HM Government

Webinar: NHS Test and Trace Programme: Accessibility, update on the REACT Study and COVID-19 Commercial Impacts

23 July 2020, 14:15

ABHI HealthTech for Life abpi Bringing medicines to life BIA UK BioIndustry Association BIVDA

Department of Health & Social Care

Opening

Lord Bethell of Romford

Parliamentary Under Secretary of State

Department of Health & Social Care

Today's Agenda

14:15 – 14:25 Opening	Lord Bethell of Romford Parliamentary Under Secretary of State, Department of Health & Social Care
14:25 – 14:40 Equality, diversity and inclusion approach within the NHS Test and Trace Programme	Alex Birtles Personal Advisor to Dido Harding, NHS Test and Trace **Q&A**
14:40 – 14:55 REACT Programme	Professor the Lord Ara Darzi of Denham Co-Director of the Institute of Global Health Innovation, Imperial College London **Q&A**
14:55 – 15:10 COVID-19 Commercial Impacts	Helen Dent Chief Operating Officer, BIVDA **Q&A**
15:10 – 15:15 Crowdicity Update & Close	Doris-Ann Williams Chief Executive, BIVDA

NHS Test and Trace

EQUALITY, DIVERSITY AND INCLUSION APPROACH

Life Sciences Industry Webinar
23 July 2020

Equality, diversity and inclusion - Key messages

The virus affects people **differently** and our service needs to counteract this so **all** can benefit

Our work is designed to foster an **inclusive** culture, **listen** to the **communities** that we serve and develop **trusted** services that work for everyone who needs to use

We are working with different communities to understand different users needs and **bring seldom heard voices** into our **design process**

NHS
Test and Trace

Our Equality Diversity & Inclusion strategy has 5 core tenants

NHS Test and Trace brings together testing, contact tracing and outbreak management into an end-to-end service to help prevent the spread of the virus, protect local communities and save lives.

Our EDI strategy includes:

1. Undertaking a baseline **assessment** across the service to identify key areas for improvement
2. Driving diversity in **recruitment**
3. Establishing **partnerships** with other organisations
4. Building staff networks to drive an **environment** of inclusion and belonging
5. Fostering a **culture** where individuals of all backgrounds feel confident and included, their talents are nurtured, and we empower them to contribute fully to our purpose

NHS
Test and Trace

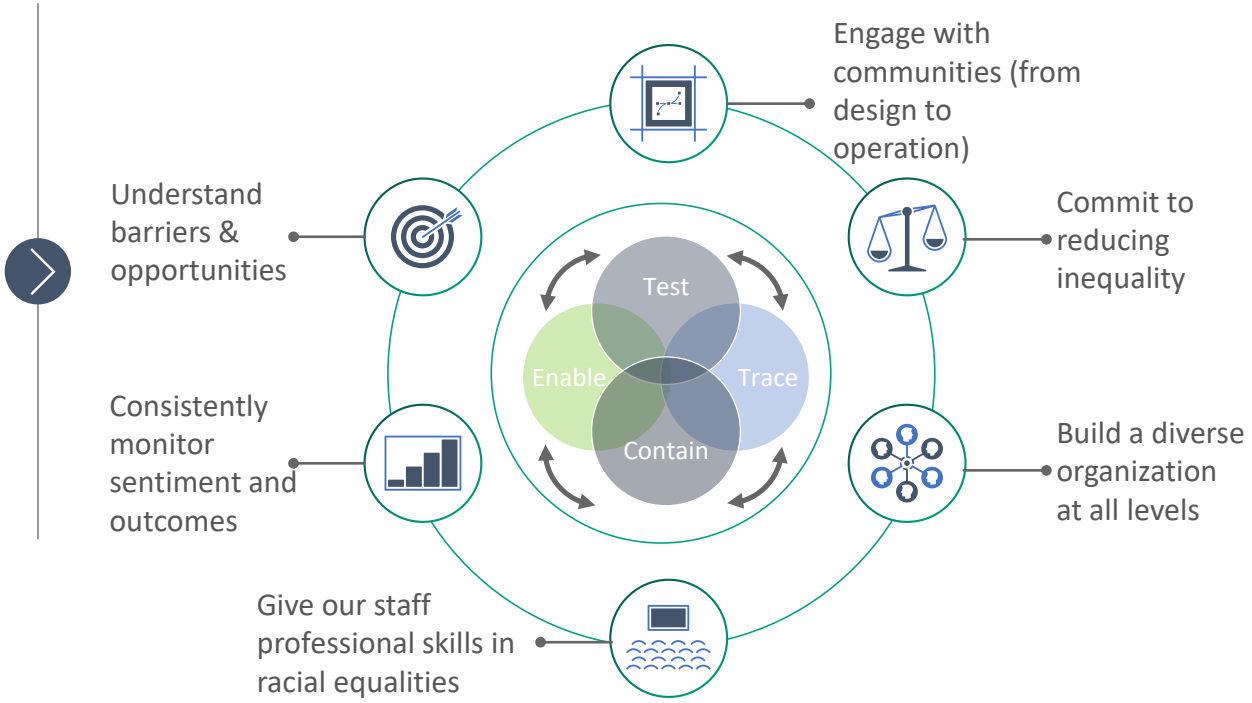
How can we ensure that NHS Test and Trace meets the need of specific communities?

What we want to do

Build a service that is Accessible, Trusted and Equitable to all

Increase engagement in all communities

How we plan to do it



What are next steps

1. Work with strategy and policy team to review and prioritize existing work
2. Develop a shared delivery plan across teams
3. Build a cross functional delivery team to run sprints against each priority

NHS Test and Trace

What can we learn from you? What have you seen work well in other contexts?

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Department of Health & Social Care

Real-time Assessment of Community Transmission (REACT)

Briefing

Lord Ara Darzi
on behalf of REACT team

REACT OVERVIEW
23 July 2020

The REACT programme is a series of studies that are seeking to improve our understanding of the prevalence of COVID-19 across England

REACT-1: a study of SARS-CoV-2 virus prevalence in the community in England

REACT-2: a study of SARS-CoV-2 antibody seroprevalence in the community in England

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REACT 1

This study is running monthly to help researchers monitor how the COVID-19 epidemic is progressing over time in England

How it works

- 120,000 people are invited to take part each month
- Randomly selected from across all 315 local authorities
- First antigen testing programme that uses self-swab
- Swabs are carried in cold chain to lab for RT-PCR
- Data analysed on daily basis
- Prevalence rate calculated for each local authority
- This study complements ONS in calculating prevalence and R rates

Testing to date

- Round 1: baseline prevalence study, conducted prior to ease of lockdown
- Round 2: first month after ease of lockdown
- Round 3: conducted using same protocol, repeated monthly

REACT 1 – prior to ease of lock down

Overall prevalence of 0.13% (95% CI: 0.11%,0.15%) from 120,610 swabs, over 1st May to 1st June.

Reproduction number **R** estimated to be **0.57** (0.45, 0.72).

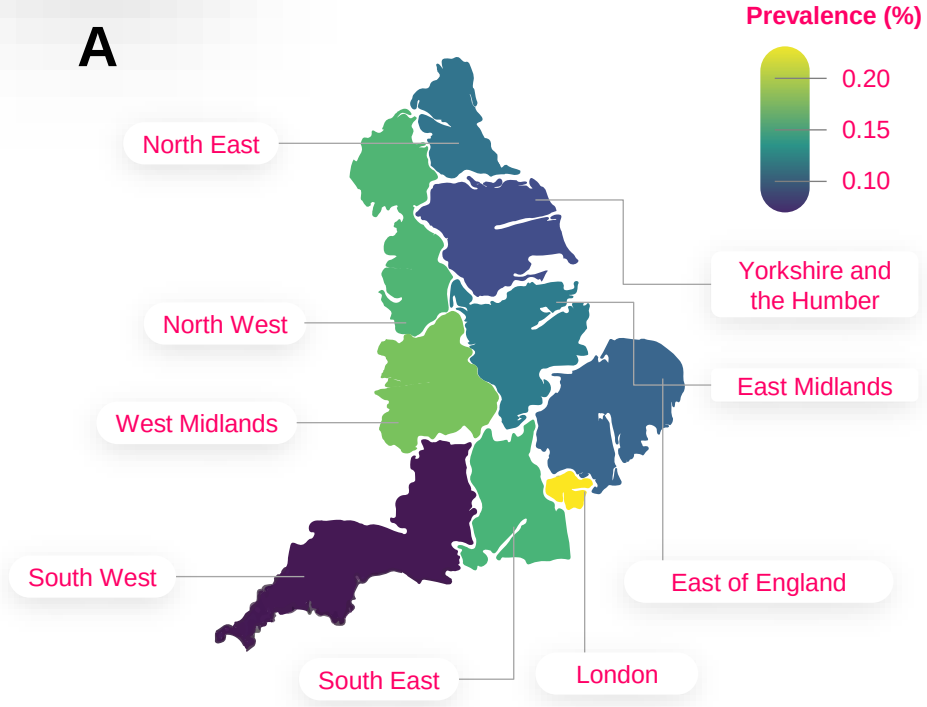
Prevalence rate is higher in Asian participants (especially South Asian), compared to white participants.

Prevalence rate is highest in adults aged 18 to 24 yrs. Those older than 64 yrs had lowest rates.

69% of positive cases were **asymptomatic** at time of test.

REGIONAL VARIANCE IN PREVALENCE (BASELINE)

A



REACT 1 – first month after easing

Overall prevalence of 0.077% (95% CI, 0.065%, 0.092%) – a reduction from prior round

Prevalence **in London remains higher** than in other regions at **0.15%** (0.097%, 0.22%)

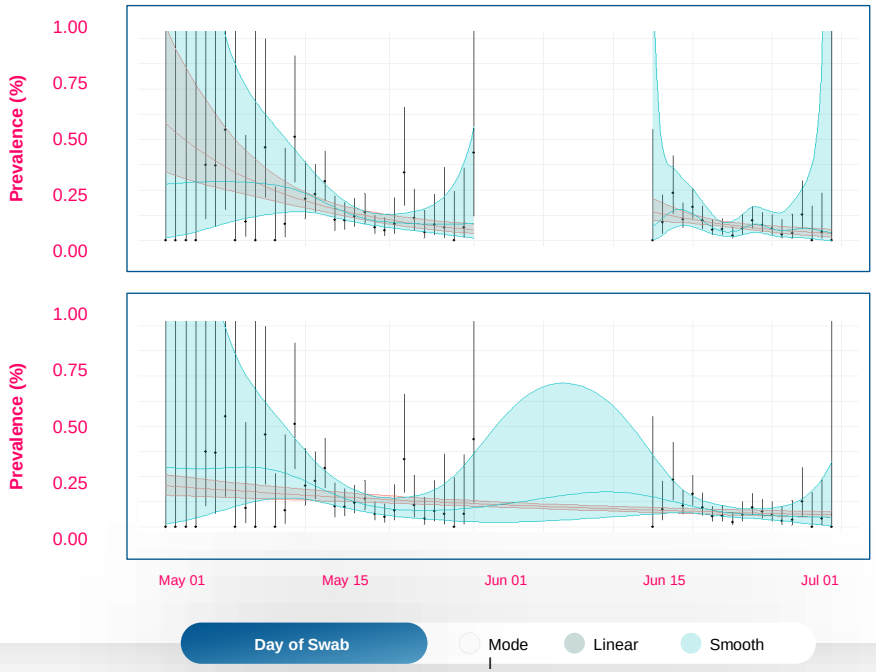
Largest falls in prevalence among **school-aged children** and **adults aged 18-24 years**

A fall in prevalence also seen among **health care** and **care home workers**

TEMPORAL MODEL FITS TO ROUND 1 and ROUND 2

› The figure below shows fits to rounds 1 and 2 separately (upper) and as a joint dataset (lower).

› For rounds 1 and 2 fit jointly, we found a halving time of 38 (28, 58) days giving and **R value of 0.89** (0.86, 0.93).



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REACT 2 Studies

Study 1

Accurancy of LFTs in lab and clinic

300 PCR positive patients

Assessing the accuracy of various lateral flow tests (LFTs), in both the lab and clinic setting across up to 300 PCR positive patients, to test for sensitivity and 500 confirmed negative samples, to test for specificity.

Study 2

Usability of home-based LFTs

300 randomly selected adults

Public engagement and involvement to obtain rapid feedback on the usability of home-based LFTs of 300 adults.

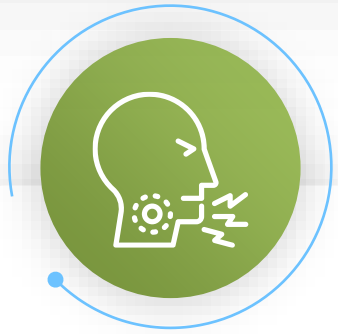
Study 3

Usability of home-based LFTs

10,000 randomly selected adults

Usability of home-based LFTs of a 10,000 representative sample of the population.

Participant interpretation of the test result will be compared with the interpretation of the research team using the photographic.



Study 4

LFTs & DBS antibody tests and saliva antigen tests

5,500 key workers (majority police)

Usability and validity of LFT antibody self-testing compared to dry blood spot (DBS) testing and validation of saliva antigen testing versus nasopharyngeal swab in 5,500 key workers (majority police)

Study 5

National sero-prevalence study in home-based LFTs

100,000 randomly selected adults

A nationally representative sero-prevalence study, by distributing 100,000 self-administered LFTs, reflecting learnings from Studies 1-4

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REACT 2 – Study 1 identifying accurate LFTs in lab and clinic

Over 15 LFTs evaluated thus far

	SENSITIVITY								SPECIFICITY			
	SERUM (LAB) (vs S-ELISA)				FINGERPRICK (CLINIC) (vs S-ELISA)				PRE OCT 2019 SERUM IN LAB			
LATERAL FLOW ASSAY	RANK	Sensitivity	95% CI	n/N	RANK	Sensitivity	95% CI	n/N	RANK	Specificity	95% CI	n=
Shortlist LFT 1	4	91%	(85.8-94.3)	173 / 191	4	78.6%	(63.2-89.7)	33/42	1=	99.8%	(98.9-100)	499 / 500
Shortlist LFT 2	5	89%	(84.3-91.9)	262 / 296	3	84.4%	(68.6-92.2)	38/45	5	98.6%	(97.1-99.4)	493 / 500
Shortlist LFT 3	3	93%	(87.5-97.1)	114 / 122	1	95.7%	(85.5-99.5)	45/47	7=	97.8%	(96.1-98.9)	489 / 500
Shortlist LFT 4	6	88%	(82.5-92.2)	168 / 191	2	86.4%	(72.7-94.8)	38/44	1=	99.8%	(98.9-100)	499 / 500

LAB TEST		Vs PCR-confirmed cases										
S-ELISA		94.7%	(91.6-96.9)	303 / 320								
RBD hybrid DABA		94.9%	(91.8-97.2)	282 / 297						100%	(99.3-100.0)	498 / 498

REACT 2 – Study 3 (usability) findings

Usability in community sample

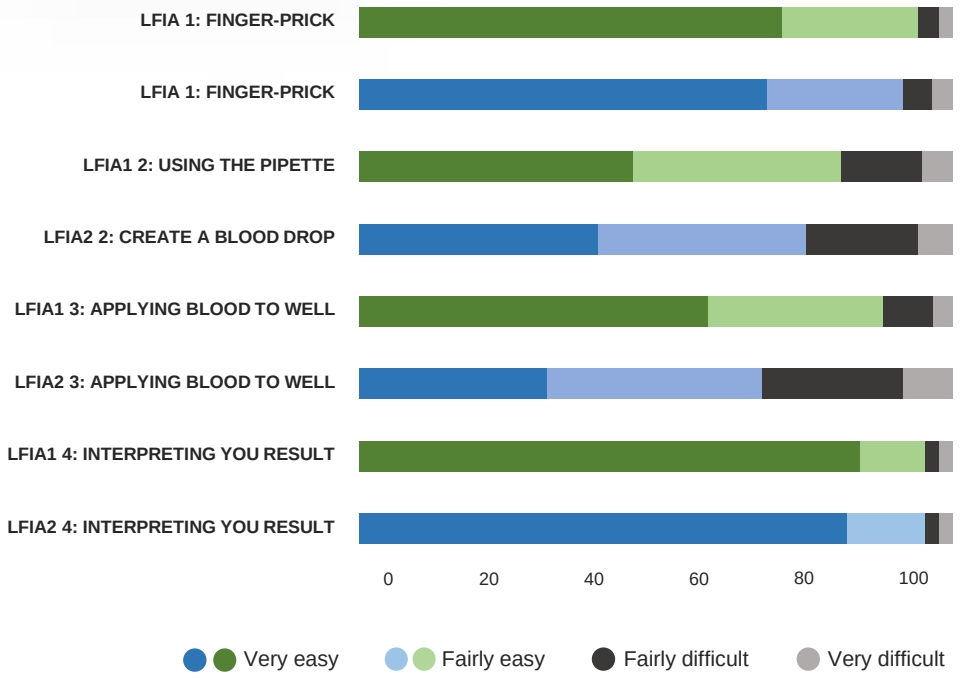
14,000 adults randomly selected

97% completed test

95% valid result

Good concordance with clinician-read result

B. Ability to performing:



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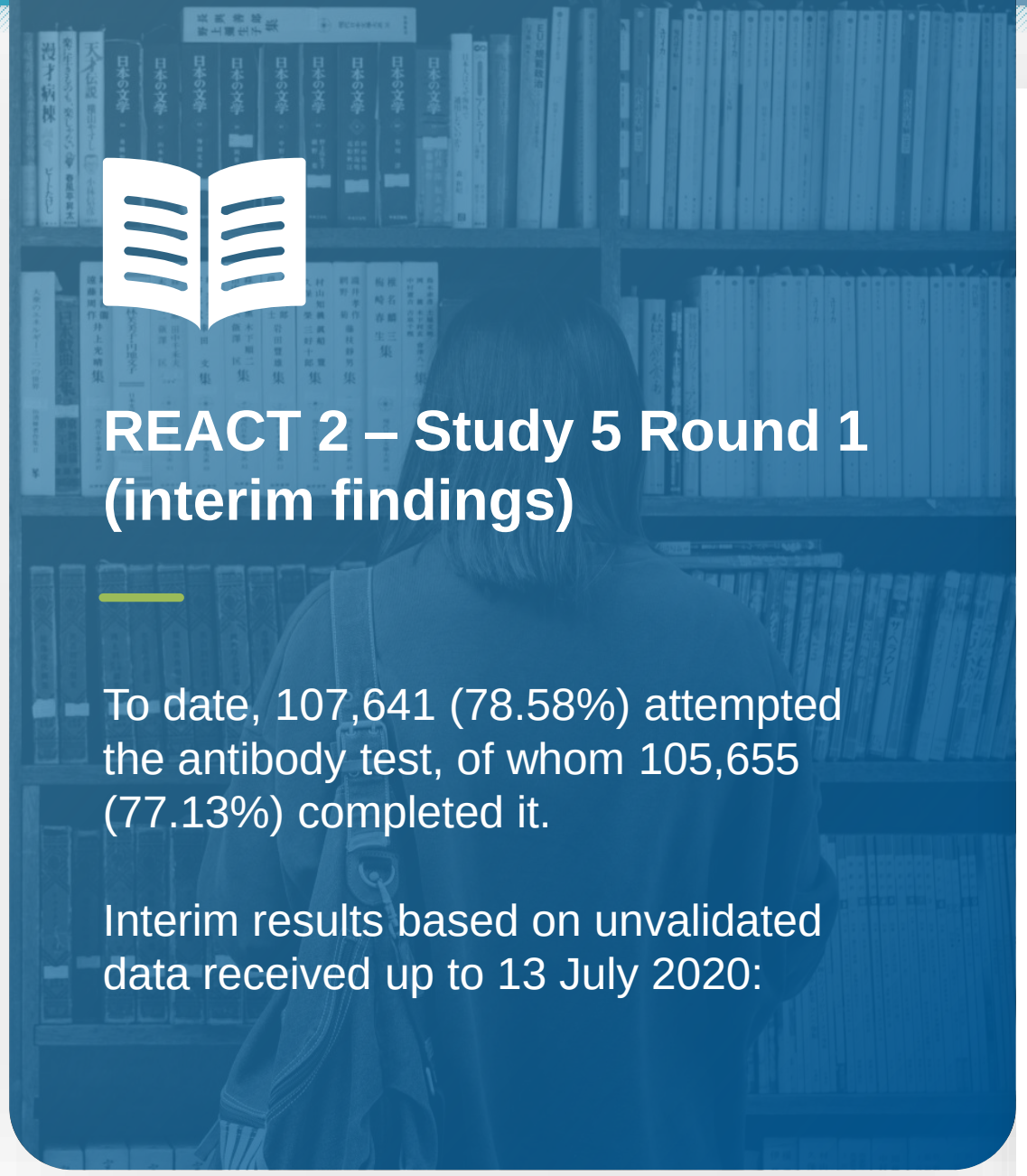
REACT 2 – Study 4 (key worker) interim findings

- Study 4 assesses the usability and validity of LFTs, in both supervised and unsupervised setting
- Recruited personnel from police and fire service.
- Also obtained:
  - swab and saliva for antigen testing
  - plasma, serum and dry blood spots for antibody testing.
- Data collection is now complete.
- 5,554 participants booked with 98% attendance
- Antigen prevalence (nose and throat swab) was 4 of 5,382 (0.074%, 95% CI, 0.029%, 0.191%).
- Initial results from the Abbott ELISA test on venous sample shows antibody prevalence of 335 of 4,507 (7.4%, 95% CI, 6.7%, 8.2%)

Prevalence of ELISA antibody test positive by region:

	Posi-tive	Total	Preva-lence	95% CI, lower	95% CI, upper
East Midlands	49	762	6.4	4.9%	8.4%
London	110	820	13.4	11.3%	15.9%
North West	51	580	8.8	6.8%	11.4%
South West	23	739	3.1	2.1%	4.6%
West Midlands	102	1606	6.4	5.3%	7.7%



REACT 2 – Study 5 Round 1 (interim findings)

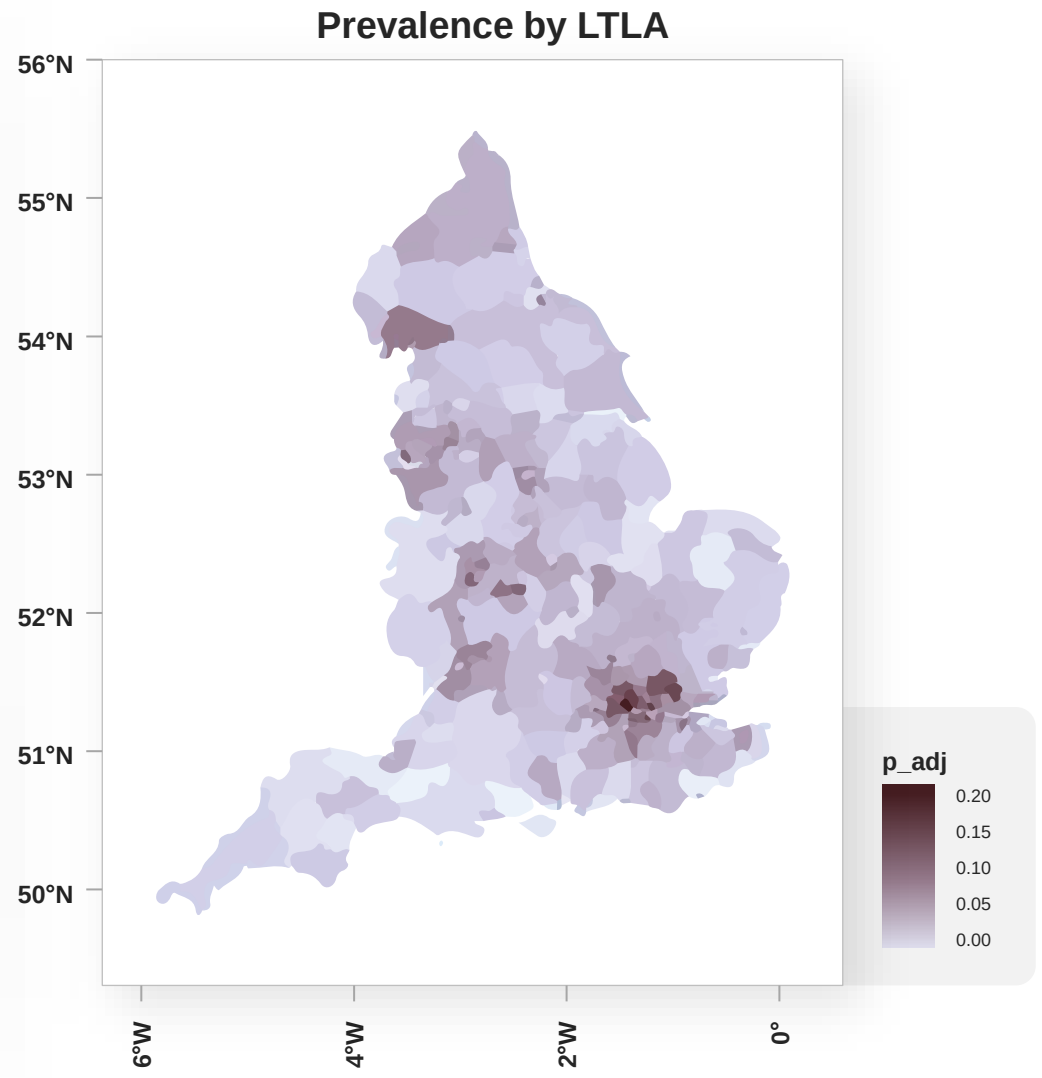
To date, 107,641 (78.58%) attempted the antibody test, of whom 105,655 (77.13%) completed it.

Interim results based on unvalidated data received up to 13 July 2020:

- **Average prevalence** of **4.82%** (95% CI 4.65%, 4.99%).
- Prevalence was **slightly higher in females** (**4.88%**, 95% CI 4.66%, 5.1%) than **males** (**4.74%**, 95% CI 4.5%, 5%).
- Prevalence was **highest in 18-24 year olds** (**6.73%**; 95% CI 6.02%, 7.5%) and **lowest in 75+ year olds** (**2.47%;** 95% CI 1.98%, 3.03%)
- Prevalence in people who **work in care homes** with client-facing roles was **15.99**% (95% CI 13.21%, 19.18%), compared with **5.12%** (95% CI 4.85%, 5.4%) for people who were **not key workers**
- **BME** had the highest prevalence at **15.69%** (95% CI 13.15%, 18.58%), compared to **4.42%** (95% CI 4.26%, 4.59%) for **White** ethnicity.
- Correlation with deprivation and prevalence also observed

REACT 2 – Study 5 Round 1 (interim findings) by LTA

Prevalence was highest in London 11.04% (95% CI 10.32%, 11.78%) and lowest in the South West (2.7%, 95% CI 2.28%, 3.17%)



REACT is a collaboration of interdisciplinary teams

This programme is a collaboration of interdisciplinary teams across Imperial College London

Imperial College Healthcare NHS Trust provide the doctors, nurses, lab technicians, and clinic and lab facilities required for LFT performance testing.

Ipsos MORI are leading a large packing, dispatch and delivery service, where kits and information are updated through learnings from the various studies. Result from the studies will inform policy and practice.

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Ipsos MORI

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Institute of Global Health Innovation

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Covid-19
Commercial Impacts

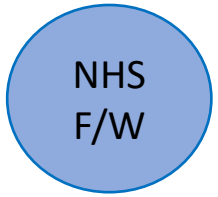
Helen Dent
Chief Operating Officer
BIVDA

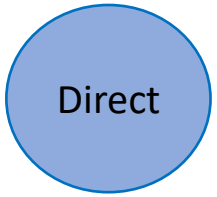
Pre-Covid-19 Procurement Landscape Core Laboratory

Outsourcing of non-business activities

One-Stop Shop for multiple vendors (customer selection via tender)

Models – Core Laboratory Primary Contractor and Vendor Neutral Contractor





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Managed Service Contracts– UK

Issue	UK Contract Requirements
HMRC –Treasury Green Book – Risk Transfer Rules	• Availability risk • Business risk • Demand risk • Design risk • Economic risk • Funding risk • Maintenance risk • Operational risk • Policy risk • Reputational Risk • Residual Value risk • Technology risk • Volume risk
One-Stop Shop for sub-contractors (customer choice via tender)	• Bid submission • Sub-contracts • Billing and Invoicing • KPI performance management • Supplier QA • Management Reporting
Outsourcing of non-business activities	• Administration • Support • Management Reporting

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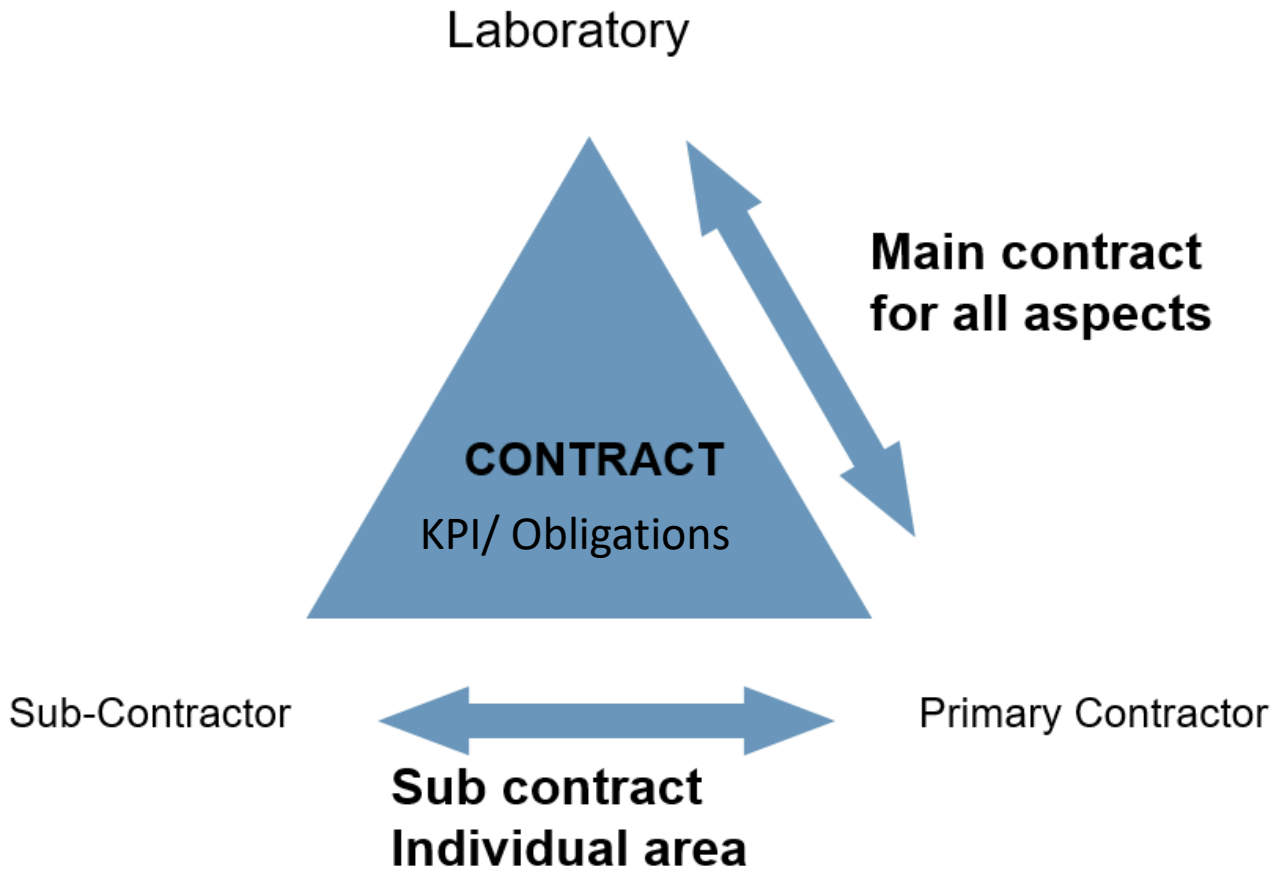
Managed Service Contracts– UK



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Commercial Impacts

- Self-Isolation – impact (s) engineer availability which impacts Key Performance Indicators and the ability of suppliers to meet contract standards.
- Social distancing – no uniform guidance, different at different Trusts.
- Different rules for devolved nations – Eg. Essential worker status/ projects/ childcare – affecting resources in companies.
- NHS laboratories and suppliers unclear about whether they can order Covid-19 related products directly or via Central government. If centrally – no mechanism in place and often direct shipments to compensate.
- No transparency and mixed messaging about procurement routes, contracts and orders.
- Suppliers entered into contracts and committed products and manufacturing but orders were not issued, and testing sites did not utilise these arrangements.
- Limited forecasts and little awareness of global supply chains and demand from other countries.
- NHS Trusts claiming KPI compensation of significant value due to not meeting (BAU) KPI targets due to resources and re-aligned priorities. (only 1 Briefing note – suggesting leniency – need a central instruction to relieve suppliers for this period of time)
- Up to 70% of Core Laboratory tests not done Eg. Cancer, haematology, clinical chemistry affecting many companies financially and for demand planning.
- No preparation for if there is a second wave – what is the process for suppliers, laboratories and core lab testing?

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Understanding Force Majeure

- Introduction – (Disclaimer)
- What does the Contract say?
- Force Majeure – Notice/ Consequences/ Other Clauses
- Frustration

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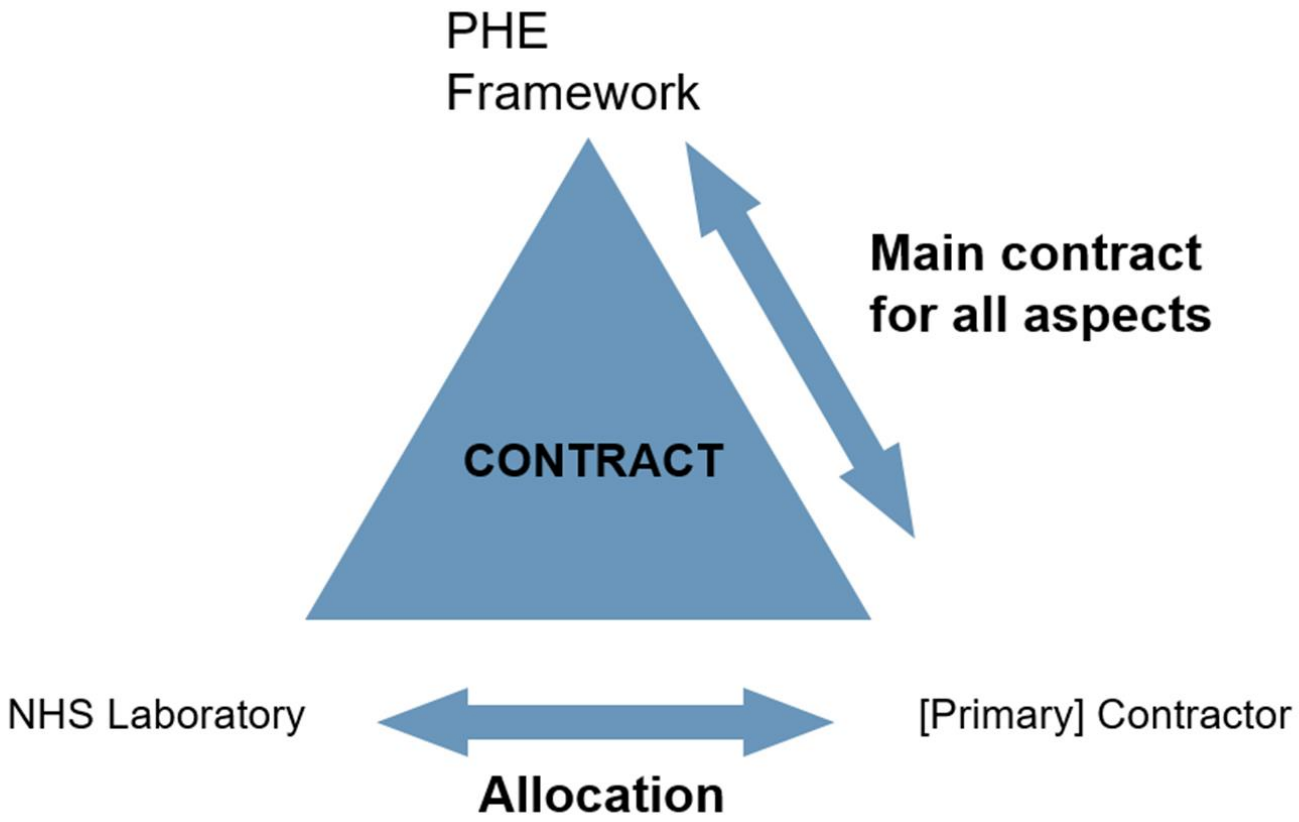
Covid-19 Antibody Procurement



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Commercial Impacts

- Very little procurement was conducted via NHS Frameworks and there was a lack of understanding of the PHE Framework.
- No clear message to suppliers other than those contracted with for the initial contract period.
- The market generally was unaware of the terms of the central procurement (method, contract length, reasoning).
- There is a feeling that suppliers did not have opportunity for tests to be evaluated.
- There is a feeling that tests were not evaluated to the same standards across evaluation sites.
- NHS laboratories were, and are continuing to be told they cannot not buy tests from their suppliers who had available tests.
- Commercial commitments were made and enacted upon in good faith but contracts have not been fulfilled.
- Limited forecasts and little awareness of global supply chains and demand from other countries.
- Commercially available tests were seemingly overshadowed by a requirement to develop new tests.
- Existing capacity was not utilised.
- How is the new PHE framework expected to sit alongside the existing contracts (managed services/ direct).

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Thank you

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Crowdicity Update & Close

Doris-Ann Williams, Chief Executive of BIVDA

https://testingmethods.crowdicity.com