



Participant Newsletter

Welcome to the first SIREN newsletter of 2025. We are kicking off the new year with lots of exciting developments. This issue will include an overview of our new pilot study, “SIREN+ RespOME”, in collaboration with the Wellcome Sanger Institute at Cambridge University, feedback from our first Participant Involvement Panel (PIP) panel of the year and the opportunity to take a look at our revamped SIREN study portal, where you can find all the latest information about SIREN.

Coming up in this issue...

The SIREN Study Portal - Revamped!

Your go-to place for everything on the SIREN study – from an overview of our publications and collaborations, to managing your participation and contacting us

The latest data from SIREN+

Keep up-to-date with the most recent SIREN+ symptoms and time off work data, which is allowing us to monitor the 2024/25 winter period

SIREN+ RespOME: a new pilot study

We are excited to be working with the Wellcome Sanger Institute at Cambridge University to understand the role of the respiratory microbiome in healthcare workers.

Science Digest

Read about our latest publications, including lessons from SIREN about cohort retention, and risk factors for catching COVID-19 over four waves of the pandemic

PIP Corner

Hear from a PIP panel member about why they're taking part,



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PORTAL REVAMP

The SIREN Study Portal - Revamped!

We're excited that the SIREN study portal has undergone a major update. The portal now houses all the up-to-date information about SIREN's publications, research collaborations, and latest news. As before, you can also use the portal to manage your ongoing participation.

You can access the SIREN study portal by clicking [here](#).

Publications

The publications tab of the portal includes an overview of SIREN publications over the years, organised under themed headings. Clicking on any of these will take you to a list of the relevant publications, with a short blurb on their aims, key findings, a lay summary and a link to the full research paper.



SIREN Study | Latest News | Manage Participation | **Publications** | Collaborations | Contact Us

Please find below a list of SIREN peer-reviewed publications:

- Monitoring COVID-19 infection trends and assessing risk factors for COVID-19 infection
- Understanding immunity against SARS-CoV-2 infection
- Evaluating protection following infection and vaccination
- Cohort retention and participant involvement panel
- Study protocols
- Persistent COVID-19 symptoms
- From collaborations, not published by SIREN team



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Collaborations

Collaboration with multidisciplinary researchers has always been a key part of the SIREN study, allowing us to exchange expertise and knowledge to address key outstanding research questions.

You can find a list of current and past collaborations in the Collaboration tab of the portal, which includes details on the organisations we are working with, the title of the project, and what we aim to achieve.

The Latest Data from SIREN+

Thanks to all our SIREN+ participants, we are continuing to track symptoms trends and time off work in our cohort, via surveys.

Check out the graphs below to see the latest data from our analyses.



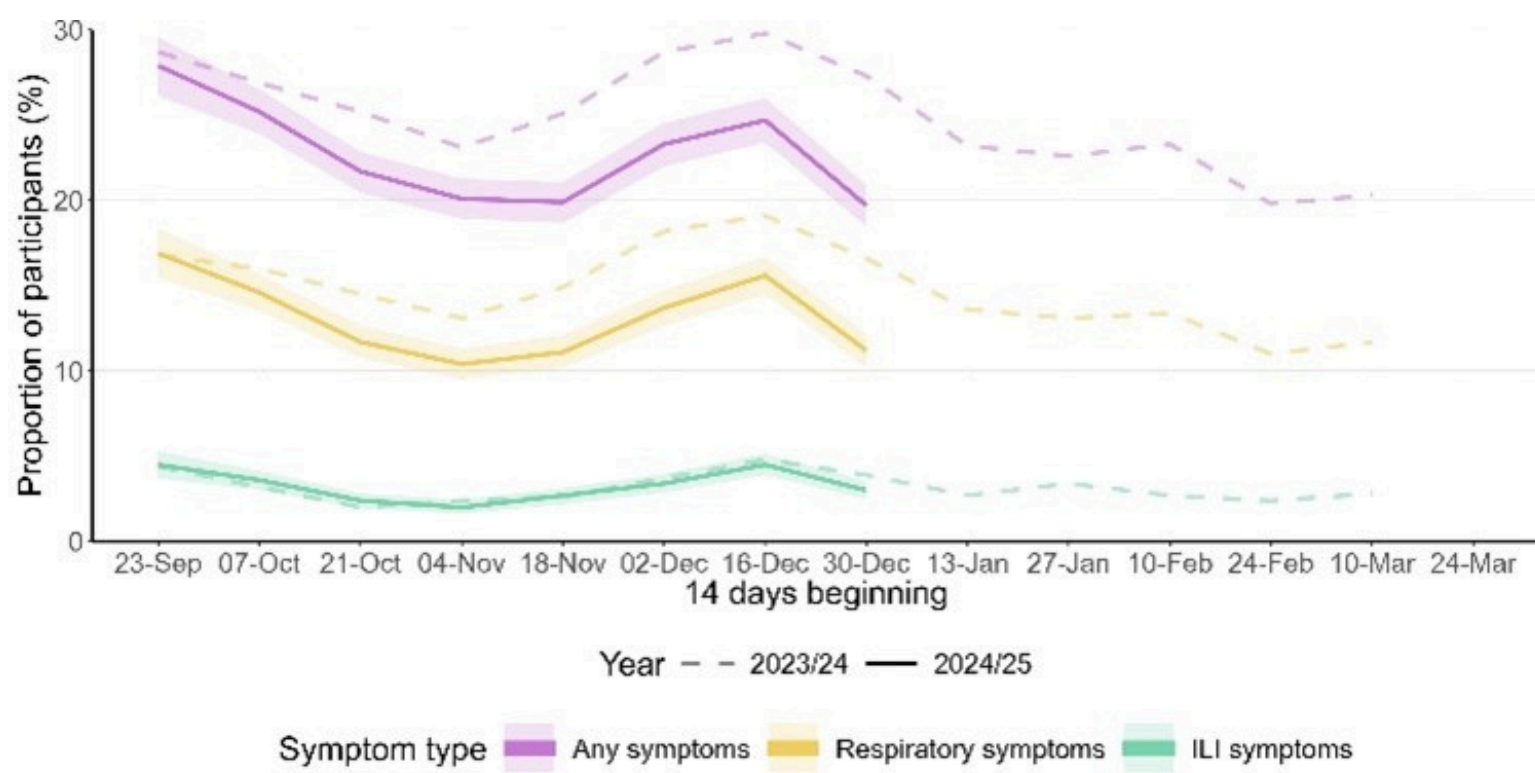
SIREN+ Winter Pressures: Symptom Trends

Our data so far shows self-reported symptoms increased during November and early December, before starting to fall in the second half of the month. A runny nose, sore throat, and headaches remain the most frequently reported symptoms.

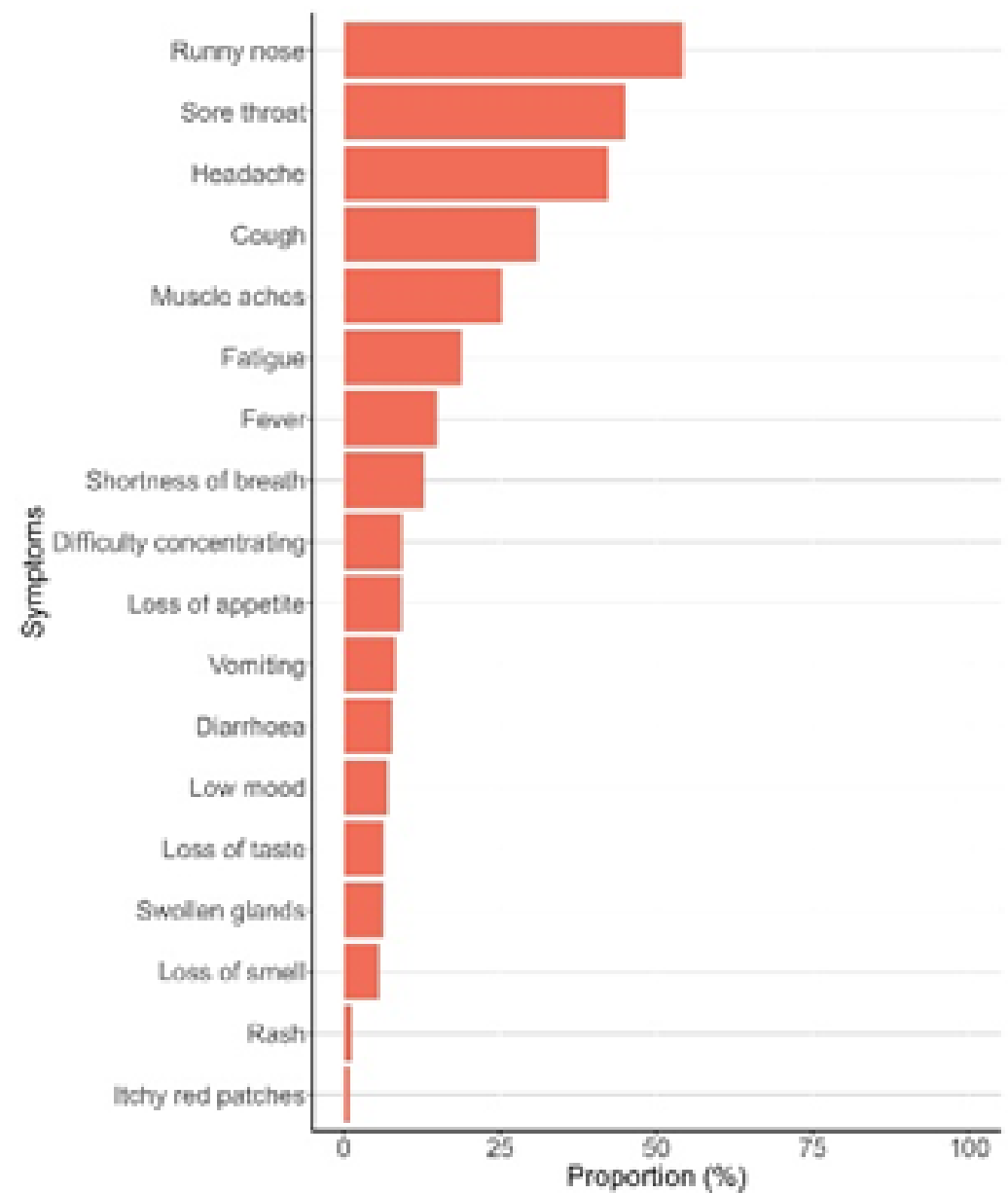


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LATEST NEWS



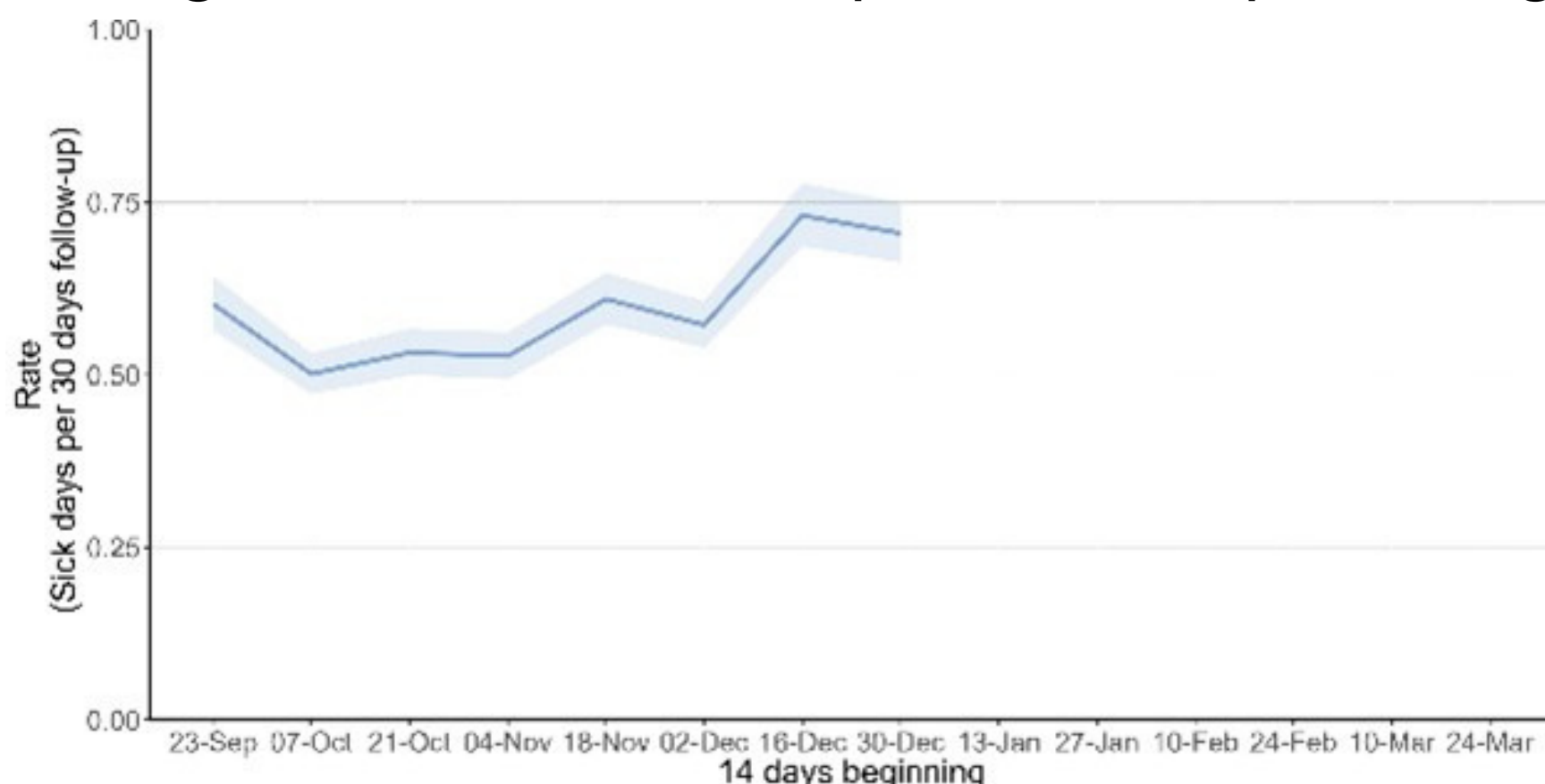
Proportion of SIREN+ participants reporting any symptoms, influenza-like illness (ILI) symptoms and respiratory symptoms, by fortnight, September 2024 to March 2025



Cumulative proportion of participants reporting symptoms by type, September 2024 to March 2025

SIREN+ Winter Pressures: Trends in Time off Work

As shown below, participants are reporting a higher rate of sick leave throughout December compared to the preceding months.



Rate of sick leave (number of sick days per 30 days) among SIREN+ participants, by fortnight, September 2024 to March 2025



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NEW DEVELOPMENTS!

SIREN+ RespOME: a new pilot study

What is it?

As part of SIREN+, we are launching a new sub-study in collaboration with the Wellcome Sanger Institute at the University of Cambridge. The SIREN+ RespOME pilot study will characterise the respiratory microbiome of healthcare workers within SIREN+ and compare it to the respiratory microbiome in the general population. The microbiome is the term given to the population of microorganisms that live within the human body.

We will also assess how many individuals carry the bacterium *Staphylococcus aureus* (*S. aureus*) in their nose or throat among the pilot study participants and compare this with colonisation rates in the community, from another study led by Wellcome Sanger.

Why is this pilot study important?

The lungs and respiratory tract host a diverse range of microbial communities, including bacteria, viruses and fungi. These microorganisms have a role in human health and can stimulate the immune system and protect against infection. Understanding how these organisms live together and what factors affect colonisation by may help find new ways to prevent and treat these conditions. This is particularly relevant when considering healthcare workers, given their increased occupational exposure to respiratory pathogens.



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NEW DEVELOPMENTS!

SIREN+ RespOME: a new pilot study

Who can take part?

Participants currently enrolled in SIREN+ and who are front-line workers in one of the following areas will be offered the option of joining SIREN+ RespOME pilot study:

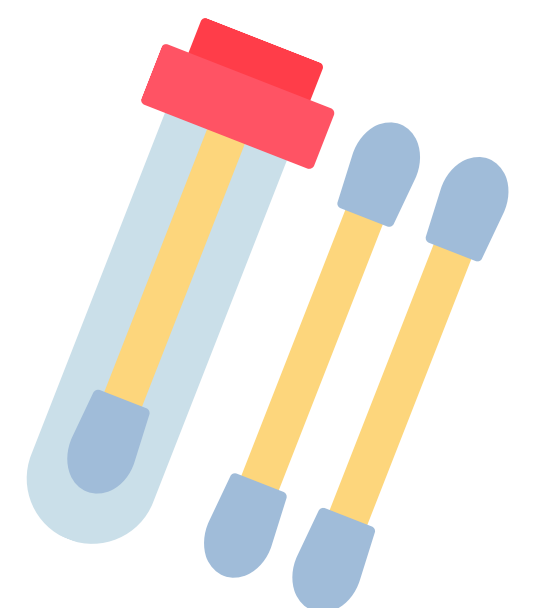
- Accident & Emergency
- Critical care
- Inpatient wards

These areas have been chosen because they have been thought to have the highest rate of contact between healthcare workers and patients.

A maximum of 250 participants will be recruited into the sub-study.

What does this pilot study involve?

Participants taking part in the SIREN+ RespOME pilot will be asked to complete a brief questionnaire to collect information about your health and lifestyle and complete two swabs at home, that should be returned via post.



When?

Recruitment will take place in early February 2025, and an invitation to join will be sent via email to eligible SIREN+ participants. The testing kit and survey will be sent out later in the month.



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Characterisation of the SARS-CoV-2 Pandemic in Healthcare Workers within the United Kingdom: Risk Factors for Infection During Four Successive Waves

Research questions

- What are the risk factors for COVID-19 infection in UK healthcare workers?

Methods

- Fortnightly PCR tests and questionnaire data from across four waves of the pandemic were analysed

What did the study find?

- During the second wave (when social distancing measures were in place), occupational risk factors such as working as a healthcare assistant, nurse, or bedside therapist, or working in an inpatient ward or in a role requiring personal protective equipment, affected risk of contracting COVID-19.
- In later waves, when there were no longer pandemic social restrictions, occupation was not found to be a risk factor. Instead, living with others (particularly children) increased risk.
- Having contact with a colleague with COVID-19 was found to be a risk for the first time in 2021-2 (third wave).

Why is this significant?

- Understanding risk factors associated with SARS-Cov-2 infection is useful for potentially preventing future infections and minimise the burden of COVID-19 in the population.

Take home messages

- This research highlights how risk factors changed over the course of the pandemic, likely in response to changing social mixing patterns.
- More research would be useful to establish what interventions are most effective at reducing respiratory virus transmission in healthcare settings.
- You can read the full article [here](#).



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Cohort retention in a pandemic response study: Lessons from the SIREN study

Research questions

- How well was the SIREN cohort retained (i.e., participants remained in the study)?
- What have we learned about retention over the course of the study?

Methods

- A mixed-methods evaluation of SIREN's cohort retention over the first two years of the study.
- Cohort retention was investigated by demographics and site, and this data was statistically analysed.
- Participant feedback was collected via survey.
- Feedback from research teams was collected in focus groups.

What did the study find?

- 37,275 (84.7%) participants at 135 sites completed 12- months of follow-up.
- 12,635 (85.5%) participants at 87 sites completed 24-months.
- SIREN scored highly in participant feedback, with 90% of respondents finding the study easy to take part in.
- Key lessons to improve cohort retention are: monitor changing participant motivations for taking part in the study, use inclusive and comprehensive communication, and acknowledge the contributions of participants and skillset of research teams.

Why is this significant?

- SIREN has had high participant retention over the course of the study, with 84.7% completing one year, and, of those extending their follow-up period to two years, 85.5% completed . Understanding why this is, and what can be done to improve, is useful information for future studies.

Take home messages

- Retaining a cohort over a long study period is challenging, but SIREN participants remain engaged.
- Good communication and acknowledging participant contributions and the skills of research teams are key lessons that can support participant retention.
- You can read the full article [here](#).



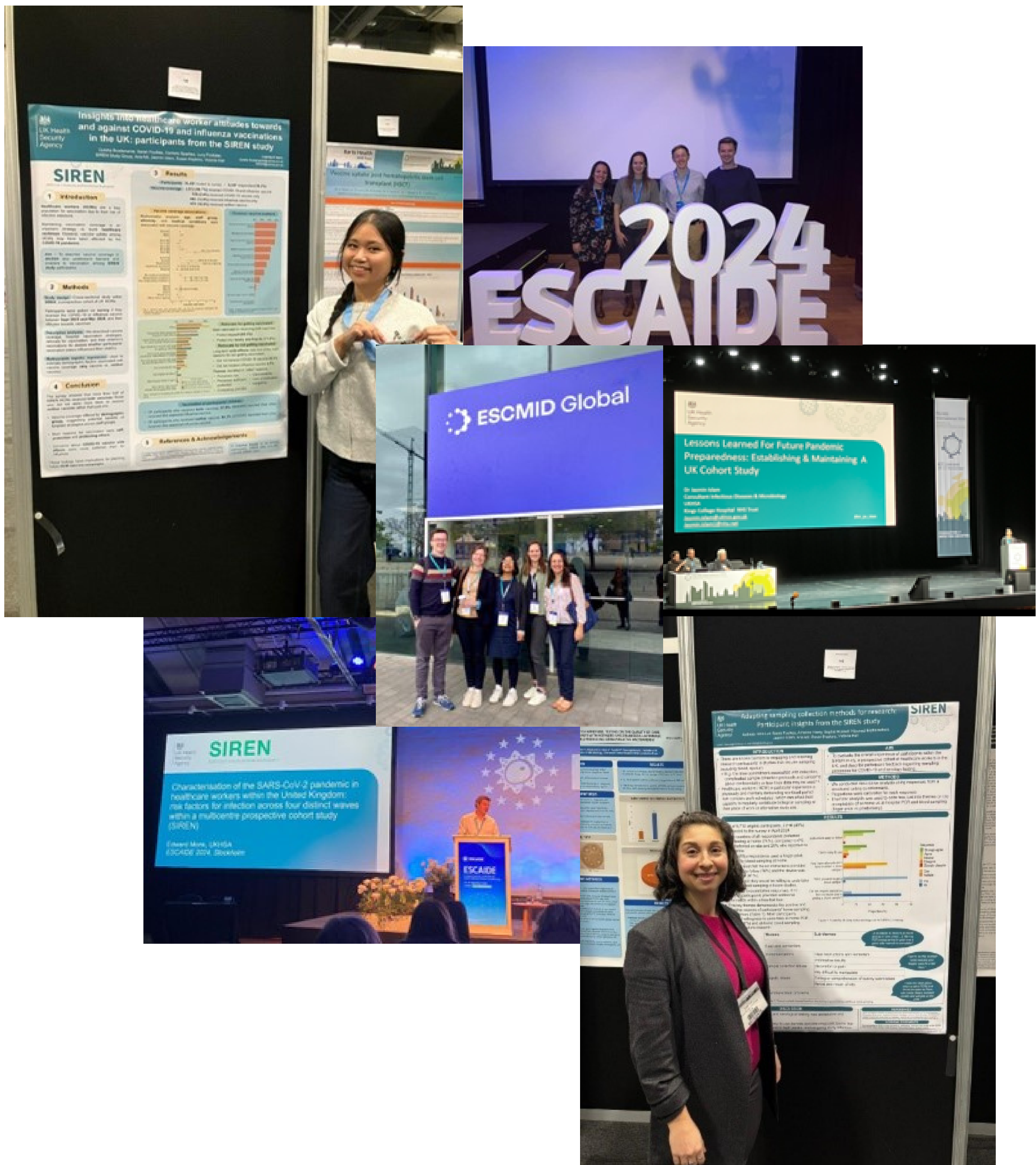
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In addition to SIREN's publications, team members have also been sharing the study's findings at key conferences through talks and posters.





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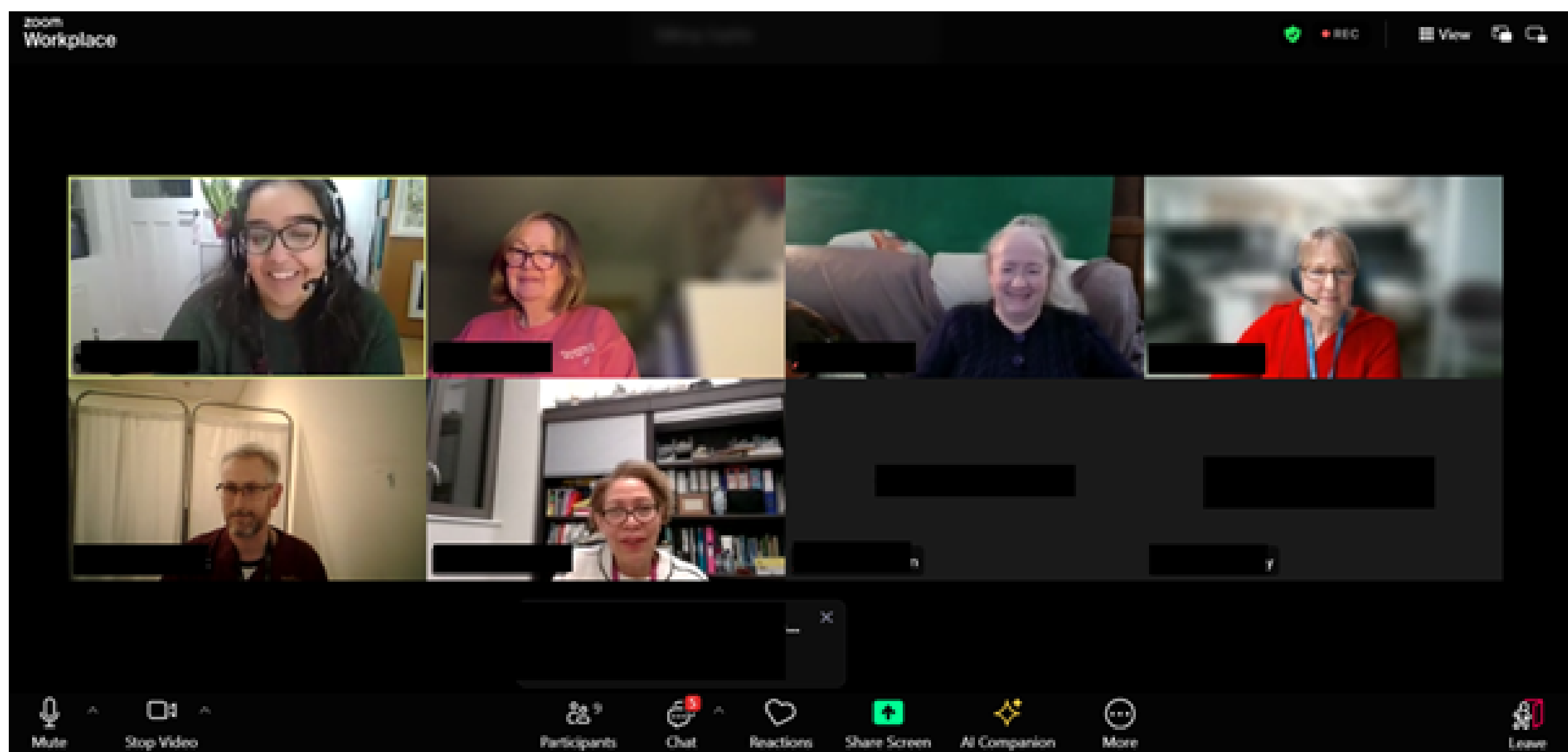
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PIP Corner

The SIREN+ Participant Involvement Panel (PIP) held their second meeting on the 21st January. One of the topics discussed was the upcoming SIREN+ RespOME project and received a huge amount of helpful feedback, which will be incorporated into the study planning.



One panel member shared,

"It has been absolutely fascinating [...] I have really enjoyed it. I have learned a lot."



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Thank you for your ongoing support to the SIREN study!

As always, should you want to get in touch with us directly please reach out to phe.siren.participants@ukhsa.gov.uk

*Thank
you!*