



HM Government

Webinar: Update on the Covid-19 National Testing Strategy and COVID-19 Surveillance



Our National Effort for Diagnostics

Lord Bethell of Romford

Parliamentary Under Secretary of State, Department of Health and Social Care



Today's Agenda

13:40-14:05

Update on the Surveillance testing to learn more about COVID-19

Overview and next steps – Tamsin Berry, Director DHSC

ONS Surveys – Professor Sir Ian Diamond, National Statistician

PHE Surveillance – Professor Yvonne Doyle, PHE Medical Director and Dr Mary Ramsay, PHE Surveillance Cell

REACT Programme – Professor the Lord Darzi of Denham, Director of the Institute of Global Health Innovation, Imperial College London and Gianluca Fontana, Operations Director and Senior Policy Fellow, Imperial College London

Q&A

14:05-14:30

Update on the 5 Pillar Testing Strategy

Update on Pillar 1 – Dr. Aidan Fowler, National Director of Patient Safety NHSE

Update on Pillar 2 – Gary Cook, Deputy Director COVID-19 Essential Workers Testing Programme

Update on Pillar 3– Tamsin Berry, Director DHSC

Q&A

14:30-14:35

New Novel Solution Challenges

Doris-Ann Williams, Chief Executive of BIVDA

14:35-14:40

Close

Doris-Ann Williams, Chief Executive of BIVDA



Pillar 4: Overview of the Surveillance Testing work and next steps

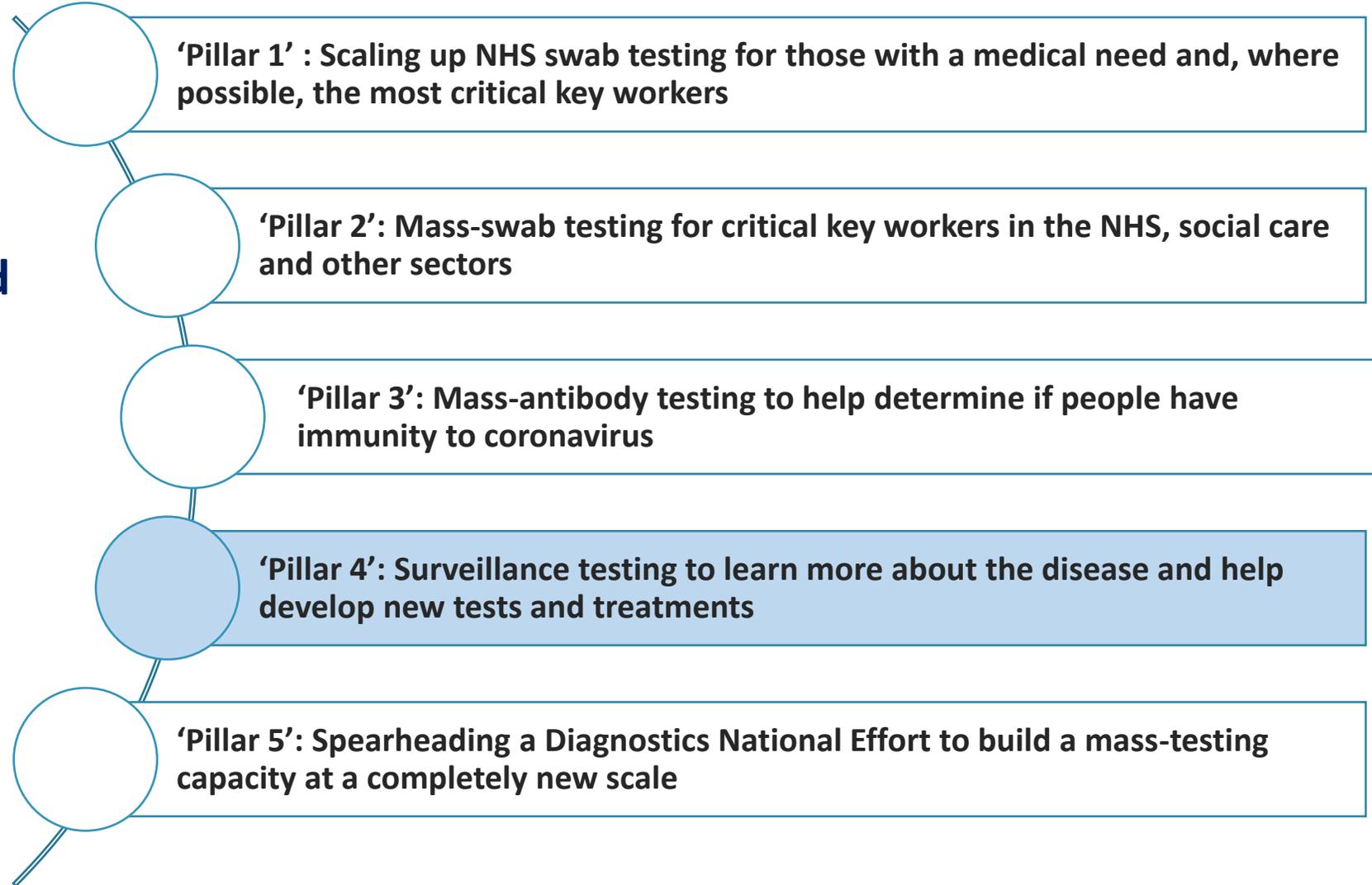
Tamsin Berry

Covid-19 Director, Department of Health and Social Care



Our National Testing Strategy

The strategy was announced by the Secretary of State on 2nd April and has 5 key strands



Office for National Statistics Surveys

Professor Sir Ian Diamond

National Statistician

Update PHE COVID-19 Surveillance

Professor Yvonne Doyle - Medical Director, PHE

and

Dr Mary Ramsay - PHE Surveillance Cell



Public health surveillance is the process of data collection, analysis, interpretation and dissemination:

- undertaken on an **ongoing** basis
- measures of health status or determinants (hazards, exposures, behaviours)
- an agreed and explicit set of **actions** that will be initiated or informed by the outputs

So what does our surveillance tell us about the main actions we have taken to control COVID?

- **Has there been an impact of sequential isolation (week 11) followed by full social distancing / lockdown?**



“Routine” COVID-19 surveillance

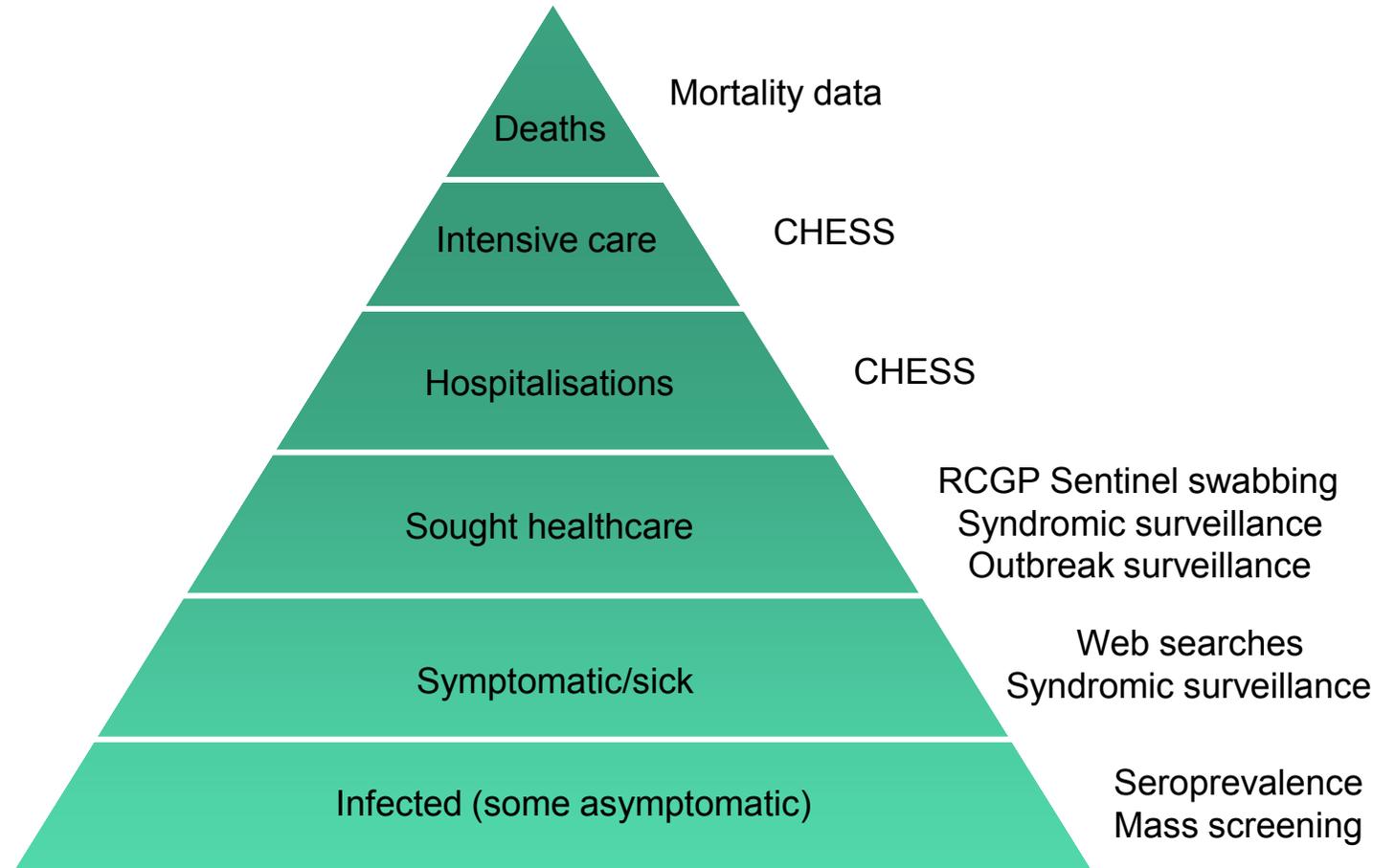
Largely based on systems already in place for influenza

- Slightly different case definitions (ARI/ILI)
- Additional COVID testing where possible
- Reflects the full disease pyramid

Supports surveillance of a range of respiratory viruses

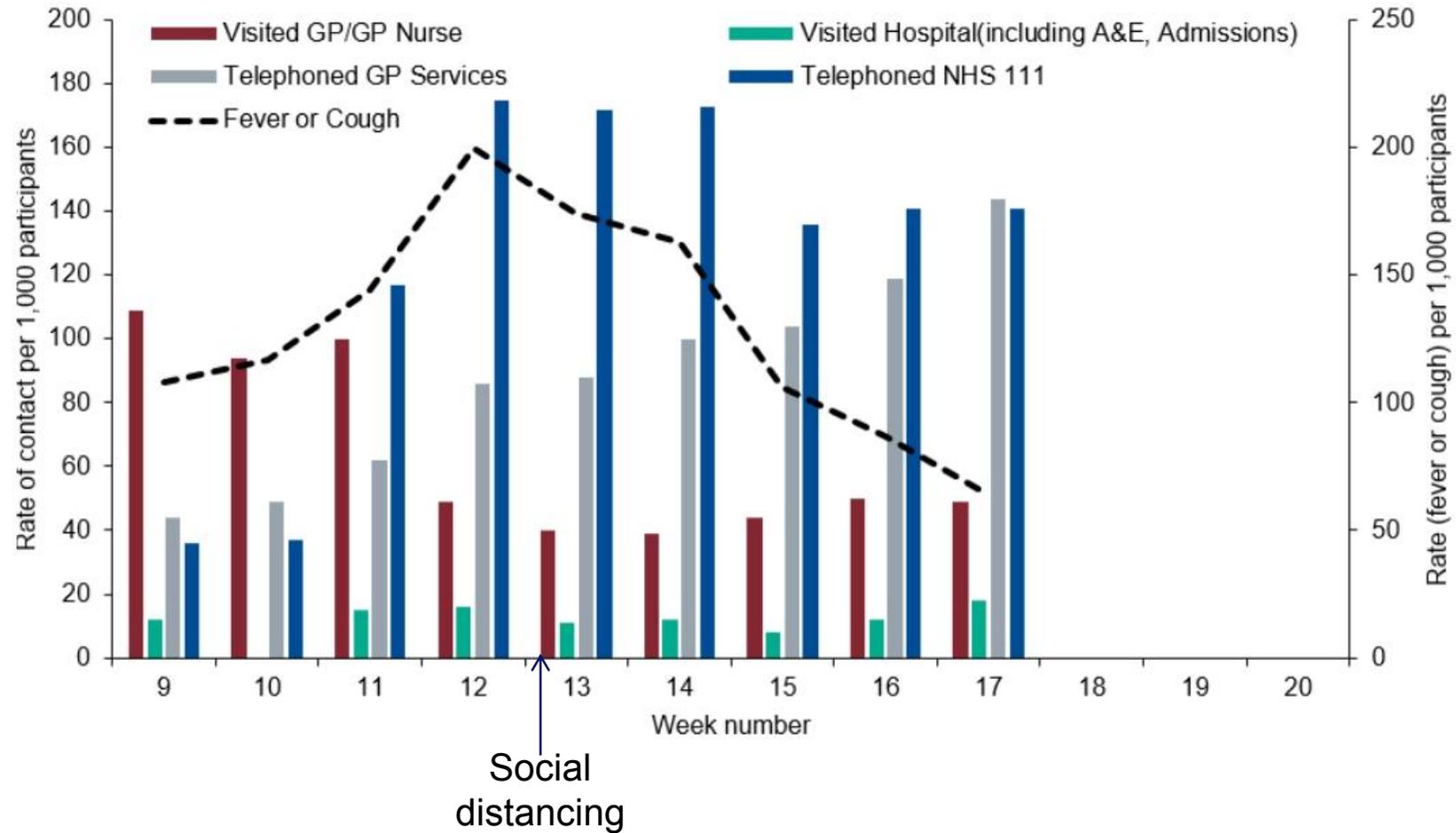
- RSV, influenza and SARs-CoV2

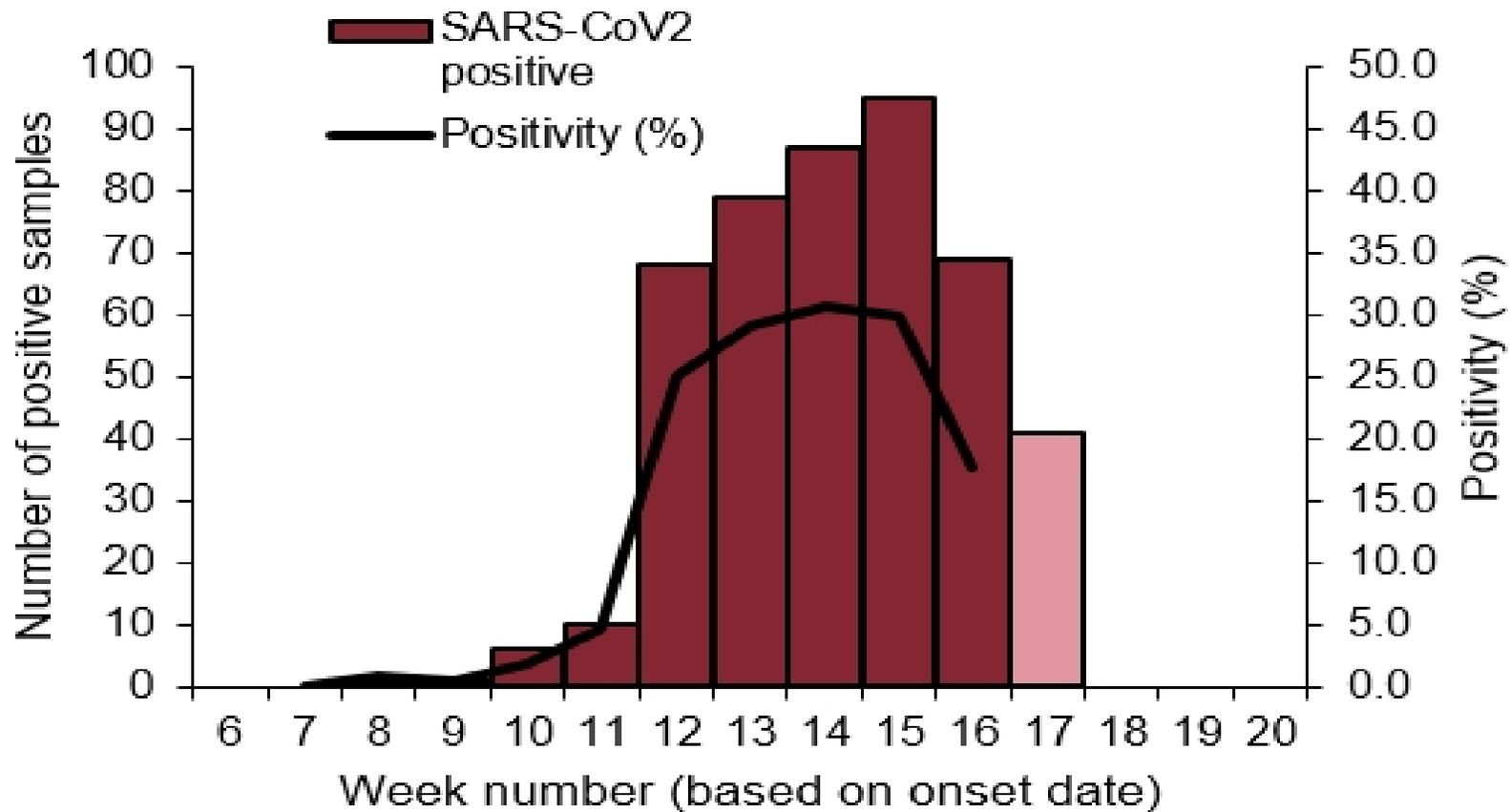
Allows further characterisation of viruses, including NGS of SARs-CoV2

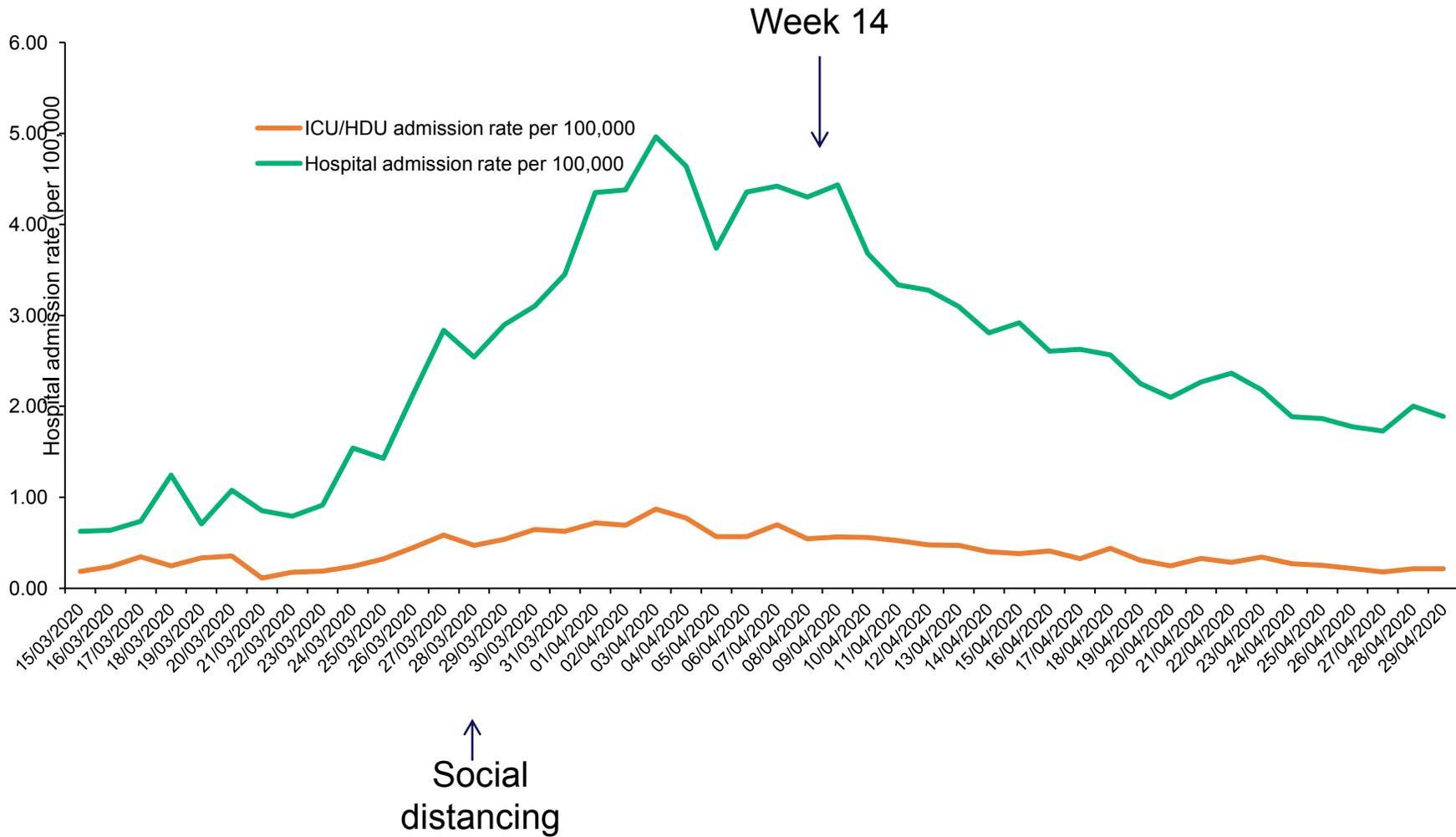




Community surveillance - FluSurvey









Comprehensive range of sustained surveillance systems required to monitor the epidemic

Have successfully shown the impact of recent control measures

- successive impact on systems that monitor each stage of illness

Overall infection rates from seroprevalence highest in young adults

- data from children still unclear

Same systems can also monitor the relaxation of any control measures

- Primary care testing likely to be the first **specific** signal

PHE surveillance systems will be key to monitoring any future vaccine programme



Public Health
England

Acknowledgements

Almost everyone in NIS and many in wider PHE who have contributed to this data

Community, general practice, laboratory and hospital staff who report to us

Patients and public participants in the surveillance scheme

Other agencies (ONS, GRO etc)

The REal-time Assessment of Community Transmission programme

Professor the Lord Darzi of Denham, OM, KBE, PC, FRS - Director of the Institute of Global Health Innovation

and

Gianluca Fontana- Operations Director and Senior Policy Fellow, Imperial College London



**Imperial College
London**

**Institute of
Global Health Innovation**

REACT Study

7 May 2020

REal-time Assessment of Community Transmission (REACT) programme

REACT-1

*Population survey of
current infection in the
community (using
antigen test)*

REACT-2

*Accuracy, acceptability
and ease of use of the
antibody test to inform
the design of a
population survey of
past infection in the
community*

REACT-2 sub-studies

Study 1

Usability, acceptability and performance of LFTs in **health service workers**

Study 2

Usability, acceptability and design of LFT self-testing in **public volunteers**

Study 3

Usability and feasibility of LFT self-testing in the **community**

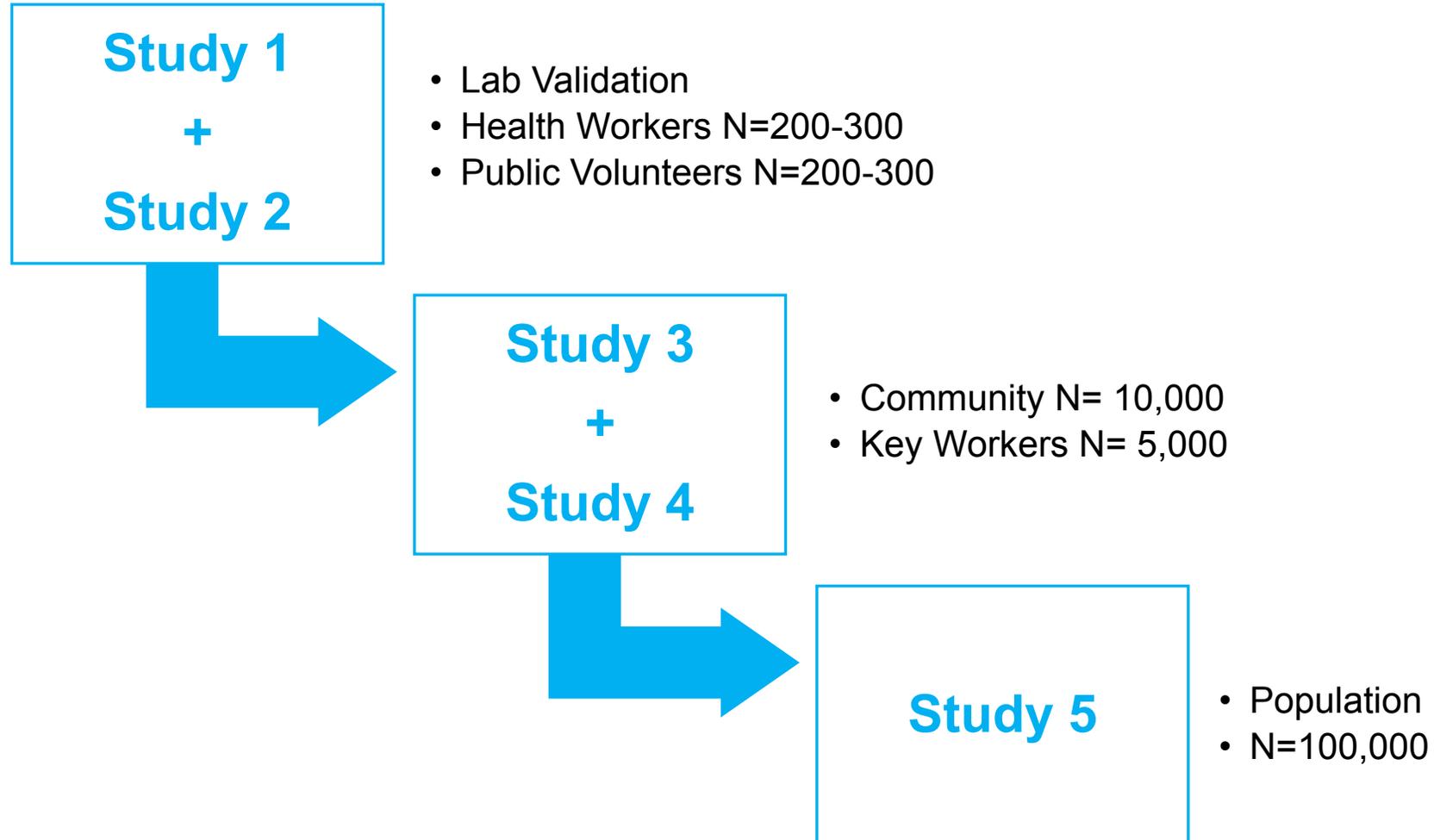
Study 4

Usability and validity of LFT self-testing in **key workers**

Study 5

A **nationally** representative sero-prevalence study through self-administered lateral flow tests

REACT-2 sub studies



Q&A



Update on the 5 Pillar National Testing Strategy



Update on Pillar 1

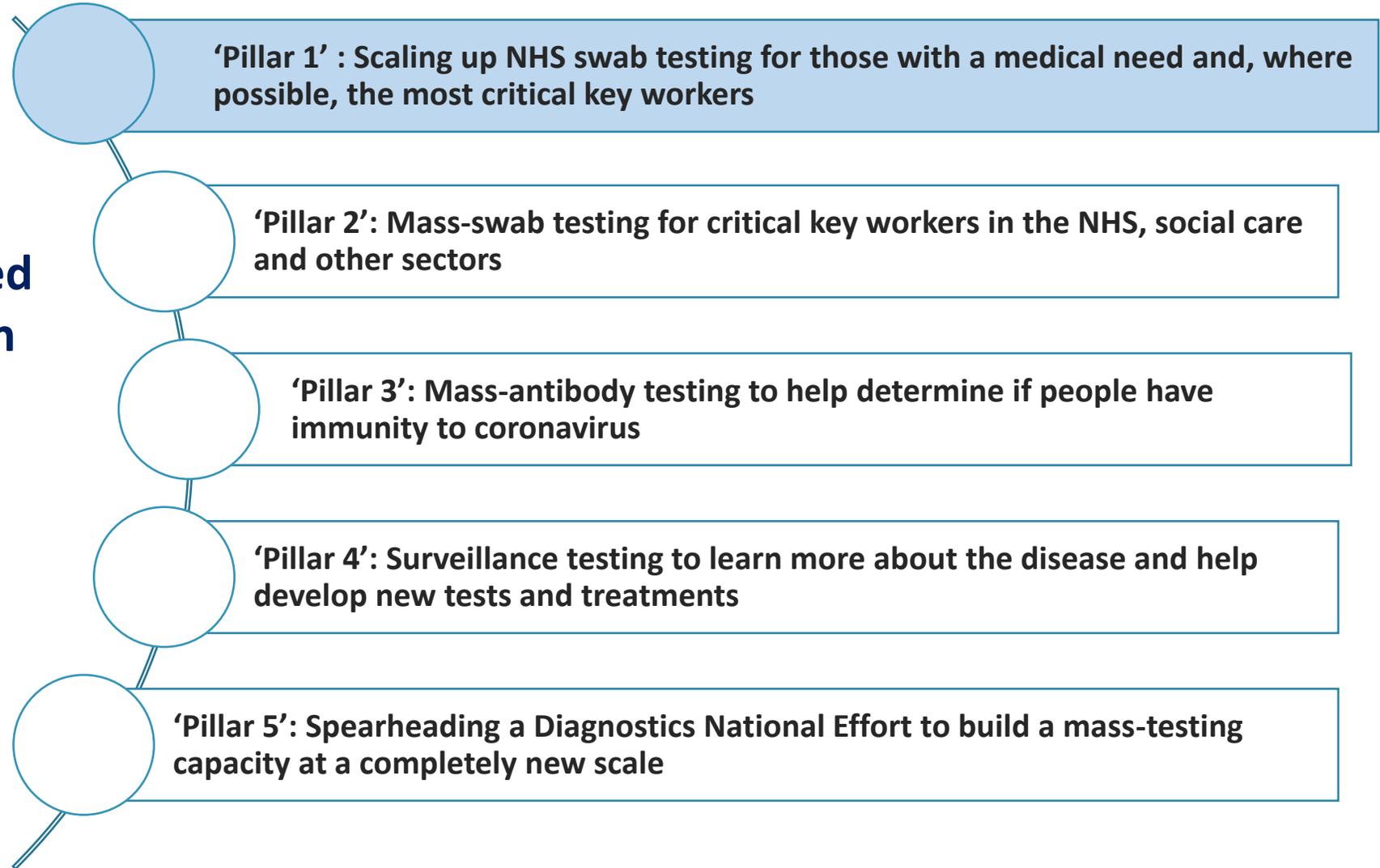
Dr. Aidan Fowler

NHS Director of Patient Safety



Our National Testing Strategy - Update

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PILLAR ONE: PROGRESS UPDATE

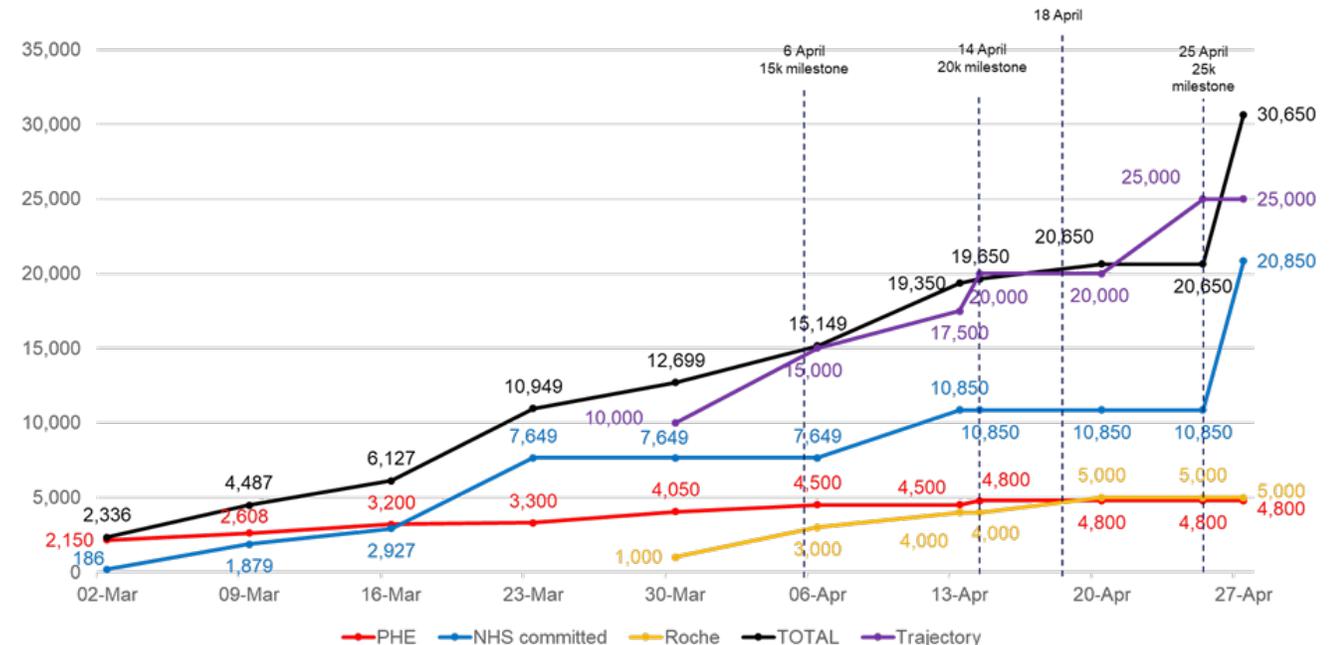
PILLAR 1 AMBITION: Scaling up NHS swab testing for patients with a medical need and, where possible, NHS and essential staff. We reached our ambition of **25,000 tests a day** by the end of April, set out in the Testing Strategy, and are now in excess of this.

KEY DEPENDENCIES: Reaching this ambition depends on getting the right **supplies** and **logistics** in place – we have a global shortage of swabs, equipment and reagents needed to run the tests. Current and potential future lab capacity is constrained by supply.

OVER THE COURSE OF APRIL WE:

- Scaled our testing capacity from 10,000 tests a day to over 25,000 tests per day.
- Had new NHS and PHE labs coming online every week and a partnership with Roche to secure high-throughput PCR capabilities. This includes **29** hub and spoke NHS networks across England, **6** PHE labs and **3** contracted PHE services at NHS Trusts, and labs across the DAs.
- Created a **network of regional leads** to help match lab capacity and demand across the country.
- With the huge **support from industry, the research community, universities** and others, we secured the testing supplies (e.g. swabs) to meet our current aims.
- As capacity increases, we are continuously considering **prioritisation** of groups.

April: The route to 25,000 tests a day



Update on Pillar 2

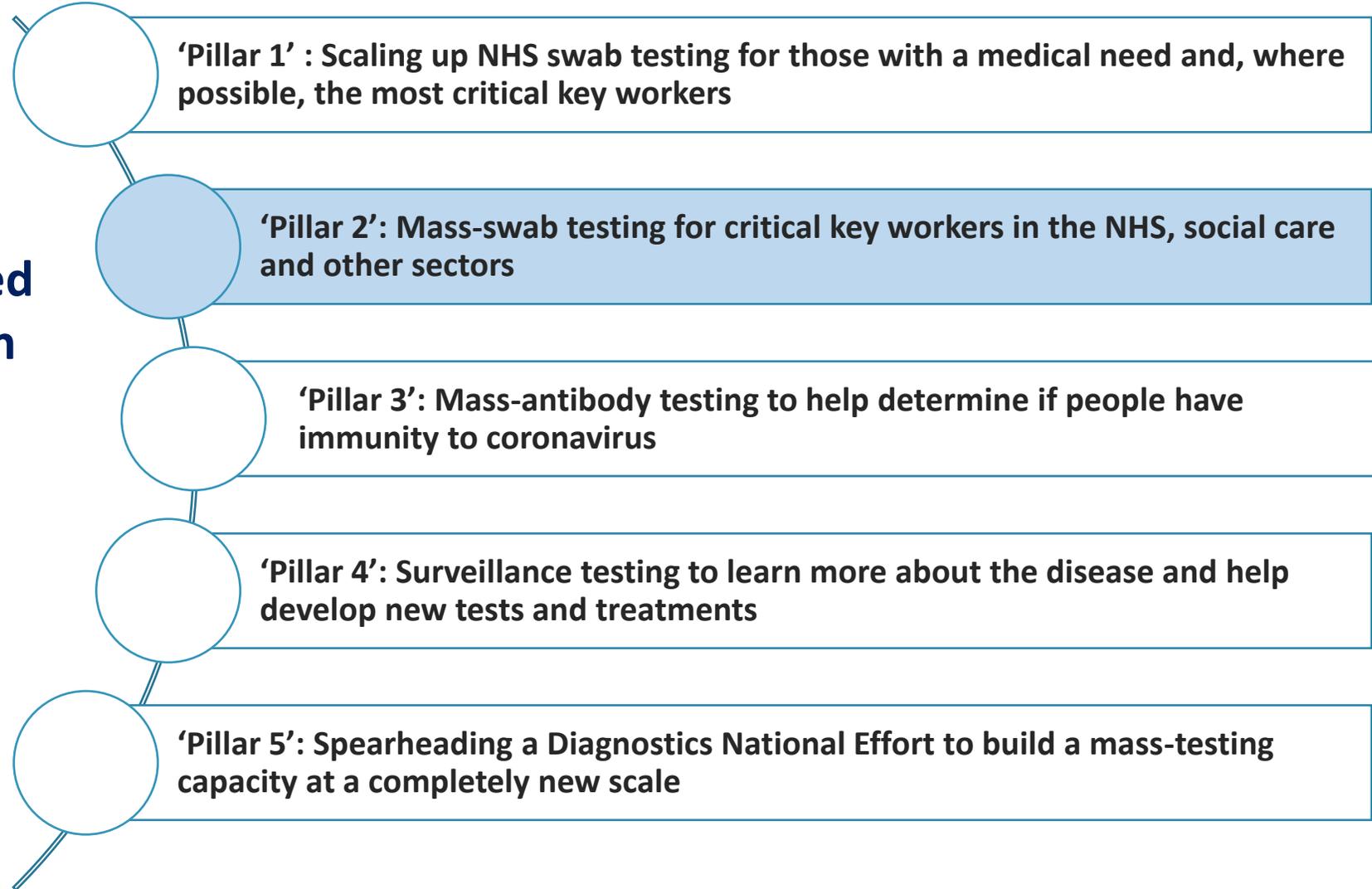
Gary Cook

Deputy Director COVID-19 Essential Workers Testing Programme



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How pillar 2 works

1. Booking



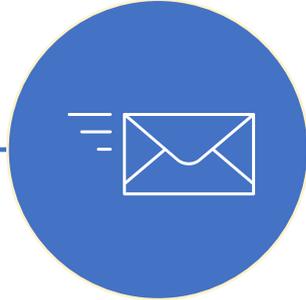
- 1. Employer portal
- 2. Self-referral portal

2. Testing

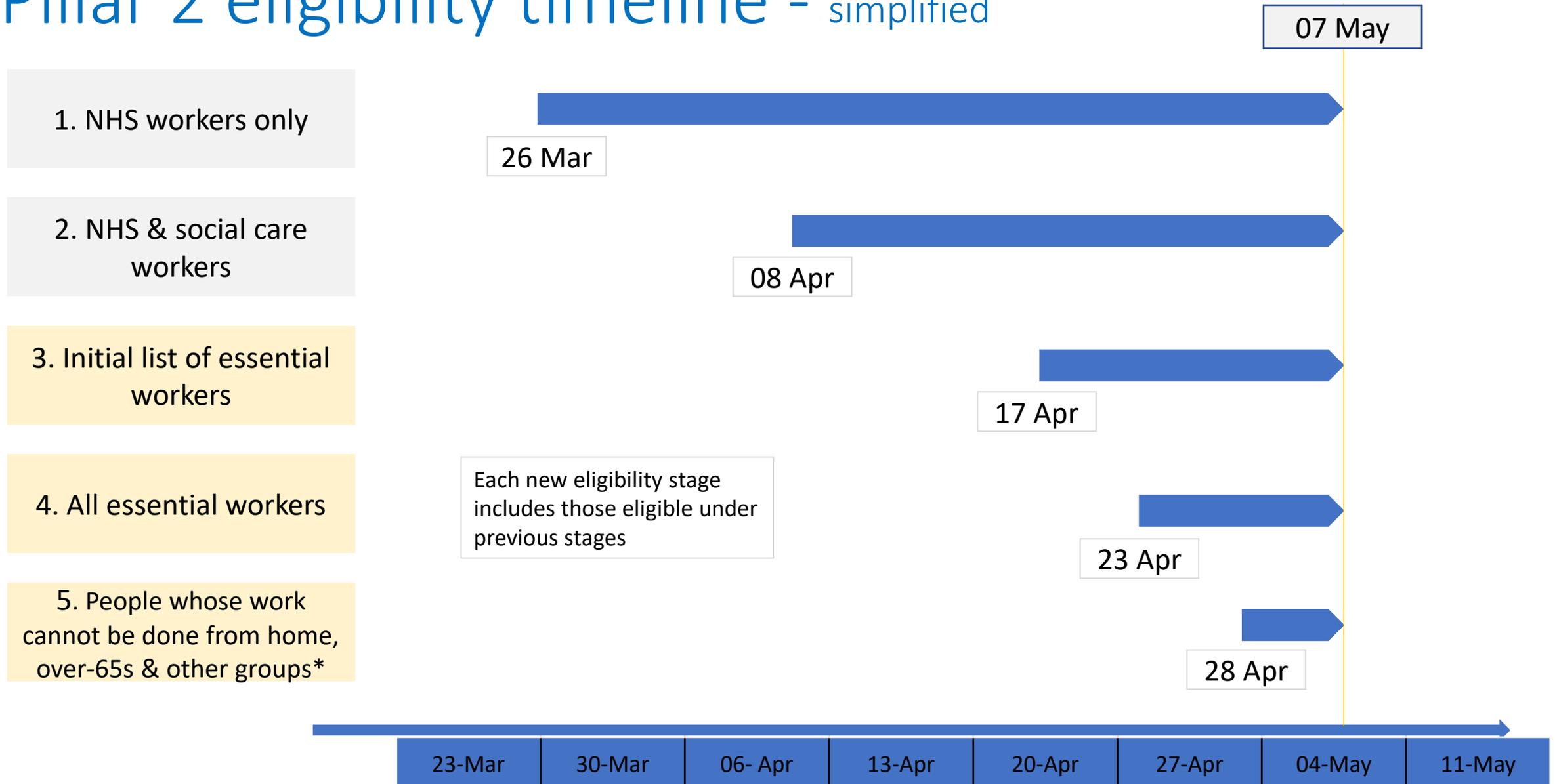


- 148 testing sites
 - 49 regional testing sites
 - 77 mobile testing units
 - 22 Satellite testing sites
- Home testing kits

3. Results



Pillar 2 eligibility timeline - simplified



Update on Pillar 3

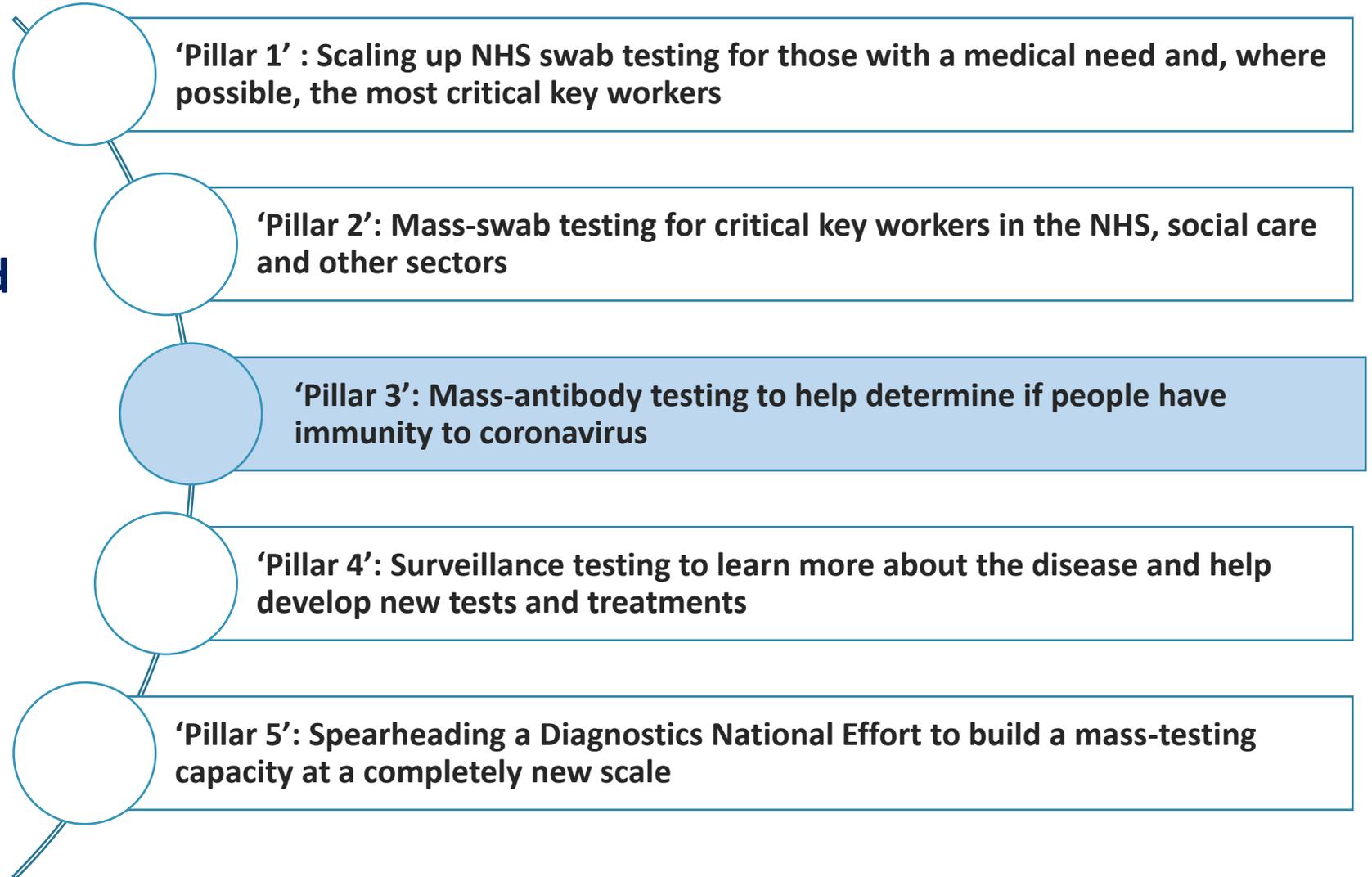
Tamsin Berry

Covid-19 Director, Department of Health and Social Care



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Q&A



New Novel Solution Challenges

Doris-Ann Williams

Chief Executive of BIVDA



We have launched two new challenges...



New challenge: Increasing end-to-end efficiency and speed of testing

Following reaching the target of delivering 100,000 tests per day by the end of April we need to continue to increase our capacity for testing. We are looking for new methods for viral detection and identification that are high throughput and that will increase end to end efficiency and speed of testing. These need to be implemented and adopted quickly. They may include solutions to challenges you have faced in your own systems in recent weeks.

Please note we are NOT looking for examples of point of care testing in this challenge.



Add your examples here: [testingmethods.crowdicity.com](https://www.testingmethods.crowdicity.com)

#TestingMethods2020

#Covid-19

New challenge: Alternative to swabs for sampling

One of the significant constraints on current testing capacity is availability of swabs for sampling. We are looking for alternative non-swab based methods or techniques of sampling for the virus that have been used in other applications or contexts and that can be implemented rapidly.

Examples could be, but not limited to, use of saliva, faeces and potentially urine. We also welcome ideas related to non-blood based sample collection for antibody testing in this challenge.



Add your examples here: [testingmethods.crowdcity.com](https://www.testingmethods.crowdcity.com)

#TestingMethods2020

#Covid-19

How you can get involved in this work

- In partnership with Crowdcity, we have launched a **testing methods sourcing platform** to collect ideas on our specific challenges <https://testingmethods.crowdcity.com/>
- If you have a solution that addresses this new challenge, please register and add it to the platform. We want to know:
 - What is your idea/offer?
 - Have you validated this method, if so, how and what were the results of the validation?
 - How quickly could this be deployed and what are the dependencies?
 - What is the likely production volume?
 - What are the risks and barriers to using this at scale?
 - Who are you already partnering with on this?
- Even if you don't have a solution, you can comment to other people's solutions; we hope you'll be willing to share but you can also make a confidential submission
- Every solution and comment will be considered

Close

Doris-Ann Williams

Chief Executive of BIVDA



Additional Resources

- [Coronavirus \(COVID-19\) scaling up testing programmes](#)
- [Help the government increase coronavirus \(COVID-19\) testing capacity](#), a link to the specific web form to collect information we need
- As highlighted in the webinar, in partnership with **Crowdicity**, we have launched a testing methods sourcing platform to collect ideas on our specific challenges <https://testingmethods.crowdicity.com/>
- Update on Lab Capacity: Current Triage Process for Offers of Lab Capacity, submissions can be submitted via the **offer portal** here: <https://www.gov.uk/guidance/help-the-government-increase-coronavirus-covid-19-testing-capacity>
- **Professor Sir John Bell's** full paper outlined in the presentation last week has been published and can be found here: <https://www.medrxiv.org/content/10.1101/2020.04.15.20066407v1>

