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- 4 Sayed S, Cherniak W, Lawler M, et al. Improving pathology and laboratory medicine in low-income and middle-income countries: roadmap to solutions. *Lancet* 2018; **391**: 1939–52.

Transforming the UK's diagnostics agenda after COVID-19

The COVID-19 pandemic spotlighted the need for transformation of pathology and laboratory medicine (PALM) to better meet public health-care needs. The *Lancet* Commission on Diagnostics¹ articulated recommendations around a fit-for-purpose global infrastructure; these are also relevant for the UK diagnostics strategy. Effective engagement with front-line PALM services and professional organisations is essential for the uptake of these recommendations and the introduction of transformative changes at the necessary pace and scale.

For many years, UK diagnostics has focused on efficiencies gained from networking and service reconfiguration. Benefits from networking have emerged during the COVID-19 pandemic. We expect that contributions made during the pandemic will catalyse a shift in focus and mindset in our future approach to diagnostics; the case is indeed compelling.

During the pandemic, PALM services have faced unpredictable clinical, analytical, and organisational challenges. Successful adaptation was based on learning to act in novel ways and set up new infrastructure to address urgent clinical care needs. This response involved mobilising academic and industry partners to capture and quickly translate innovation into clinical practice. Many services made multifaceted clinical and scientific contributions for patient benefit. For example, capacity testing gaps and urgent clinical care bottlenecks in managing admissions were addressed by dedicated high-

throughput COVID-19 testing laboratories. The ability to successfully redeploy staff from different specialties competent in molecular methods highlights the need for highly skilled and flexible staff. PALM services with sufficient staff capacity contributed to national programmes by setting up specialist services, such as RNA sequencing to support the COVID-19 Genomics UK Consortium,² and supporting the UK National Health Service (NHS) Test and Trace technical validation groups. Rapid translation of novel biomarker concepts and timely implementation of recommended clinical investigations, such as those published by the Royal College of Pathologist³ and *BMJ Best Practice*, became crucial for the effective management of patients with COVID-19, a particular challenge given the paucity of evidence-based markers to monitor progression and severity.

We recognise the commitment of PALM services in the face of a global health-care emergency to contribute through the development of dedicated and accredited biobanks, artificial intelligence-based innovations, and medical technology solutions. However, most of these services have had chronic scientific-expertise depletion, making innovation and adoption a challenging goal. Nevertheless, mature partnerships with academia and industry have been a major driver to NHS-led innovation. This collaboration identifies a major focus on the transformation roadmap and makes a strong case for strengthening such collaborative interactions in the future.

Planning for pandemic preparedness and tackling innovation in precision medicine and integrated care, requires the UK diagnostics landscape to optimise services cooperation and integration, and accelerate collaboration. Aligning with this vision will ensure that appropriate lessons from this pandemic have been learnt.

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- 1 Fleming KA, Horton S, Wilson ML, et al. The *Lancet* Commission on diagnostics: transforming access to diagnostics. *Lancet* 2021; **398**: 1997–2050.
- 2 COVID-19 Genomics UK. An integrated national scale SARS-CoV-2 genomic surveillance network. *Lancet Microbe* 2020; **1**: e99–100.
- 3 The Royal College of Pathologists. Guidance on the use and interpretation of clinical biochemistry tests in patients with COVID-19 infection. London: The Royal College of Pathologists, 2020./

For *BMJ Best Practice COVID-19 investigations* see <https://bestpractice.bmj.com/topics/en-gb/3000201/investigations>

Department of Error

Lloyd DFA, Pushparajah K, Simpson JM, et al. Three-dimensional visualisation of the fetal heart using prenatal MRI with motion-corrected slice-volume registration: a prospective, single-centre cohort study. *Lancet* 2019; **393**: 1619–27—In this Article, Alexander Schulz's affiliations should have included Charité—Universitätsmedizin Berlin, corporate member of Freie Universität Berlin and Humboldt-Universität zu Berlin, Berlin, Germany. This correction has been made to the online version as of April 21, 2022.

Dadi AF, Mersha TB. WHO's surveillance system for attacks on health care is failing Ethiopia. *Lancet* 2022; **399**: 1225–26—In this Correspondence, the first sentence of the third paragraph should read "A war has been going on in northern Ethiopia since the Tigray People Liberation Front attacked the Ethiopian federal army bases in the Tigray region on Nov 4, 2020." This correction has been made to the online version as of April 21, 2022.

Sabatine MS, Bergmark BA, Murphy SA, et al. Percutaneous coronary intervention with drug-eluting stents versus coronary artery bypass grafting in left main coronary artery disease: an individual patient data meta-analysis. *Lancet* 2021; **398**: 2247–57—The appendix of this Article has been corrected as of April 21, 2022.