

## Evaluation Working Group Webinar

# Evaluation of population health approaches addressing health inequalities

Dr John Ford, Cambridge University

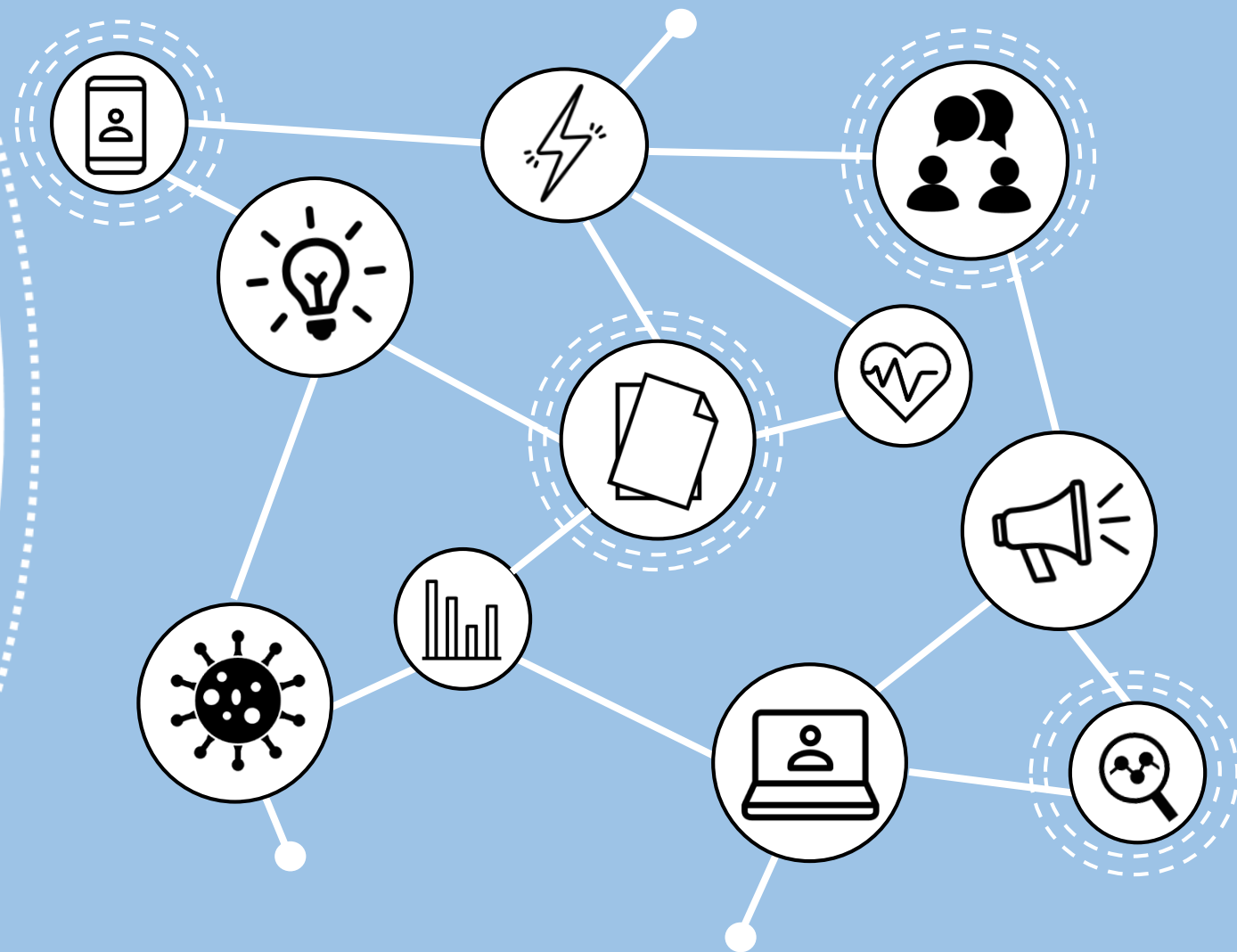
Dr Helen Green, DHSC OHID & NHSEI East of England  
(hosted by East Suffolk & North Essex NHS FT)

26<sup>th</sup> April 2022

12:30 – 1:30



East of England  
Population Health Research Hub  
EoE PHResH



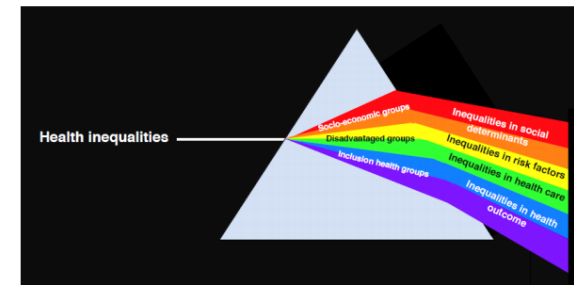


Research pillars

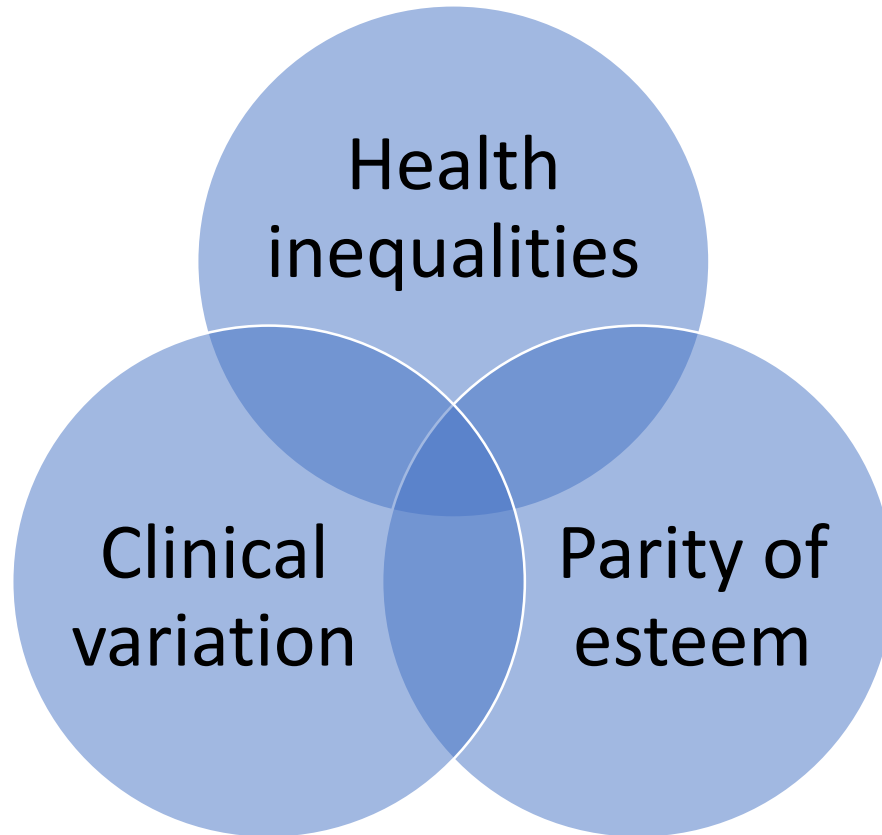


# England

**Cambridgeshire and Peterborough Health Inequalities Strategy**



# Conceptualising health inequalities



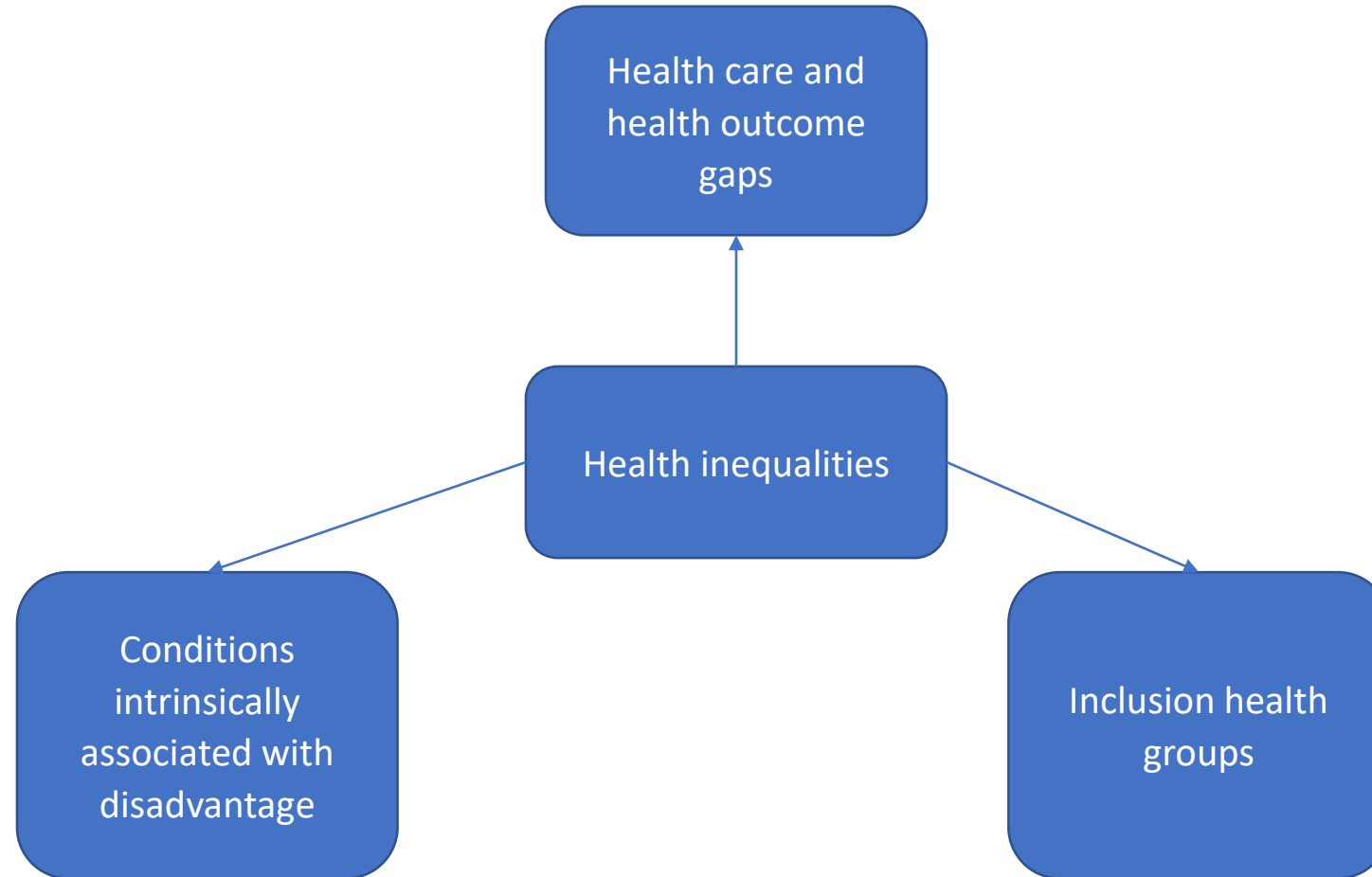
Three important distinct, but overlapping concepts.

Health inequalities: differences in the population driven by disadvantage

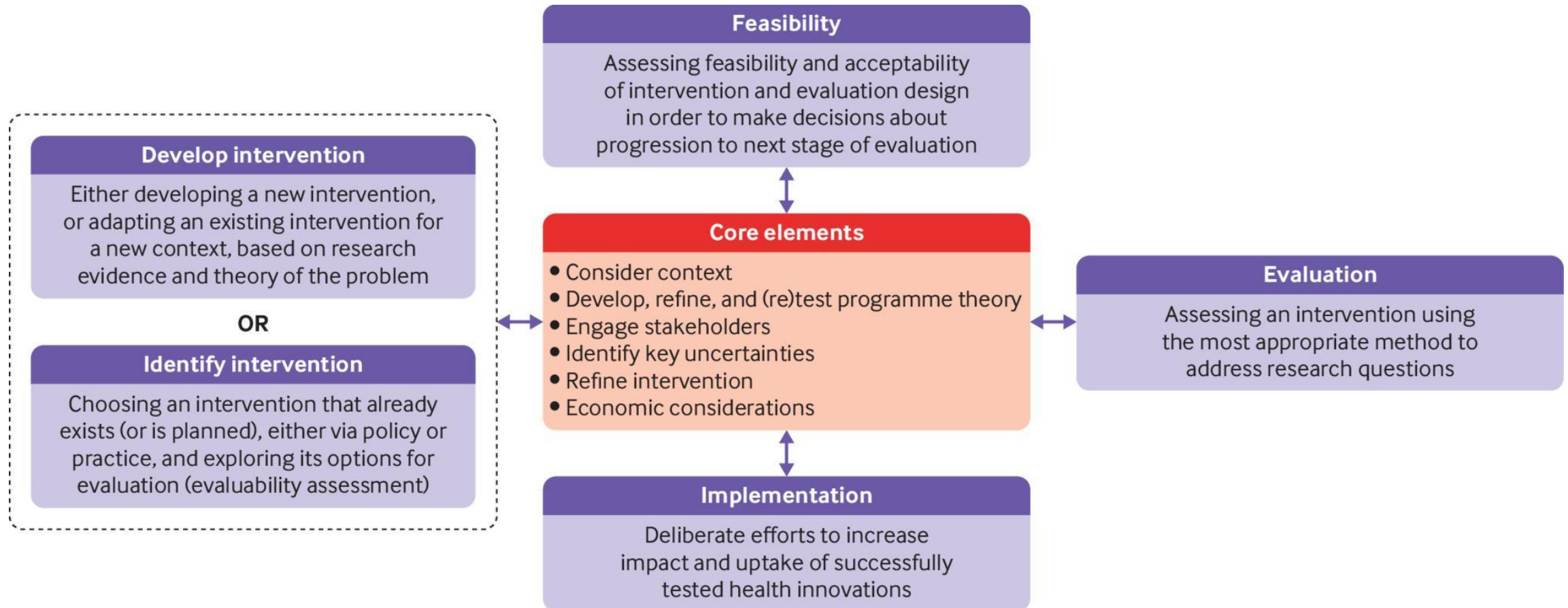
Clinical variation: differences in the provision of health care driven by organisational factors

Parity of esteem: differences in the relative attention paid to different conditions

# Unpacking health inequalities



# Evaluation principles - MRC framework



Skivington K, Matthews L, Simpson S A, Craig P, Baird J, Blazeby J M et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance *BMJ* 2021; 374 :n2061 doi:10.1136/bmj.n2061

# Reflections of evaluating complex interventions

1. Generating useful evidence
2. Context is King
3. Engagement with patients and communities
4. Transdisciplinary
5. Live evaluation with real-time feedback

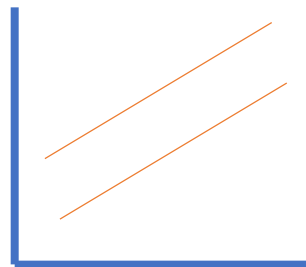
**EVIDENCE**



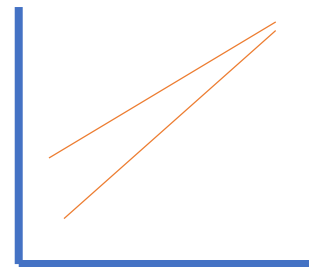
# Evaluating inequalities

Targeted interventions

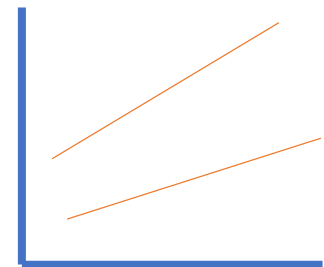
Universal interventions



Neutral



Narrowing



Widening

# Key principles

1. Engage with citizens, communities and senior decision makers early
2. Explore data at baseline and throughout disaggregated by disadvantage
3. Start roll out with those most in need
4. Enable evaluation to improve equity of service throughout



# Equity-focused evaluation – approaches and available resources

# Place-based action on health inequalities

- Place-based action on health inequalities

<https://www.gov.uk/government/publications/health-inequalities-place-based-approaches-to-reduce-inequalities>

- Evaluation toolkit

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1007778/Toolkit\\_for\\_local\\_areas.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007778/Toolkit_for_local_areas.pdf)

- Intermediate outcomes
- Long term outcomes
- Addressing complexity

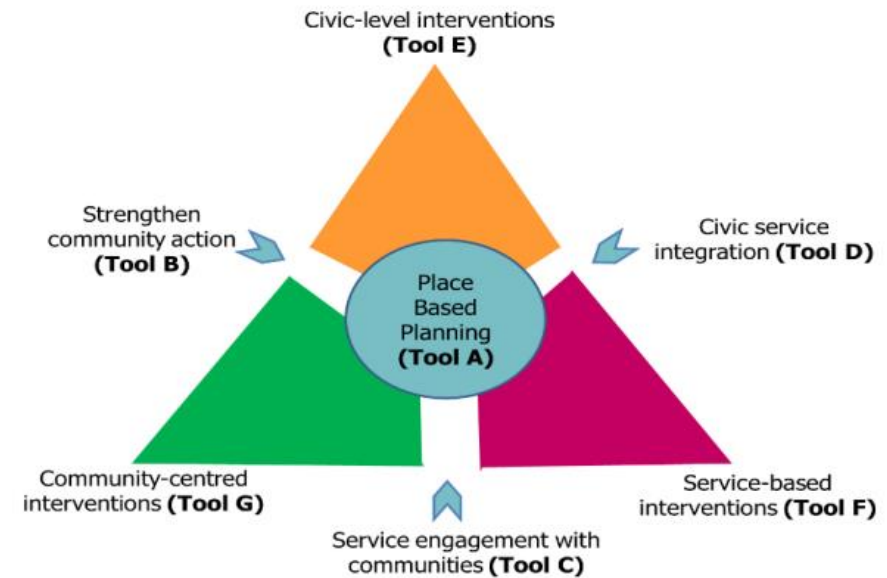


Figure 1 Population Intervention Triangle

# Place-based action on health inequalities

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## **-Intermediate outcomes**

- ➔ Range of stakeholders identified during the initial planning process
- ➔ Regular monitoring recommended

1. How would you rank the current priority of tackling health inequalities in your area?
2. To what extent has PBA become a standard way of working?
3. How cooperatively do different organisations work together in your area to meet the needs of your population?
4. How do you rate the availability of resources made available to tackle health inequalities?
5. How integrated are services to address health inequalities in your area?
6. How confident is your workforce in tackling health inequalities using PBA?
7. How confident is your community in tackling health inequalities using PBA?
8. To what extent has the community been involved in strategic decision-making?
9. How well are services planned and co-produced in the area with community members?
10. How well is the community involved in service delivery?

# Place-based action on health inequalities

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- Intermediate outcomes
- Long term outcomes
- Addressing complexity

## **Realist evaluation**

What works, for whom and in what circumstances?

- Move beyond looking at quantifiable outcomes from datasets to incorporating the wider contextual factors which will impact on how well the programme works, and how this might change in different populations or settings.
- What different outcomes might be observed when a programme is attempted in different contexts or with different populations

# Long term outcomes

- Standard evaluation steps
  - Understanding the intervention and the problem it is intended to solve
  - Defining the evaluation question
  - Reviewing what evidence or data are currently available or would be needed to answer this question
  - Designing your evaluation: logic model, methodology, suitable control group, anticipating challenges
  - Collecting the evidence or data (baseline assessment)
  - Analysing the evidence or data
  - Reporting on the findings (Feedback loop allowing ongoing results to influence the design and iterative improvements)
  - Drawing conclusions or making recommendations

# Data and measurement

Consider.....

the **health measure** that is being considered/question that is being asked

how to identify and differentiate the **different population groups**

the **overall geographic scale** of the population set being considered by the health measure

the **scale of aggregation of data**. Conceptually we can think of inequalities existing between individuals e.g. someone more deprived having a worse health outcomes. However, in practice we generally cannot see the deprivation of an individual directly and instead have data on average deprivation by geographic areas such as a Lower Super Output Area (LSOA).

the **inequality metric** that summarises, in a single number, the relationship between a health measure and different population groups for a certain overall geographic scale and scale of aggregation of data.

the **measurement uncertainty** in the estimate.

# A guide to using national and local data to address health inequalities

Product	Purpose	Levels of Geography	Indicators	Different population Groups	Inequality Metric
<a href="#">PHE Health Inequalities Dashboard</a>	Display trends in health inequalities in England	England, regions, local authorities (inequality data at region and local authority level for some indicators)	18 key indicators including health outcomes and wider determinants of health	Specific to each indicator, but includes: Deprivation, Sexuality, Ethnicity	Slope & Relative Index of Inequality, Absolute & Relative gaps, mean difference
<a href="#">PHE Segment Tool</a>	Present causes of death and age groups driving life expectancy gap	England, regions, local authorities	Breakdown of life expectancy gaps between local authorities and England, and between most and least deprived within each area, by cause of death and age group	Sex	Contribution to the life expectancy gap expressed as a percentage and number of years.

○ Some relevant content  
 ◐ Highly relevant content  
 ● Highly relevant content

	PHE Health Inequalities Dashboard	PHE Segment Tool	Right Care - Equality & Health Inequalities Packs	PHE & NHS Right Care Atlases of Variation	PHE LKIS Health Inequalities Packs	PHE Wider Determinants of Health	PHE Public Health Outcomes Framework	PHE Local Health	IHM and Evaluation Global Burden of Disease Compare Tool	Strategic Health Asset Planning and Evaluation (SHAPE) Place Atlas
What are the main causes of death and poor health in my population?		◐	○	●	◐	●	●	◐	●	◐
How does my area compare against national averages, targets or with other similar areas?	◐	◐	●	●	◐	●	●	◐	●	◐
Is there evidence of inequalities within my area, geographically or for particular pop sub-groups?	◐	●	●	○	●	○	○	●	○	◐
What are the main factors driving inequalities within my population?	○	◐	◐	◐	◐	●	◐	◐	◐	◐
Is there evidence of inequalities within local health & care pathways?		○	◐	●	○	○	○	○	○	◐

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/817767/PBA Inequalities data sources.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/817767/PBA_Inequalities_data_sources.pdf)

# OHID Inequality national data tools

## Inequality Tools

### Introduction

This page contains data on health inequalities at England and local level.

CHIME, the Health Inequalities Dashboard and the Segment Tool are interactive web tools which can be accessed via the links below. Some additional data and resources are also provided on this page.

### COVID-19 Health Inequalities Monitoring for England tool (CHIME)

The CHIME tool brings together data relating to the impacts of COVID-19, for factors such as mortality rates, hospital admissions, confirmed cases, vaccinations and life expectancy. It presents inequality breakdowns, including by age, sex, ethnic group, level of deprivation, population density and region.

Access the CHIME tool [here](#)

### Health Inequalities Dashboard

The Health Inequalities Dashboard provides information to monitor progress on reducing inequalities within England. It presents measures of inequality for 19 key indicators, the majority drawn from the [Public Health Outcomes Framework](#). The dashboard measures trends in each indicator since a baseline period, with longer term data provided where these are available.

Access the Health Inequalities Dashboard [here](#)

### Segment Tool

The Segment Tool provides information on the causes of death and age groups that are driving inequalities in life expectancy at local area level. Targeting the causes of death and age groups which contribute most to the life expectancy gap should have the biggest impact on reducing inequalities.

Access the Segment Tool [here](#)

Indicator	Group	Measure	Baseline Period	Baseline Value	Reporting Period	Reporting Value	Absolute change	Trend
Life expectancy at birth-Male		Value	2011 - 13	80.2	2017 - 19	80.5	0.3	↑
	LSOA deprivation deciles	Slope index of inequality	2011 - 13	7.1	2017 - 19	7.9	0.8	↑
Life expectancy at birth-Female		Value	2011 - 13	83.6	2017 - 19	83.9	0.3	↑
	LSOA deprivation deciles	Slope index of inequality	2011 - 13	5.3	2017 - 19	6.2	0.9	↑
Healthy life expectancy at birth-Male		Value	2011 - 13	64.6	2016 - 18	64.1	-0.5	↓
Healthy life expectancy at birth-Female		Value	2011 - 13	65.3	2016 - 18	64.7	-0.6	↓

- Smoking prevalence in adults now contains a breakdown by sex for all geographies, with inequality measures also available by sex at England level for the majority of the inequality dimensions
- The indicator of children in low income families (all dependent children under 20) has been replaced with two new indicators: children in absolute low income families and children in relative low income families. Both are based on children under 16 and further details can be found in the definitions tab

<https://fingertips.phe.org.uk/profile/in-equality-tools>



# Indicators

<https://analytics.phe.gov.uk/apps/health-inequalities-dashboard/>

- Breakdown of data across a range of dimensions of inequality and a summary measure calculated
- Absolute and relative gap
- Slope index of inequality (absolute difference) and relative index (relative difference) of inequality by deprivation

<https://www.scotpho.org.uk/comparative-health/measuring-inequalities/>

<https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/The-Good-Indicators-Guide.pdf>

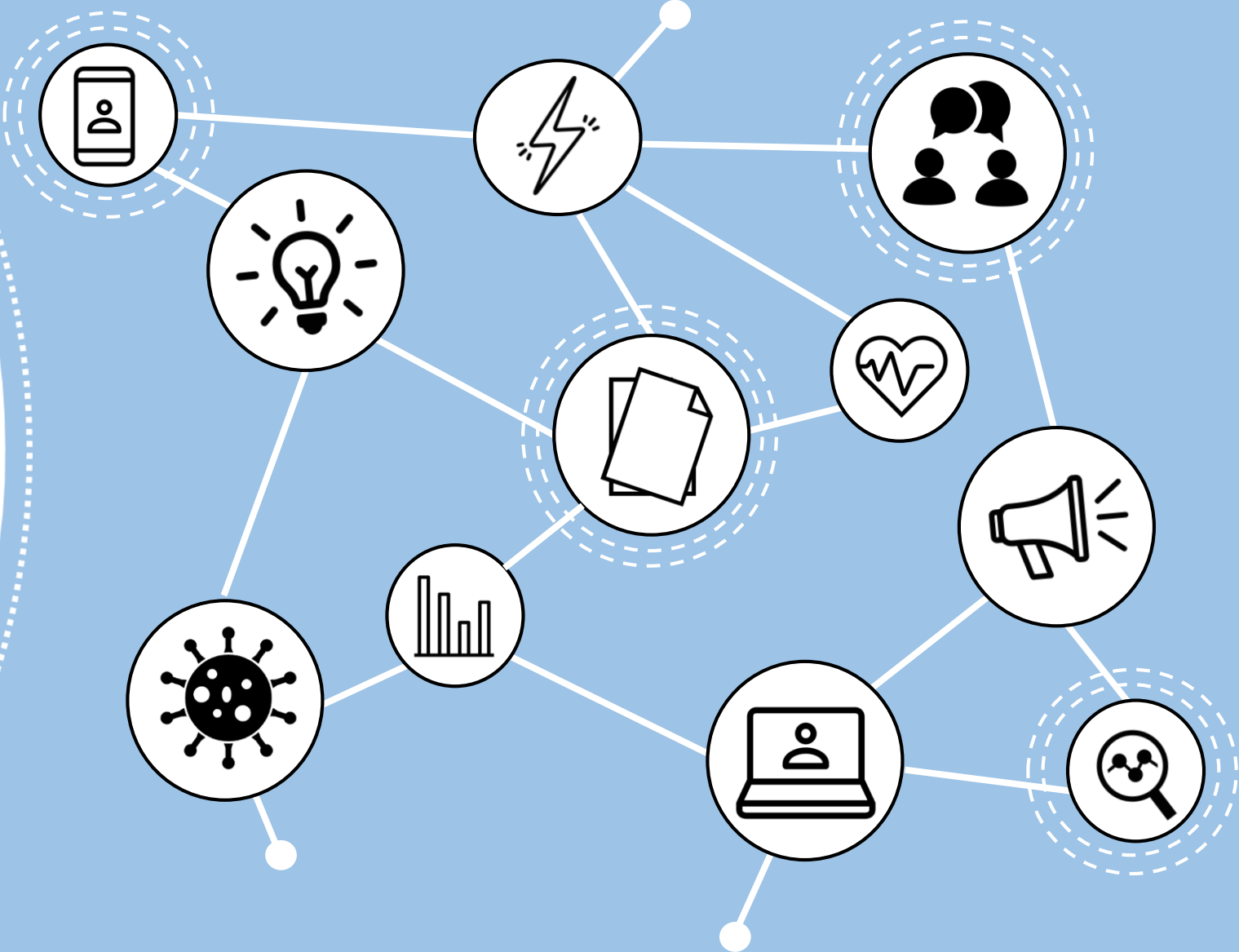


Any questions?

Do you have any examples of equity-focused evaluations you are working on or thinking of starting?

Do you have any examples of the challenges you are experiencing with these areas of work?

# Upcoming Events





## Upcoming Events

### **Webinars**

We are running a series of monthly webinars on a variety of evaluation topics.

#### **Next Evaluation Working Group Webinar:**

*Process and Impact Evaluations*

**May 24<sup>th</sup> 2022: 10 – 11am**

Yannis Pappis, University of Bedfordshire  
Amanda Burke, University of East Anglia

### **Evaluation ‘Drop-In’ Clinic**

Do you have a question or challenge about an evaluation you are planning that you like to discuss with an expert?

Book a time to meet with Professor Andy Jones, Public Health Expert Advisor, Norfolk County Council for advice and guidance on the next steps for your evaluation.

This could be help in defining your research question through to advanced evaluation techniques for complex evaluations, all are welcome – no question too big or small!

**Next clinic date to be announced soon.**

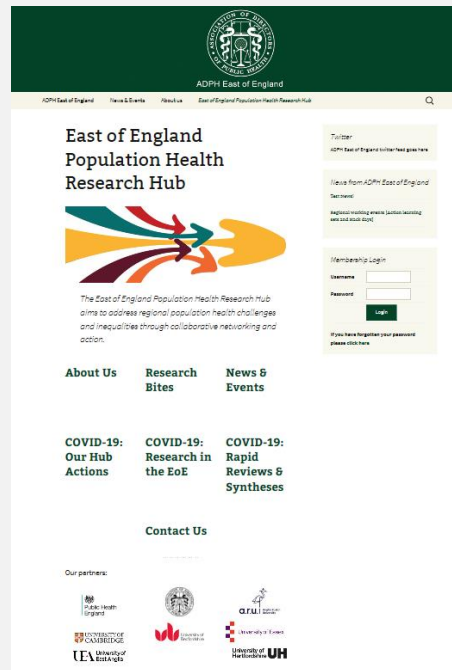


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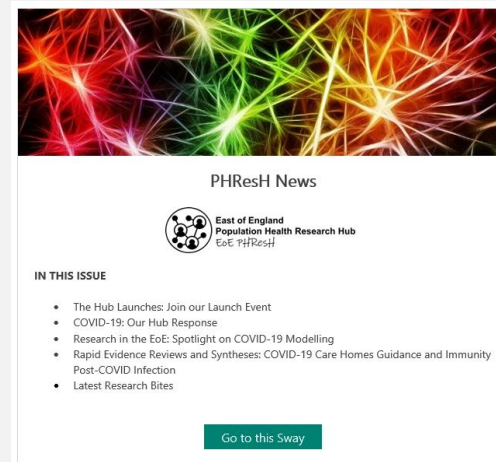
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The EoE Population Health Research Hub aims to address regional population health challenges and inequalities through collaborative networking and action.

[East, England](#)

Joined March 2020



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