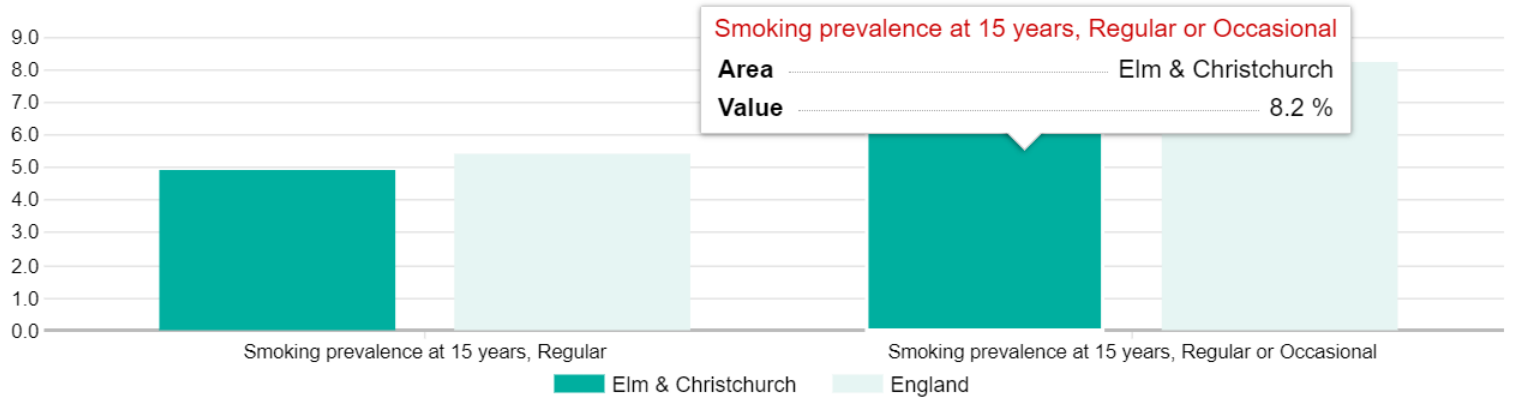
LOCAL HEALTH: REPORT PART 1 - BEHAVIOURAL RISK FACTORS

Smoking prevalence, %, 2014. (Modelled estimates)

Indicators	Elm & Christchurch	Fenland (LTLA 2021)	Cambridgeshire (UTLA 2021)	England
Smoking prevalence at 15 years, Regular (%)	4.9	5.2	5.2	5.4
Smoking prevalence at 15 years, Regular or Occasional (%)	8.2	8.2	8.2	8.2

Source: Department of Geography, University of Portsmouth and Department of Geography and Environment, University of Southampton; Mid year population estimates, Office for National Statistics.

Smoking prevalence, %, 2014. (Modelled estimates)



Local Health questions / demonstration

- [Local Health - Office for Health Improvement and Disparities]

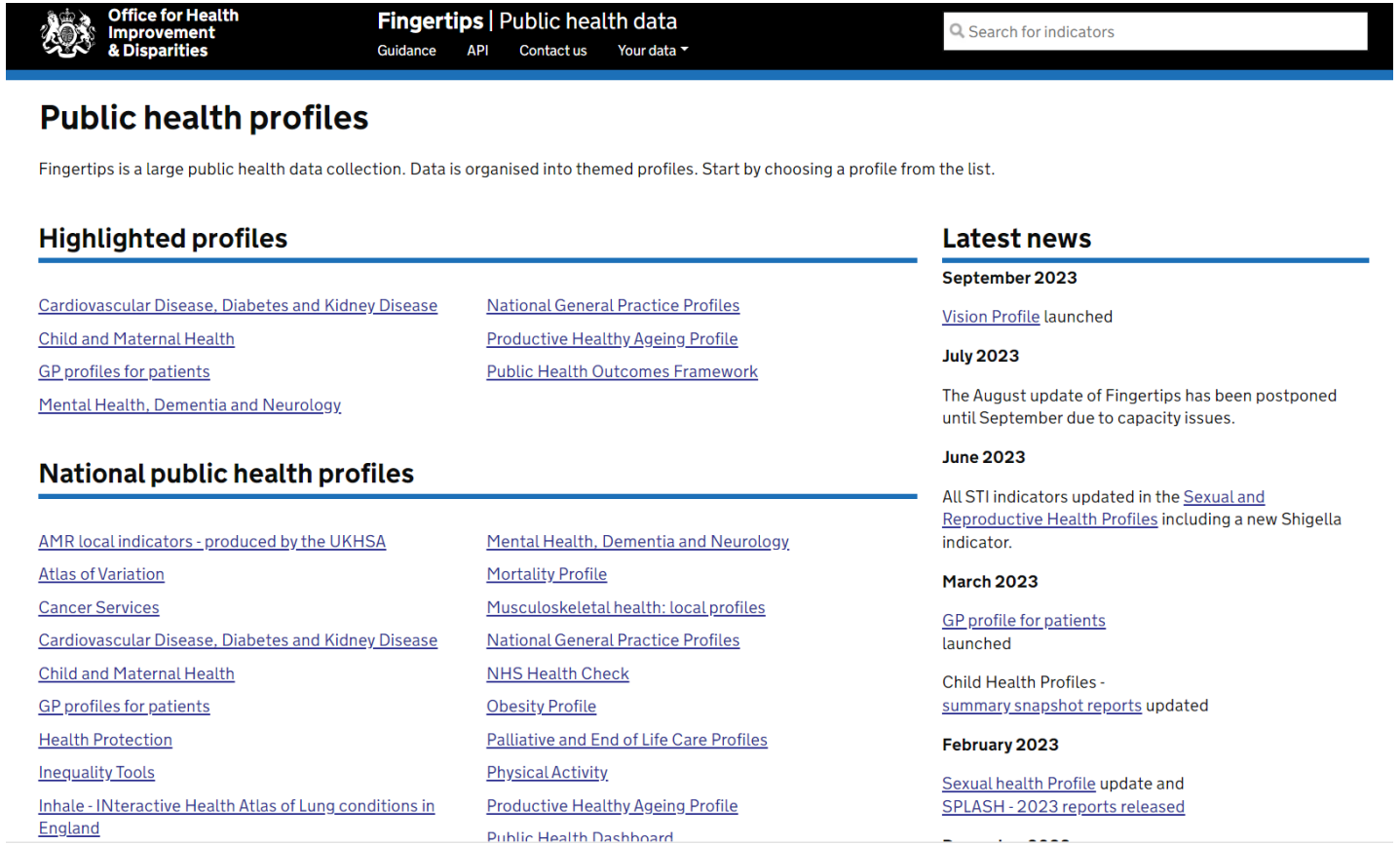
- **How might you use Local Health in your role?**

Fingertips (health and wellbeing profiles)

What is Fingertips?

Fingertips is a large **public health** data collection. Data is organised into **themed profiles**.

Fingertips profiles are a rich source of indicators across a range of health and wellbeing themes. They are designed to support Joint Strategic Needs Assessment (JSNA) and commissioning to **improve health and wellbeing and reduce inequalities**. With these profiles you can browse indicators at different geographical levels, **benchmark** against the regional or England average and **export data** to use locally.



Fingertips (health and wellbeing profiles)

What it contains:

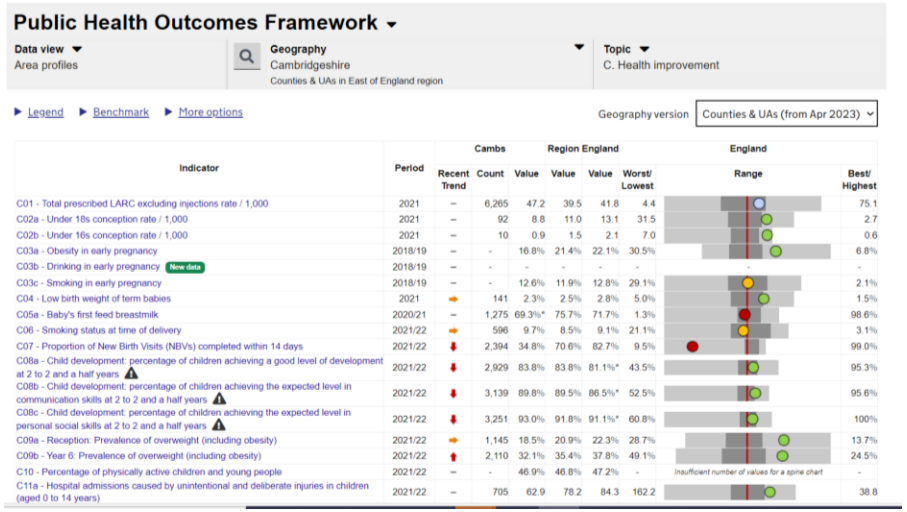
Fingertips groups indicators together across themes so that users can explore population need. Themes may be a disease and its risk factors (i.e. cancer services), a public health approach (for instance exploring inequalities) or a population type (i.e. Children).

Data is available at England, Region, UTLA, LTLA, Ward, ICB, Sub-ICB, PCN, GP (all depending on the profile accessed).

A wide variety of visualisations which help explore user questions.

The ability to benchmark against other measures and statistically compare values.

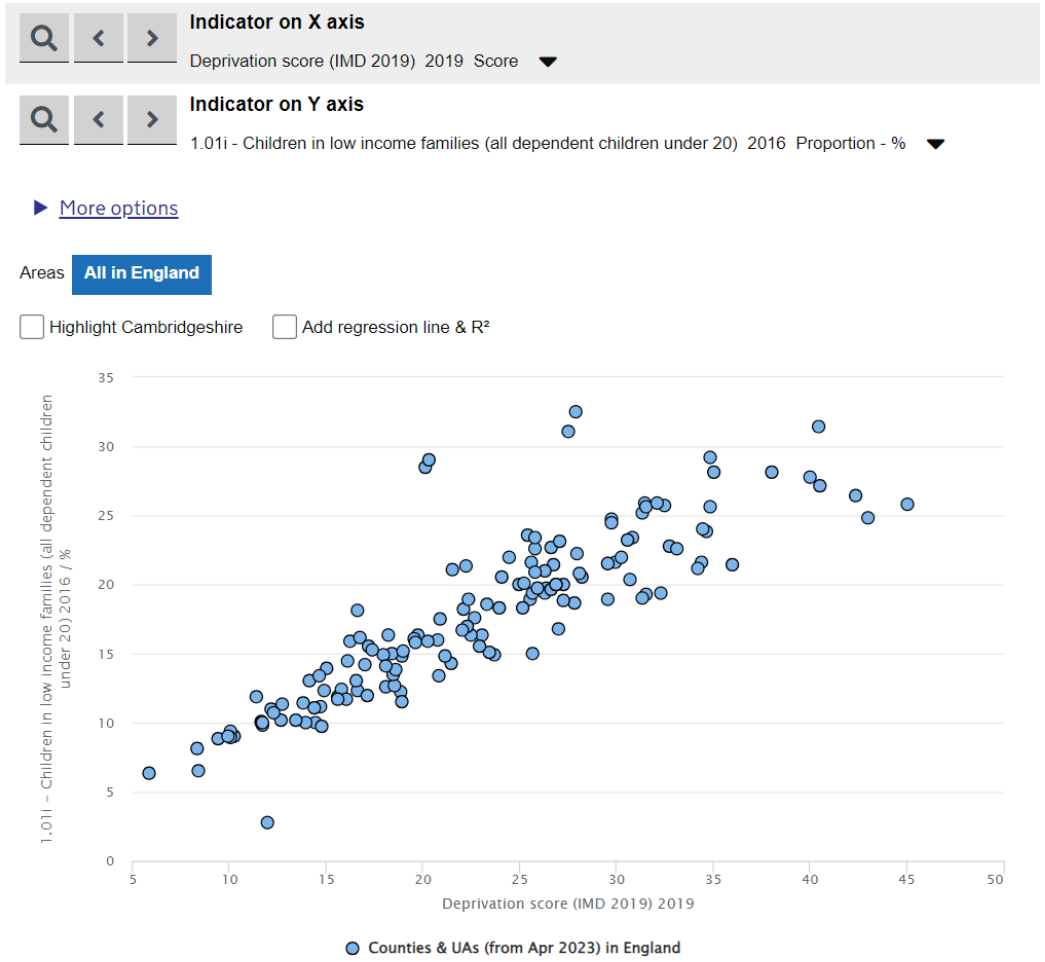
Data can be downloaded, and also linked to other analysis through fingertips API and FingertipsR package.



Fingertips (health and wellbeing profiles)

Caveats and Issues:

- Not all data available at all geographical levels.
- OHID are a secondary user of data so can only display what data is available.
- Boundary changes can impact on selecting and choosing data.
- Huge selection of indicators and profiles can make navigating tricky.
- Potential steep learning curve for new users owing to multiple options available to navigate and display data.

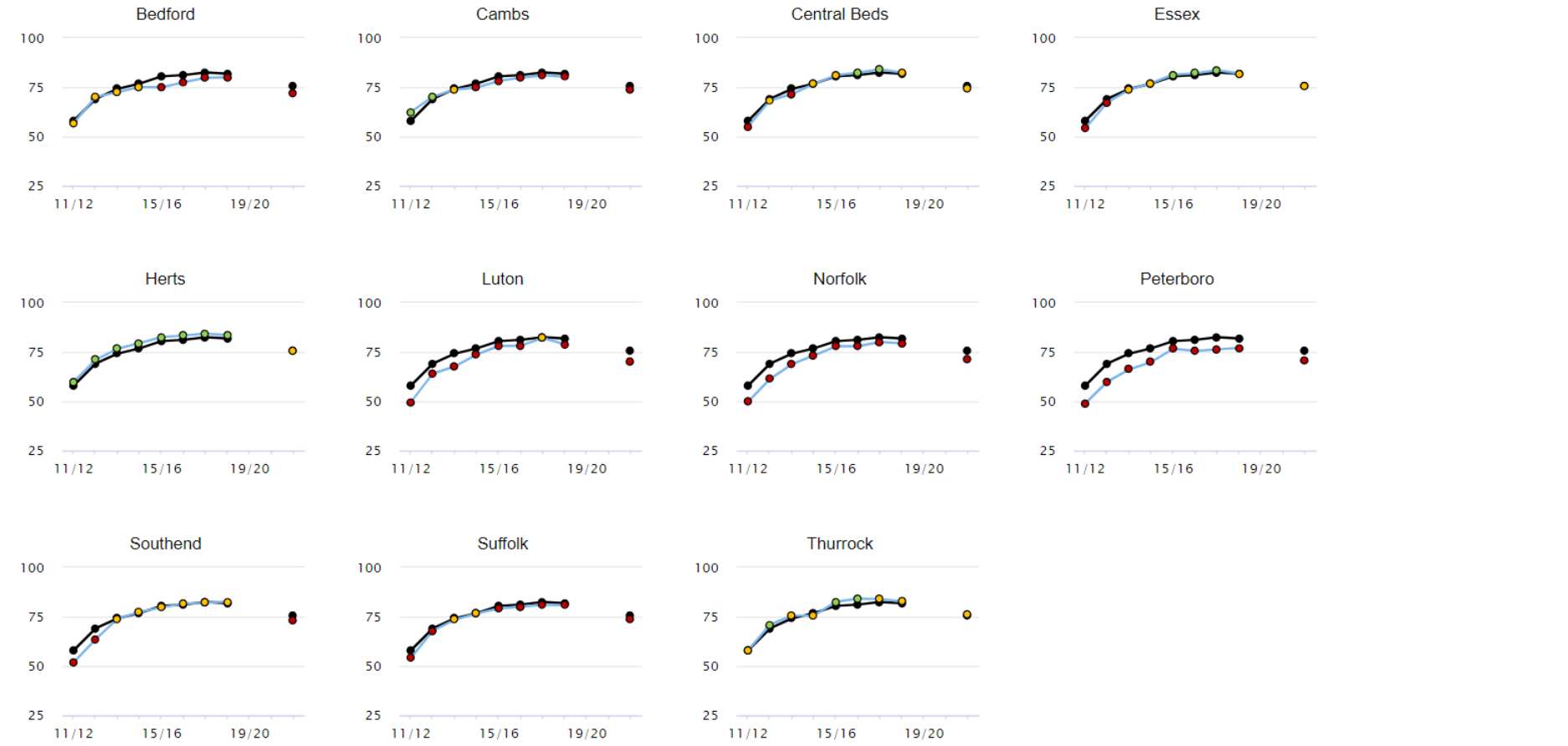


Fingertips (health and wellbeing profiles)

Trends for: Selected area | **All areas (grouped)** — Sort charts by: **Area name** | Latest value

B02b - School readiness: percentage of children achieving the expected level in the phonics screening check in Year 1

Proportion - %



Fingertips (health and wellbeing profiles)

Indicator

C21 - Admission episodes for alcohol-related conditions (Narrow) (Persons) 2021/22 Directly standardised rate - per 100,000

▶ Legend ▶ Benchmark ▶ More options

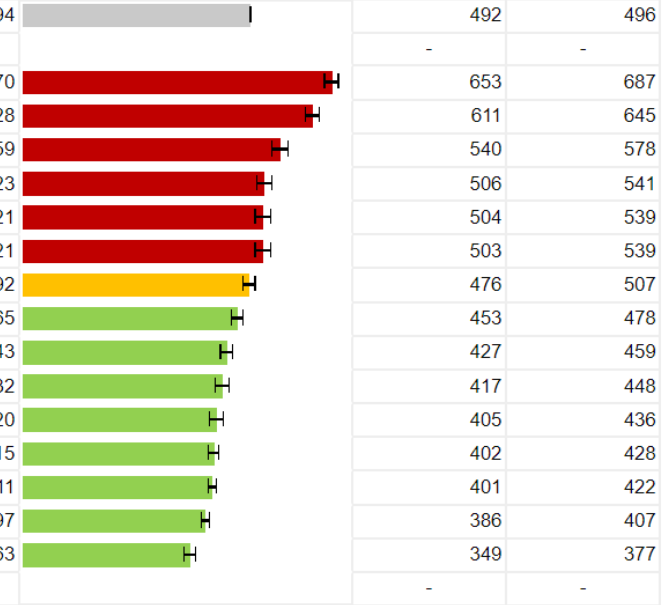
Geography version: Counties & UAs (2020/21)

☑ CIPFA nearest neighbours to Cambridgeshire

Areas Cambs and neighbours | All in England **Display** Table | Table and chart

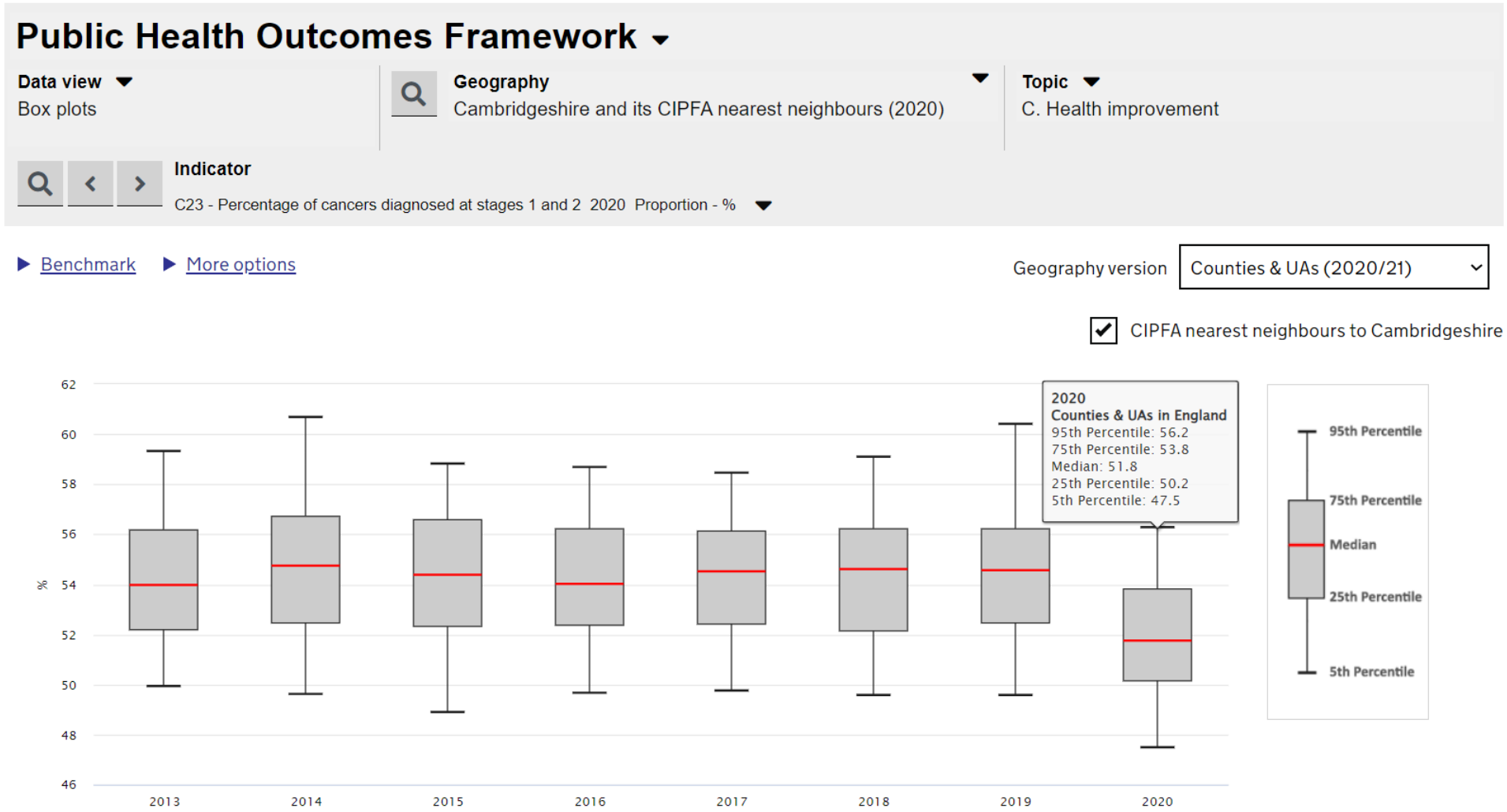
Show 99.8% CI values

Area	Recent Trend	Neighbour Rank	Count	Value	95% Lower CI	95% Upper CI
England	–	-	270,774	494	492	496
Neighbours average	–	-	-	-	-	-
Staffordshire	–	11	6,148	670	653	687
Derbyshire	–	15	5,234	628	611	645
Somerset Cty	–	12	3,395	559	540	578
Worcestershire	–	6	3,346	523	506	541
North Yorkshire Cty	–	14	3,504	521	504	539
Warwickshire	–	2	3,156	521	503	539
Suffolk	–	8	3,925	492	476	507
Hertfordshire	–	13	5,305	465	453	478
Gloucestershire	–	3	2,923	443	427	459
Leicestershire	–	4	3,133	432	417	448
Cambridgeshire	–	-	2,774	420	405	436
West Sussex	–	10	3,803	415	402	428
Essex	–	7	6,234	411	401	422
Hampshire	–	9	5,726	397	386	407
Oxfordshire	–	1	2,533	363	349	377
Northamptonshire	–	5	-	-	-	-



Source: Calculated by OHID: Population Health Analysis (PHA) team using data from NHS Digital - Hospital Episode Statistics (HES) and Office for National Statistics (ONS) - Mid Year Population Estimates.

Fingertips (health and wellbeing profiles)



Fingertips questions / demonstration

- [Public health profiles - OHID (phe.org.uk)]

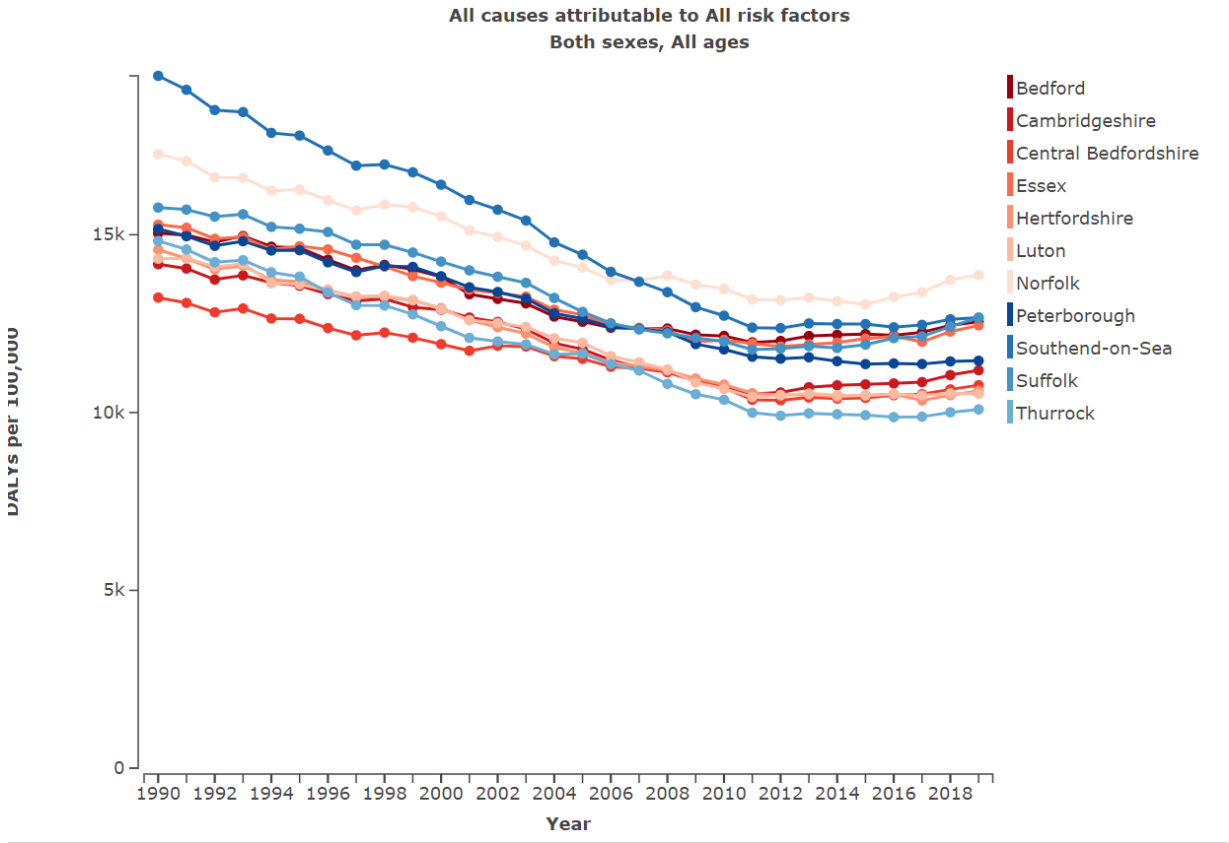
- **How might you use Fingertips in your role?**

GBD (Global Burden of Disease)

What is GBD?

The global burden of disease tool answers these type of questions: “what is the impact of **morbidity and mortality** on my population?”, “How is this changing over time?”, and “what is the role **behaviours** play in poor health outcomes?”.

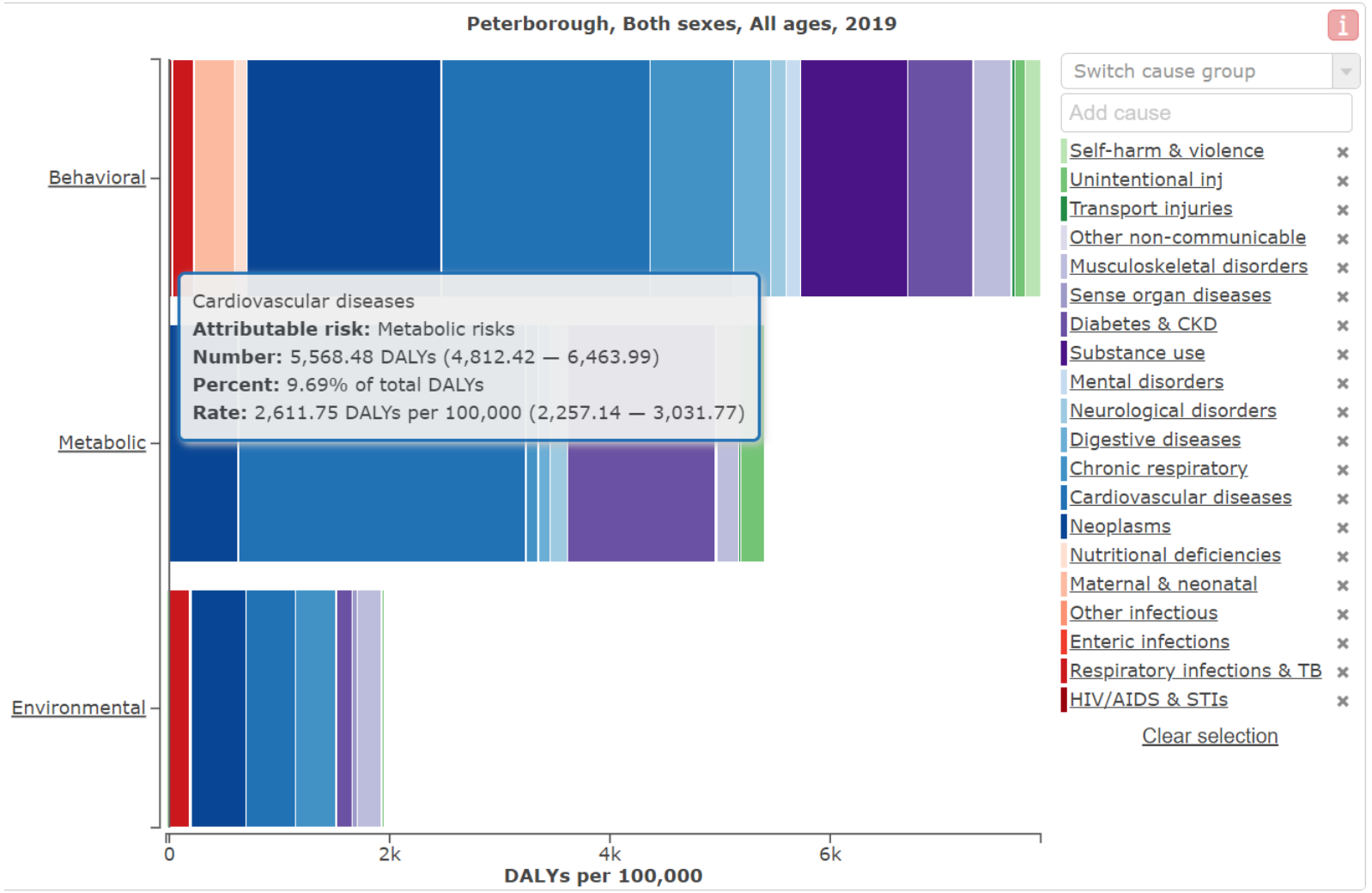
GBD Compare offers a visual representation of these types of questions and should be the first port of call for anyone looking to understand mortality and morbidity of a population.



GBD (Global Burden of Disease)

What it contains:

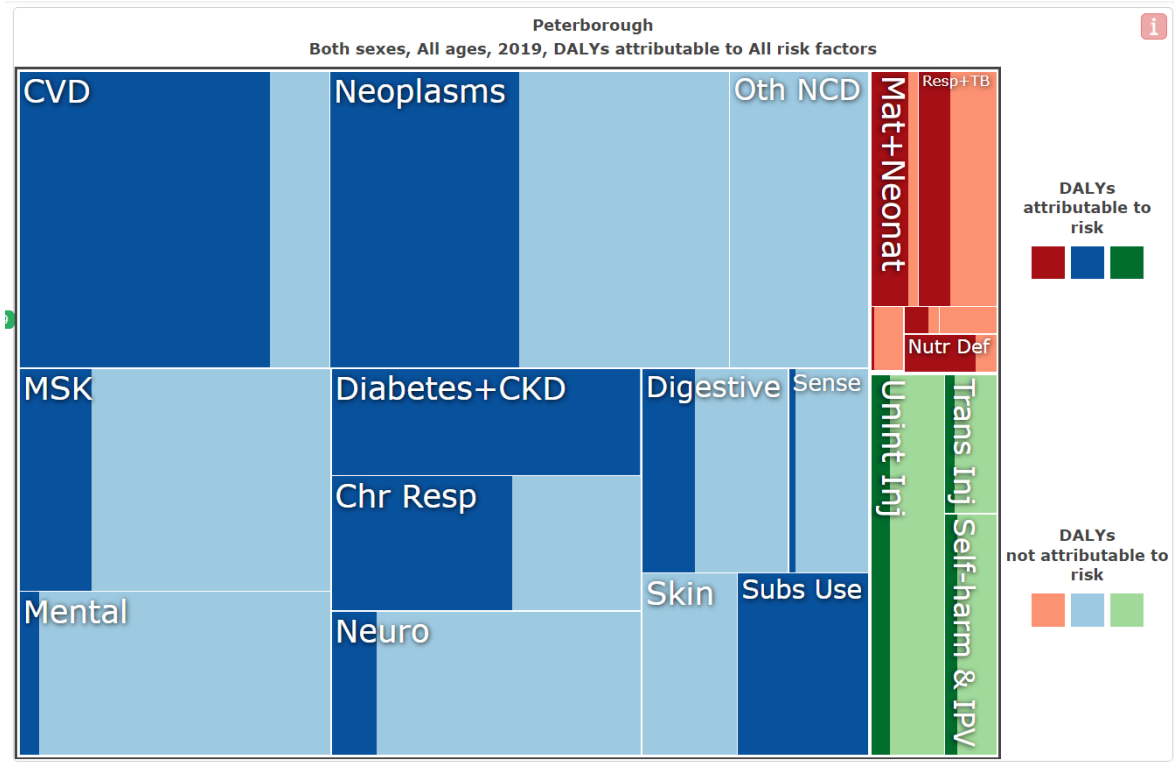
- Global geographies.
- Cause of death.
- Age, sex, risk, cause breakdown options.
- Risk attribution to ill health and mortality.
- Communicable, non-communicable and accident/injury data.
- Only shown GBD Compare here but the GBD programme offers a huge wealth of other tools, projects, resources.



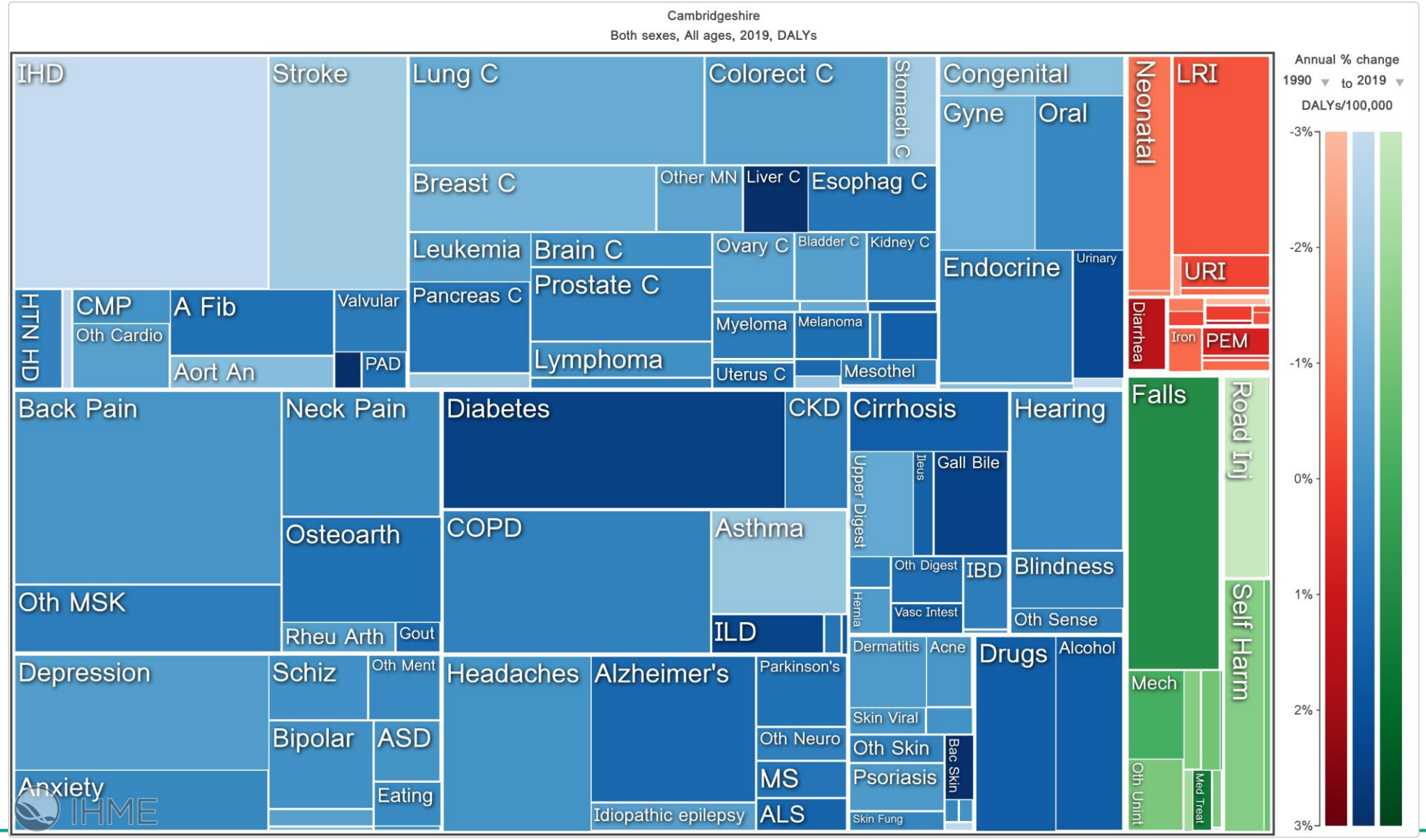
GBD (Global Burden of Disease)

Caveats and issues:

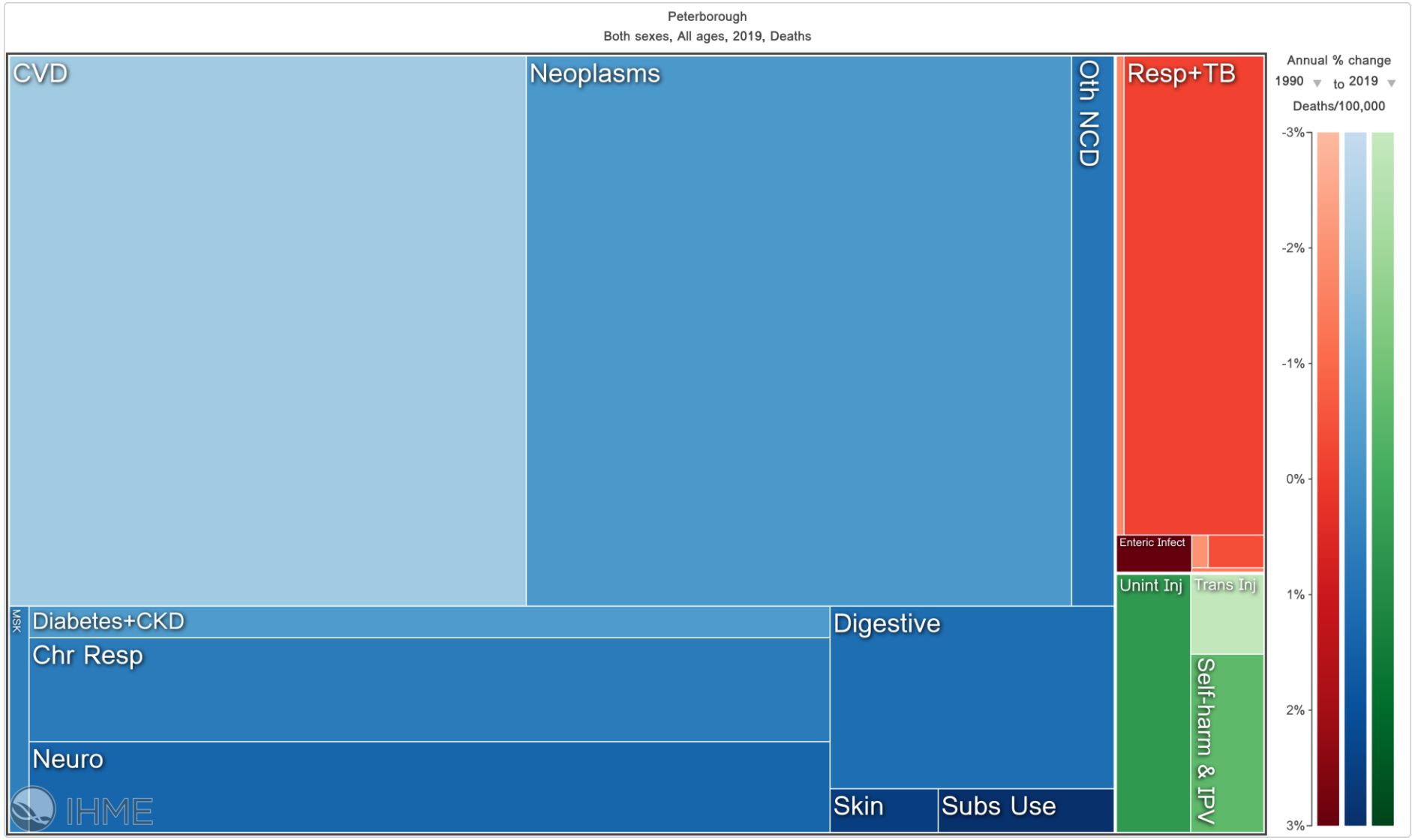
- GBD uses modelled estimates so that they can compare globally. Therefore the measures used may not compare with either other estimates, or with recorded values of mortality and morbidity.
- Data is currently only up to 2019 owing to pandemic hiatus.
- May be tricky to communicate to non technical audience.
- Each new release uses a new model and re-calculates all historical estimates, so exercise caution when comparing new research with old.



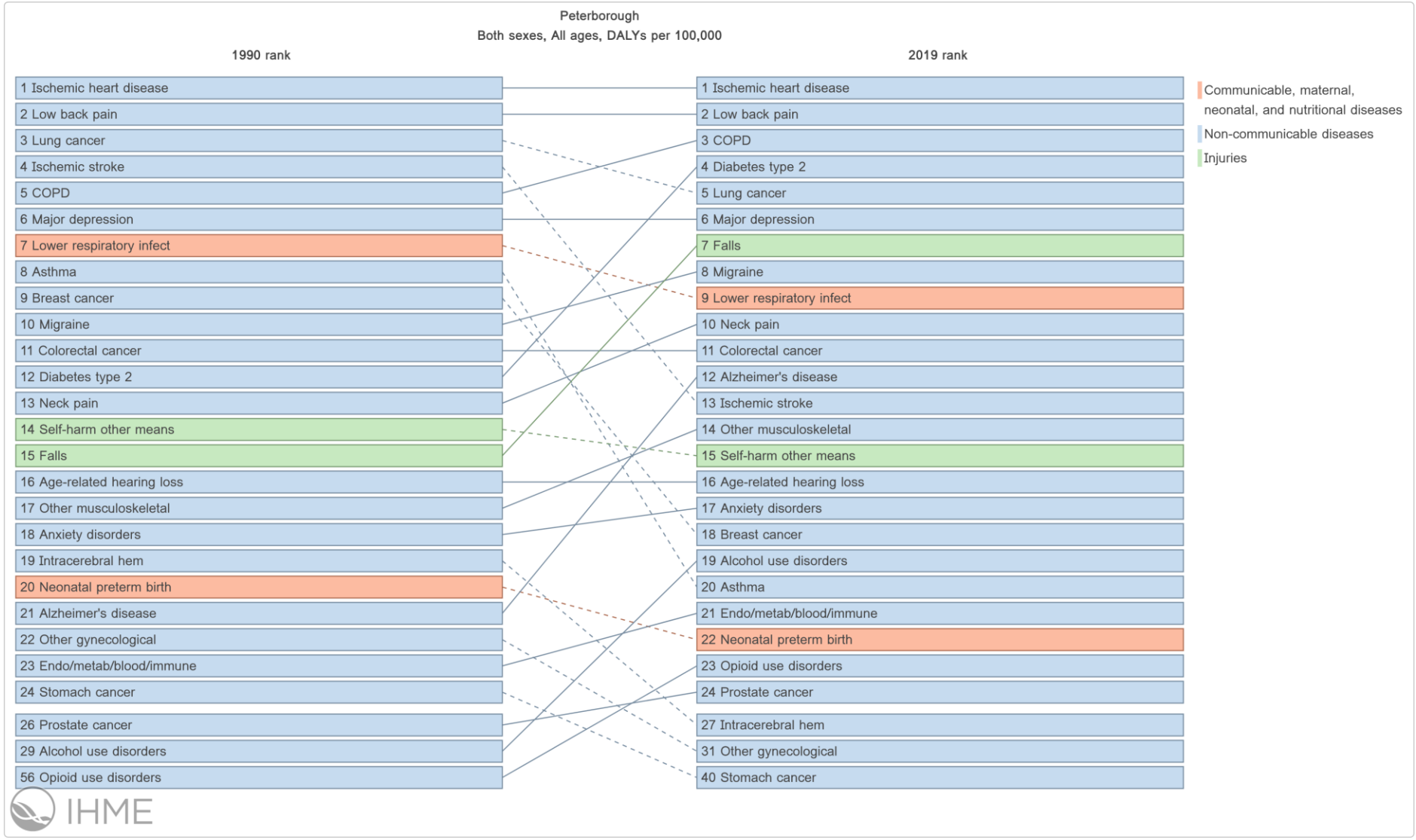
GBD (Global Burden of Disease)



GBD (Global Burden of Disease)



GBD (Global Burden of Disease)



GBD questions / demonstration

- VizHub - GBD Compare (healthdata.org)

- **How might you use GBD in your role?**

Join our mailing list

LKIS have a contacts database which allows us to keep users informed of new releases of our products, resources and tools.

Please follow the QR code to register your details or visit this link.

Panel Q&A

What are the challenges and opportunities for using health data in decision making?