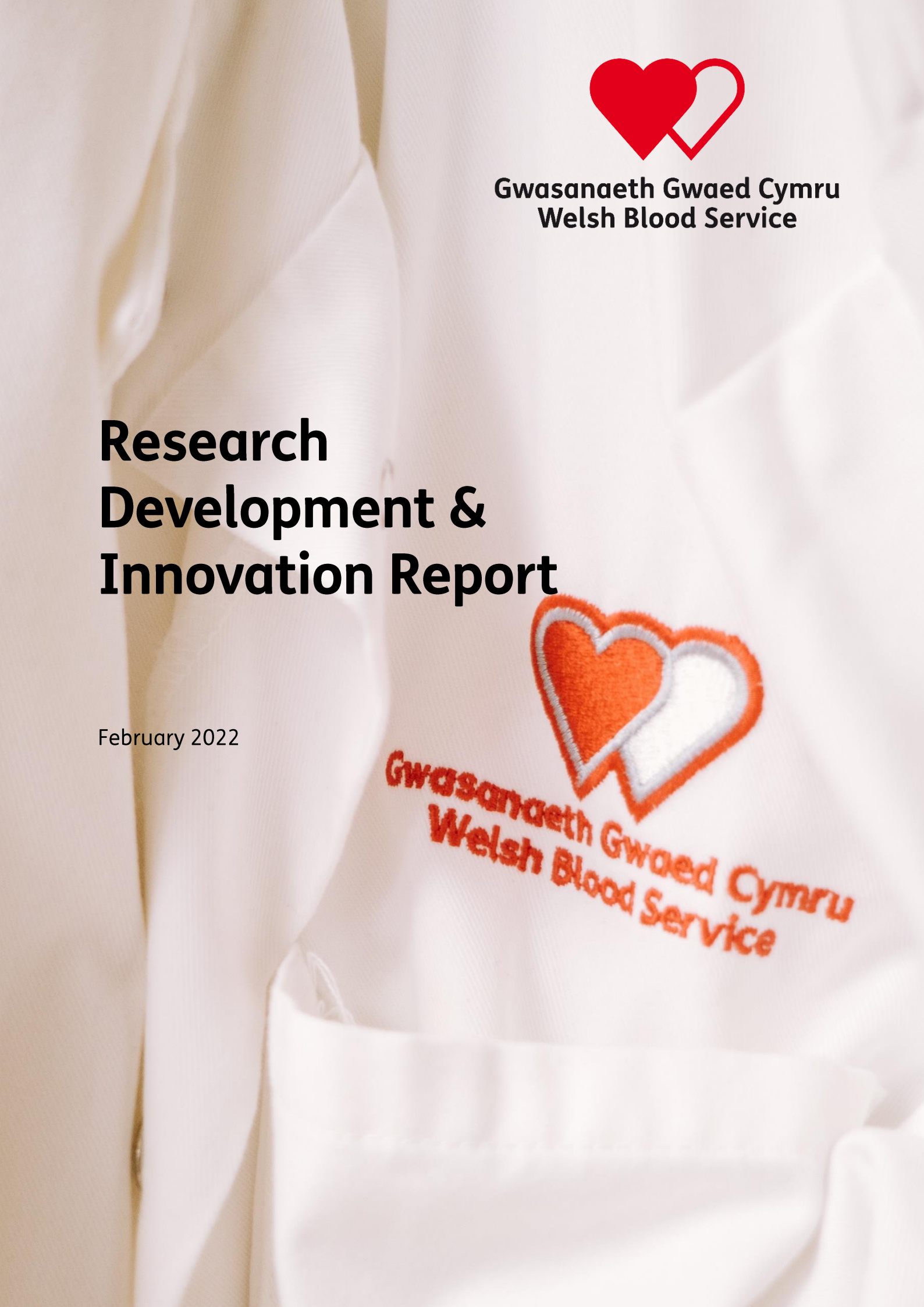
Gwasanaeth Gwaed Cymru
Welsh Blood Service

Research Development & Innovation Report

February 2022



Our Vision

Welsh Blood Service will advance donor care and transfusion and transplantation medicine through the inception and participation in high quality health services research.

Foreword

We began 2022 with a reminder that COVID is still at the forefront of our efforts.

As we entered a new phase of restrictions due to the Omicron variant our serosurveillance efforts with Public Health Wales were reacting to this. In this update, we have summarised our efforts to date and provide some context to the efforts. The samples that were provided to the project now account for three-quarters of the capacity of the Millennium Stadium if we were to substitute seats with samples. We also report how we marked the effort of our colleagues. This project will continue into 2022 and has the potential to open avenues of research.

In other work the Health Research Authority campaigning has challenged us on transparent reporting. We've made great strides over the years – this is the fourth publication of this new engaging format of our research update. Together with this and other measures we will continue to ensure that our donors and community are paramount in our reporting.

Sian James
RD&I Facilitation Lead
Welsh Blood Service

About this document

This document has an up-to-date summary of all planned, ongoing or completed research, development and innovation activity within the Welsh Blood Service.

This version of the document has been specially adapted so the donors, patients and the public can see the Research, Development and Innovation activity they support through the gift of blood, stem cell and organ donation

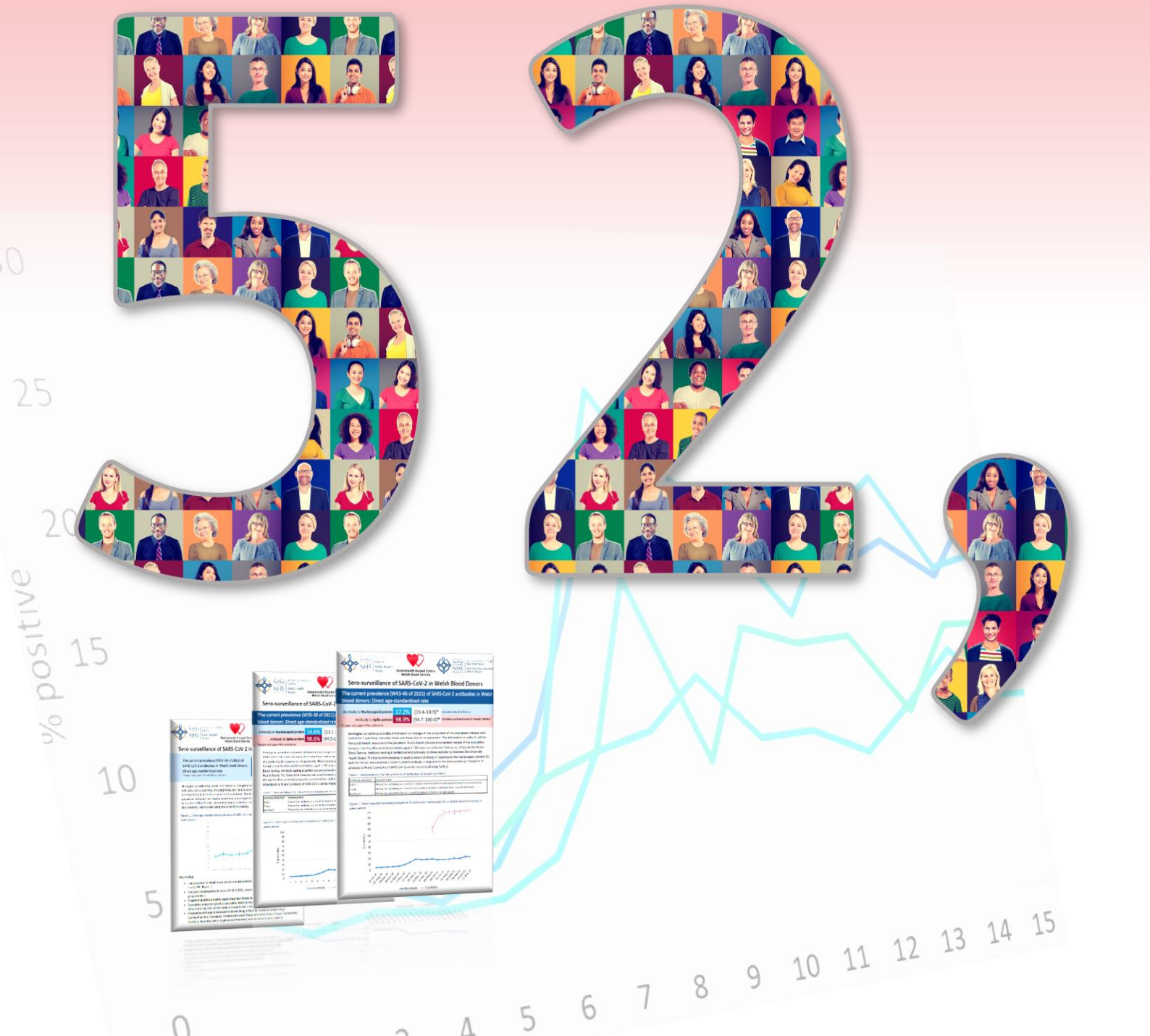
Serosurveillance Update

With the emergence of new variants and the continuation of the coronavirus pandemic, there is renewed attention on our serosurveillance efforts with Public Health Wales.

The COVID-19 serosurveillance has reached its 18-month milestone. The epidemiology focus is now on understanding the impact of mass vaccination, the duration of antibodies presence and immunity, and how this affects population prevalence and the clinical severity of coronavirus.

The project has brought in Cwm Taf Morgannwg UHB as a testing partner. Cwm Taf Morgannwg UHB is also known for excellence in pathology testing.

The epidemiological findings have been presented in public health circles and are intended to be published in academic journals.

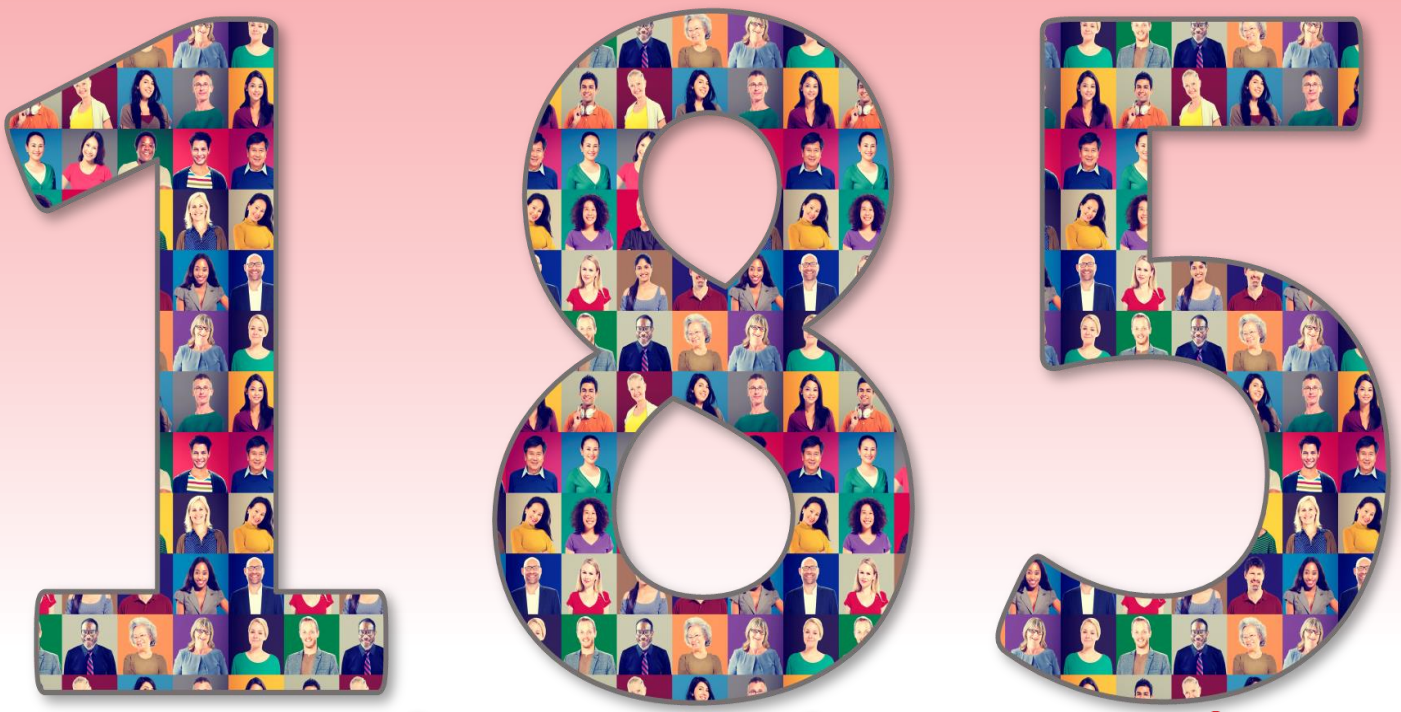


The Welsh Blood Service has focused its findings on the logistical and data linkage achievements made in this project. Sian James presented this aspect at the European Conference on Donor Health and Management, Hamburg in September 2021.

The Welsh Blood Service was the only UK service to present a COVID epidemiology study. There was a lively discussion with the researchers from Sanquin, who presented a similar examination of Dutch blood donors.

Public Health Wales are likely to continue the surveillance into 2022 to assess variants as they emerge, and reports will continue to be circulated to Public Health leads and Welsh Government.

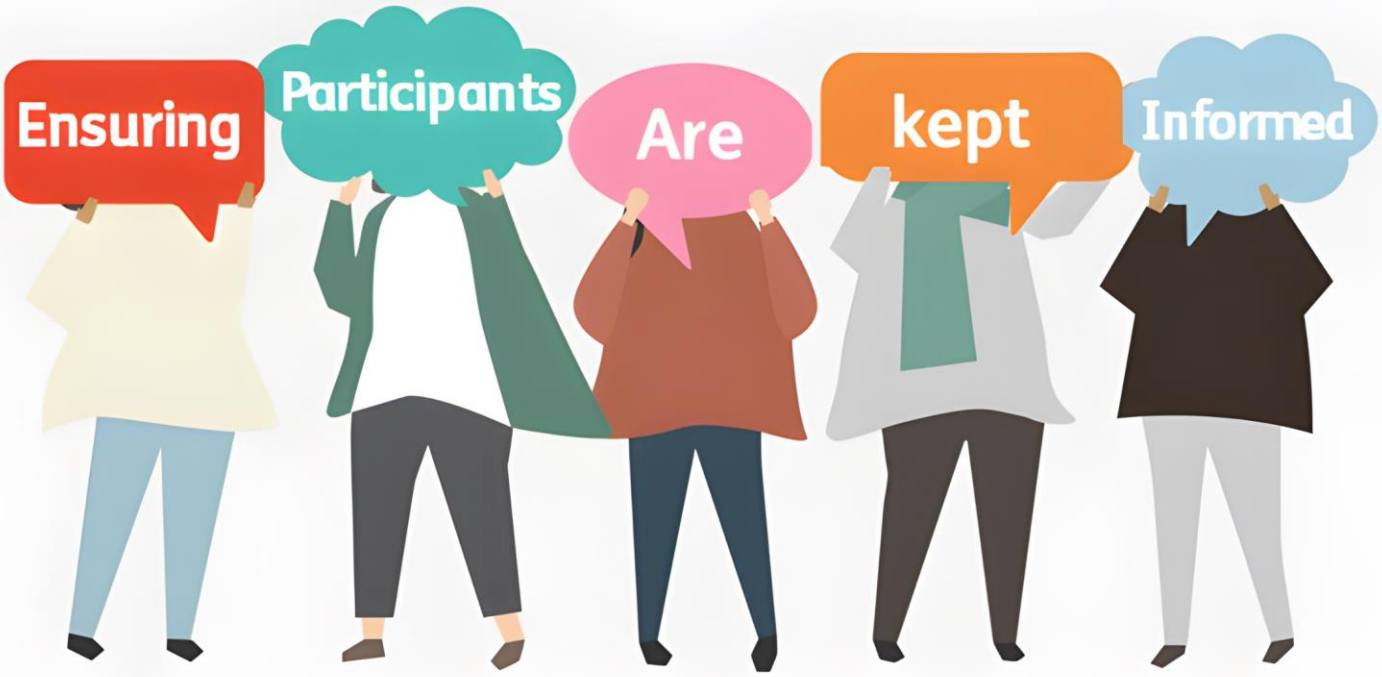
At the end of January 2022, the project had processed 52,185 samples. It is expected that by July 2022, the number of samples processed will exceed the number of seats in Cardiff's Millennium Stadium.



samples and counting

Celebrating one year of COVID surveillance

As we approached the anniversary in June, we took time to thank all our colleagues involved in this effort formally. The thank you package contained a message of gratitude for the effort and small tokens of appreciation.



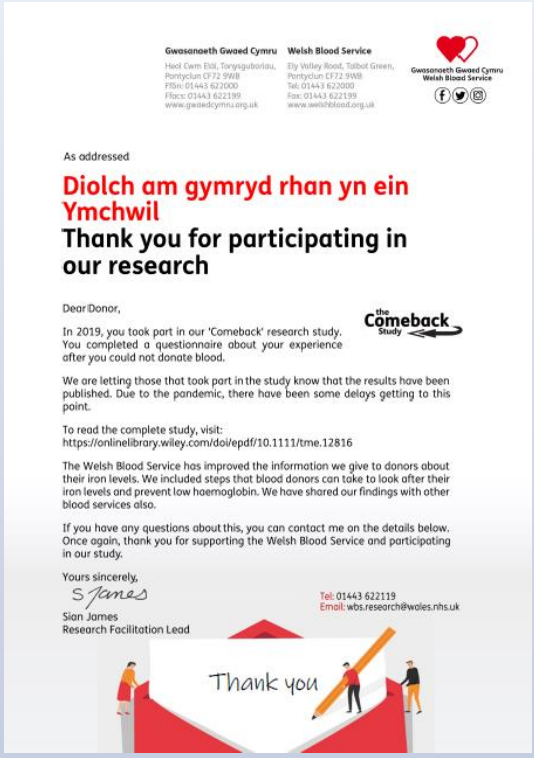
In November 2021, we attended the Health Research Authority's inaugural **Make It Public Conference**. The conference encouraged best practice in research transparency, with discussions surrounding the impact of research on patients and communities. Transparency in research includes the active dissemination of results among participants. It has been found that this positively affects taking part in future studies.

This prompted us to reflect on how we show this transparency with donors and participants.

Recently the findings of the Comeback Study (*WBSRD0067*) were presented at the British Blood Transfusion Society conference. This study had 444 participants who volunteered for this research, informing us of their experiences in primary care follow up.

We will be sending Comeback participants a letter of thanks for their willingness to advance our research, with details on where they can read the findings.

We will now be considering other steps to include patients, donors, and our community in the impact of research.



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As addressed

Diolch am gymryd rhan yn ein Ymchwil
Thank you for participating in our research

Dear Donor,

In 2019, you took part in our 'Comeback' research study. You completed a questionnaire about your experience after you could not donate blood.

the Comeback Study

We are letting those that took part in the study know that the results have been published. Due to the pandemic, there have been some delays getting to this point.

To read the complete study, visit:
https://onlinelibrary.wiley.com/doi/epdf/10.1111/tme.12816

The Welsh Blood Service has improved the information we give to donors about their iron levels. We included steps that blood donors can take to look after their iron levels and prevent low haemoglobin. We have shared our findings with other blood services also.

If you have any questions about this, you can contact me on the details below. Once again, thank you for supporting the Welsh Blood Service and participating in our study.

Yours sincerely,

S James

Sian James
Research Facilitation Lead

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Email: wbs.research@wales.nhs.uk

The **Biomedical Excellence for Safer Transfusion Collaborative**, or ***BEST-C*** is an international research organisation with a vision to lead the field of transfusion medicine and cellular therapies toward the best products and practices for donors and patients.

BEST-C membership spans a broad range of the companies and blood suppliers engaged with blood collection, distribution, and transfusion worldwide. Welsh Blood Service has been a member over 10 years.

BEST-C allows thoughtful consideration to identify important research questions in transfusion and design and executes studies to address these questions. BEST-C allows members to share their research plans in confidence with other members, encouraging expression of interest to participate and contribute to their studies.

Through our participation in BEST-C, the Welsh Blood Service has contributed to many international studies, most recently an investigation of Cryoprecipitate standardisation, which examined the production and quality parameters of blood products for patients that undergo fibrinogen therapy (BEST Study 158). Another contribution was to a study that identified strategies that may result in a reduced risk of transfusion-transmitted infection (BEST 123).

The Welsh Blood Service can continue to build our international research portfolio. Our ultimate ambition for BEST-C is for a Welsh investigator to lead a BEST-C research initiative.

RD&I Project Portfolio

We have **18** open projects

5
in Transplantation

Includes solid organ and stem cell transplantation, histocompatibility, immunogenetics and donor registries

3
in Donor Care & Public Health

Includes donor recruitment and retention, eligibility and care and public health surveillance

9
in Products

Includes blood components, which include immunohematology, testing, component and product manufacturing, quality management, and the evaluation of equipment and materials

1
in Therapies

Includes topics surrounding cellular and other blood therapies

56 Staff involved in research

Staff undertake WBS led research or provide service support of others' research. This also includes those performing research as part of a qualification. We also collaborate with other organisations globally, working with universities and international blood services in shared areas of interest.

26 Publications* including conference presentations and journal articles

WBS publishes in journals and presents at conferences to share our findings and build our reputation within the research community. Producing publications also provides our staff with opportunities to develop their skills and build professional reputations.

**in the last rolling 12 months*

Publications

Impactful publications from the Welsh Blood Service colleagues and our collaborators in the previous three months

Journal Articles

Summarised, verified and accessible: improving clinical information management for potential haematopoietic stem cell transplantation patients

Felicity May *in the journal* BMJ Open Quality

Citation: May F, Pepperall J, Davies E*, et al*. Summarised, verified and accessible: improving clinical information management for potential haematopoietic stem cell transplantation patients. *BMJ Open Quality* 2021;**10:**e001605. DOI: 10.1136/bmjoq-2021-001605

Effect of Convalescent Plasma on Organ Support-Free Days in Critically Ill Patients With COVID-19: A Randomised Clinical Trial

Janet Birchall *in the journal* The Journal of the American Medical Association

Citation: Writing Committee for the REMAP-CAP Investigators. Effect of Convalescent Plasma on Organ Support–Free Days in Critically Ill Patients With COVID-19: A Randomised Clinical Trial. *JAMA.* 2021;326(17):1690–1702. doi:10.1001/jama.2021.18178

Conference Proceedings

Contrôles Internes de Qualité

Colleagues presenting on behalf of collaboration work with Ann Jones and WBS *at the conference* French Society of Blood Transfusion (SFTS)

Valid until May 2022

We thank the blood, platelet and transplant donors who make our research possible.

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