

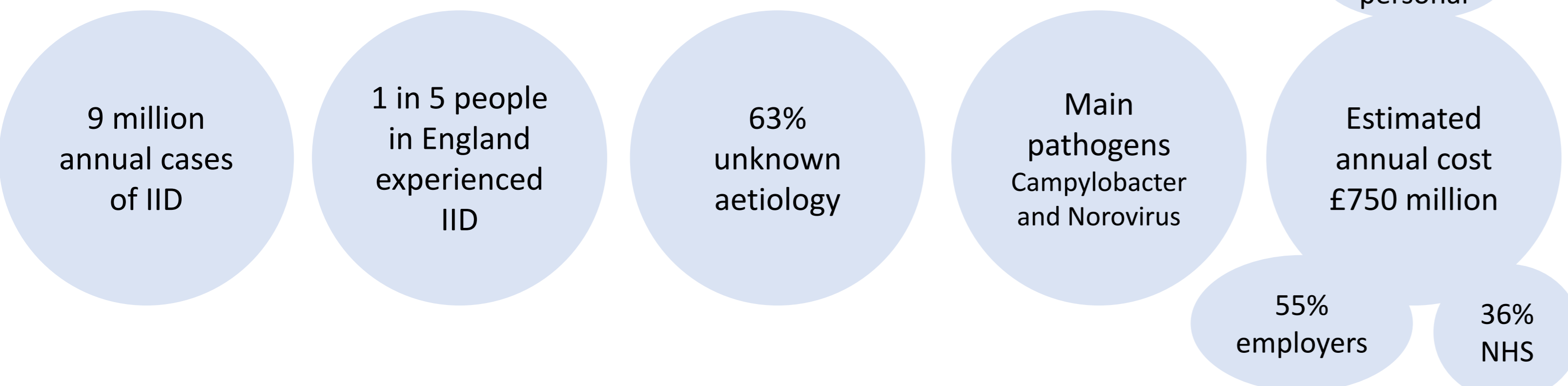
Background

The UK Food Standards Agency (FSA) is the competent authority for food safety and food hygiene in England, Wales and Northern Ireland. Infectious intestinal disease, presenting as diarrhoea and vomiting, is caused by a range of pathogens and is usually self limiting in the UK. The FSA use data on rates of infectious intestinal disease in the UK to inform our food safety strategy and to help measure the effect of foodborne disease prevention strategies. The last study on intestinal infectious disease in the UK, IID2, ended data collection in 2009. The FSA is now running a third iteration of the project, IID3, to update IID estimates along with the FSA foodborne disease estimates and cost of illness models.

Results from previous IID studies

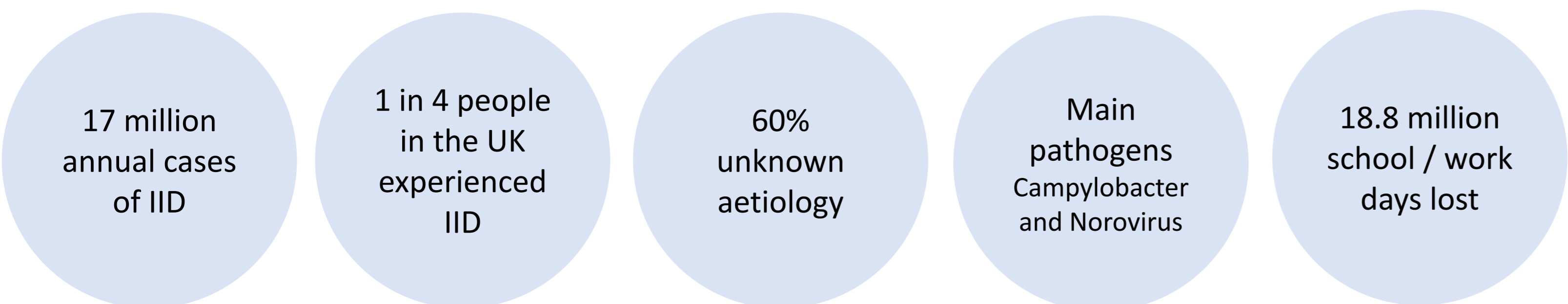
IID1 (data collected April 1993 – January 1996)

Took place in England



IID2 (data collected April 2008 – August 2009)

Covered all 4 nations in the UK



IID3 study aims

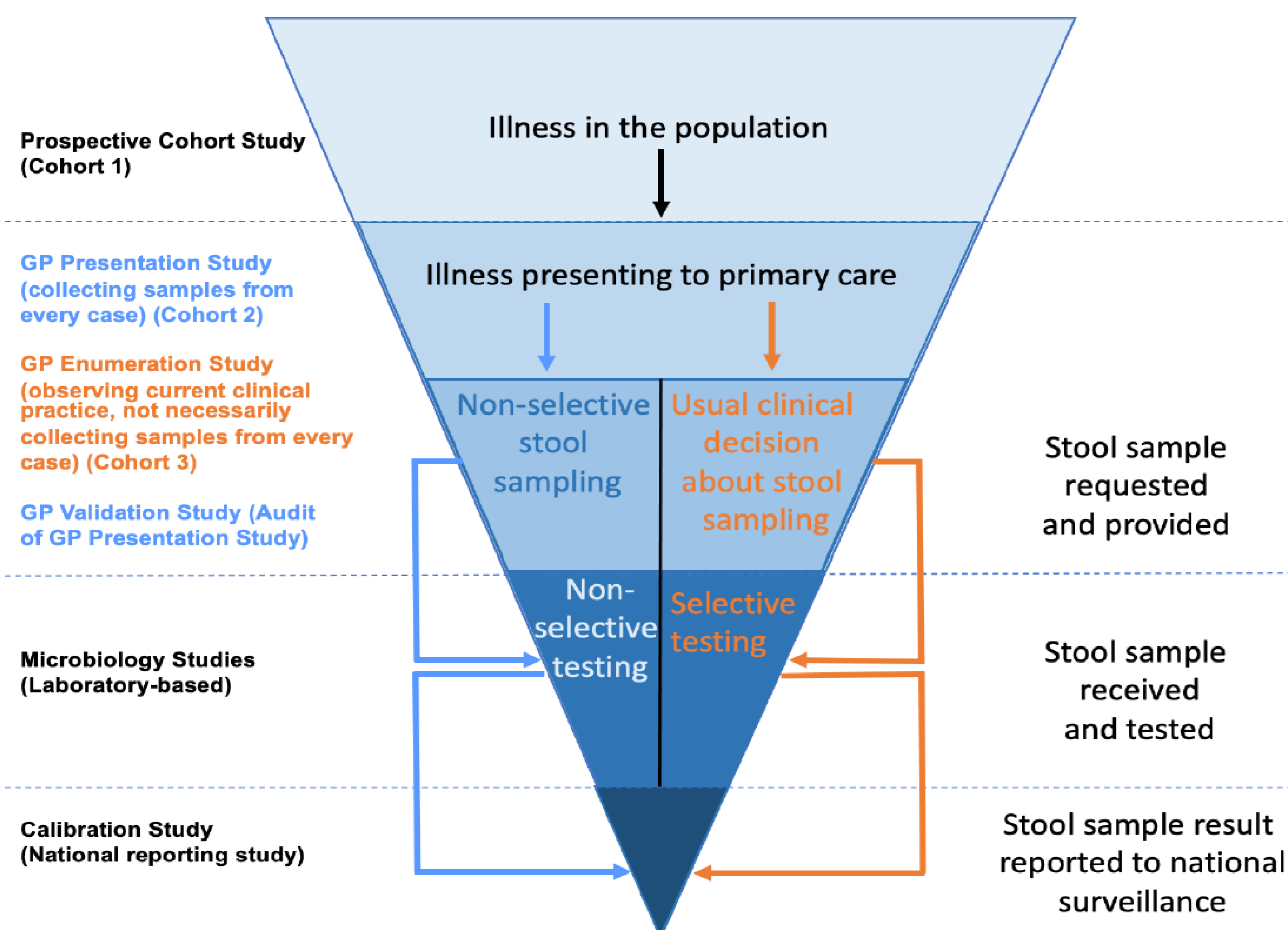
- Determine the overall incidence of IID in the UK population.
- Establish the incidence of IID presenting to primary care.
- Clarify the proportion of IID that is UK-acquired.
- Describe the pathogens causing IID in the UK, including levels of antimicrobial resistance (AMR).
- Re-calibrate UK surveillance data for IID overall and by pathogen.
- Determine the number of cases in the community, GP reported cases, hospitalisations and deaths due to IID in the UK.
- Compare results from the IID3 study with previous studies.

IID3 study design

IID3 will consist of three studies running in parallel:

1. population-based prospective cohort
2. GP presentation study that captures all patients that present to their GP with IID
3. GP enumeration study that monitors current practice

The case definition (those experiencing vomiting and/or diarrhoea) has been kept the same as that used in IID1 & IID2 to allow comparison between all three studies. The research team is aiming to recruit 150 GP practices to participate in the prospective cohort (cohort #1).



Pathogens included in IID3 study

Stool samples will be screened using the SeroSep EntericBio® diagnostic platform for a majority of the pathogens. Where a bespoke PCR has been developed, this is denoted with an *.

- Bacteria** • *Salmonella* • STEC • *Campylobacter* • *Shigella* • *Aeromonas* * • Diarrhoeagenic *E. coli** (EPEC, ETEC, EAEC) • *Yersinia* • *Clostridium difficile* • *Clostridium perfringens** • *Vibrio*
- Viruses** • norovirus GI/GII • sapovirus • astrovirus • adenovirus • rotavirus
- Parasites** • *Entamoeba histolytica* • *Giardia* • *Cyclospora cayentensis** • *Cryptosporidium*

Samples that are positive by PCR will be sent for isolation. Bacterial isolates will undergo WGS at UKHSA, allowing for AMR associated with IID in the UK to be included in the study analysis for the first time.

Key Dates for IID3

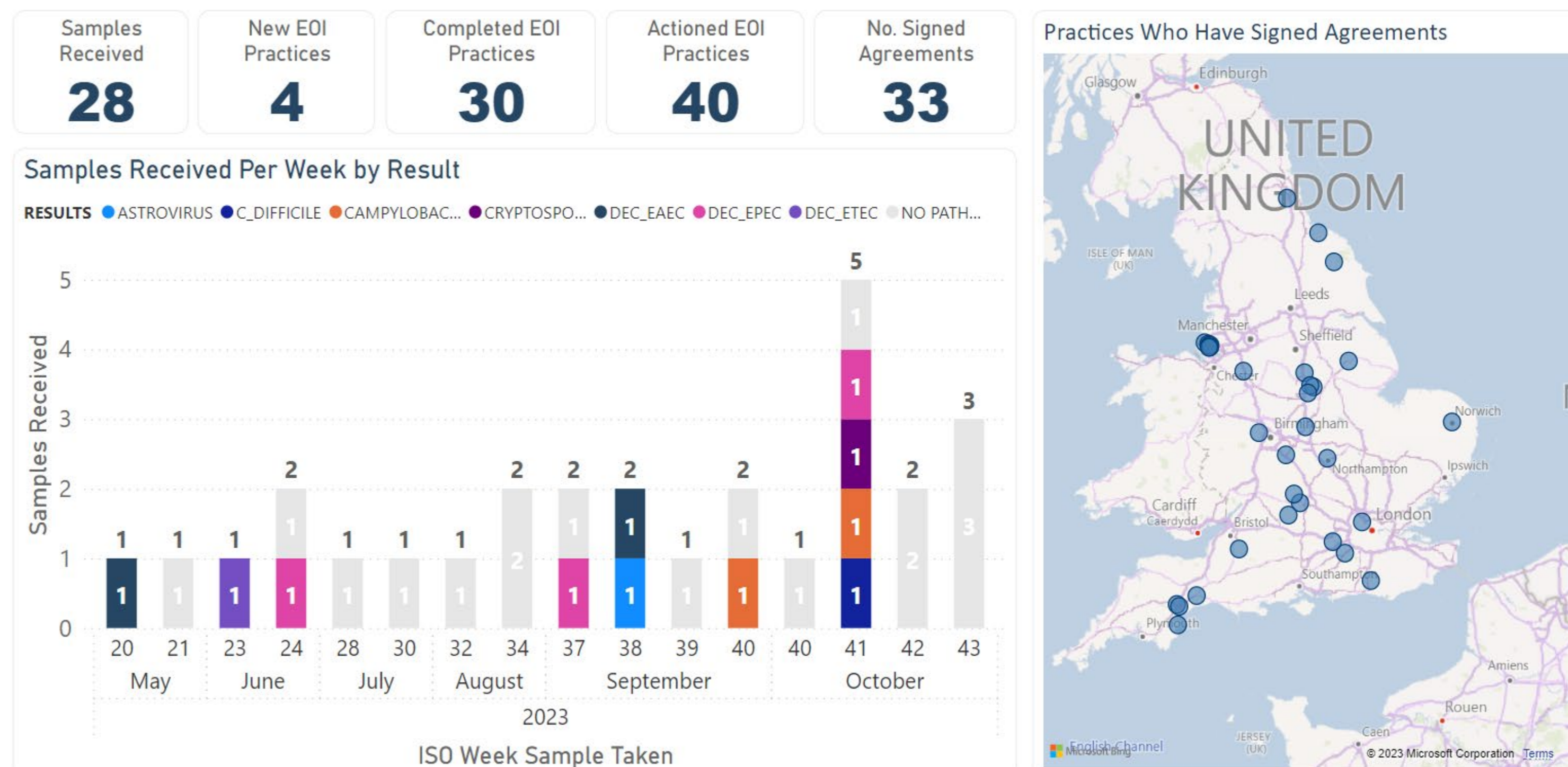
- Data collection period: September 2023 – September 2025
- Final report & dataset available (anticipated): September 2026

Stay updated on project progress

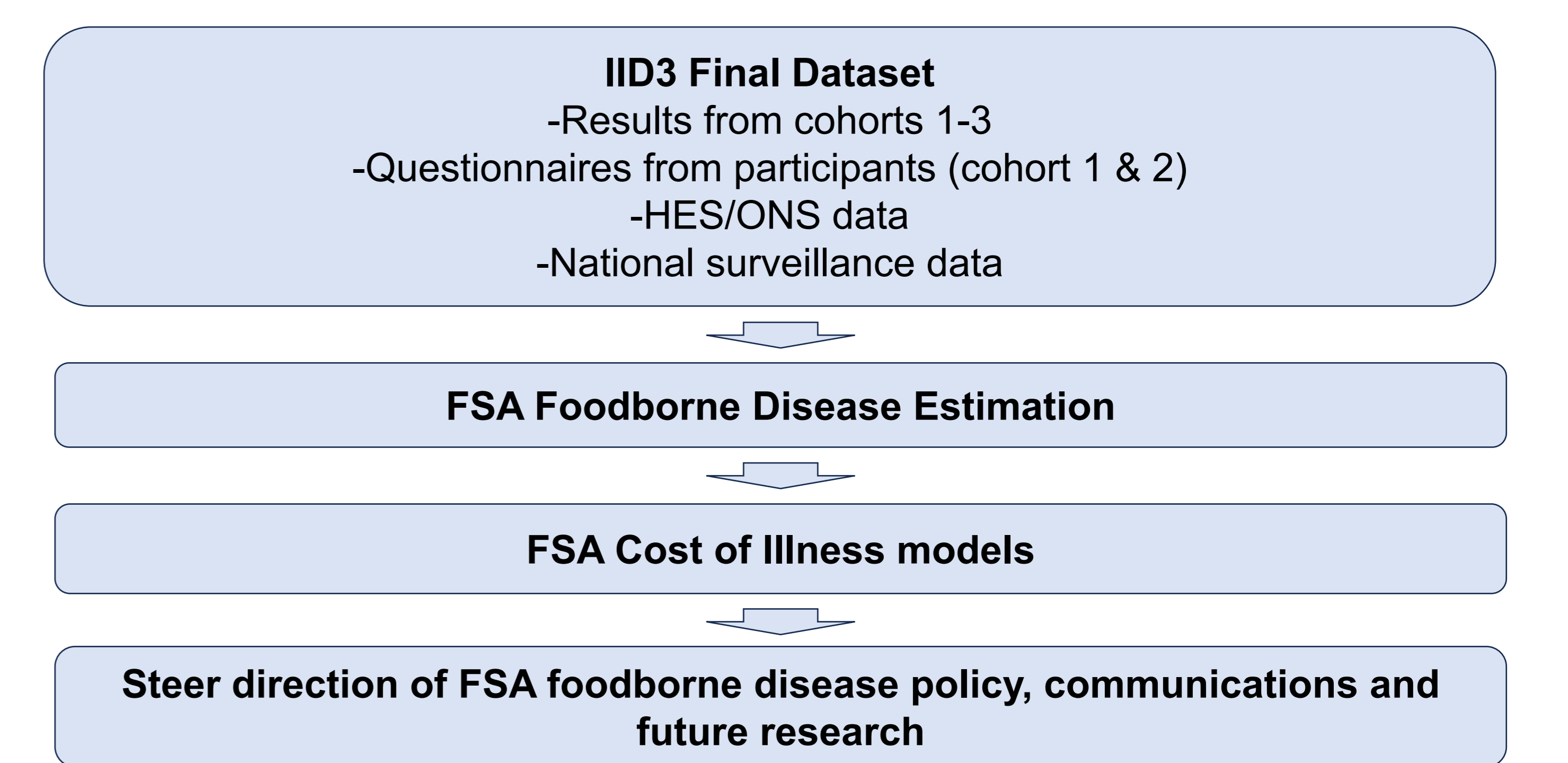
- Quarterly updates will be given via the FSA's science and research stakeholder updates (sign-up to receive at food.gov.uk)
- Contact us at iid3micro@food.gov.uk
- Visit the IID3 Dashboard

Updates on GP recruitment and analysis of stool samples can be found at the IID3 Dashboard, linked from the IID3 project page on food.gov.uk.

IID3 Dashboard as of November 1st 2023



FSA uses of IID3 data



The IID3 Consortium

- Funders:** Food Standards Agency and Food Standards Scotland
- Lead Contractor:** University of Newcastle
- Sub-contractors:** University of Oxford, University of Liverpool, Liverpool Clinical Laboratories, UK Health Security Agency, Public Health Scotland, Public Health Wales