Memorandum of Understanding (MOU)
Between
NHS Digital (NHSD)
And
Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH)
For
Partnership in the establishment and development of the DRIVE Program

Introduction
This Memorandum of Understanding (MOU) sets out the terms and understanding between GOSH and NHSD (the Parties) for joint working within the Trust’s new Digital Research, Informatics and Virtual Environments (DRIVE) programme.

Purpose of the MOU
This MOU describes the rationale for this partnership, the intended areas of initial collaboration, the initial funding commitment and the high-level governance arrangements for this partnership. We expect the initial areas of collaboration to form a template for ongoing broader partnership over the next 5 years.
Specific programs of work established under this MOU will be described in separate Collaboration Agreements which will detail scope, key deliverables and associated funding and resource commitments for each program individually.

Background — GOSH
GOSH has undertaken a comprehensive evaluation and mapping of current and future needs of the hospital against current and likely future developments in Digital Health. Whilst specific prediction of future requirements and technologies are impossible, the impact of broad directions such as artificial intelligence, sensors, blockchain applications etc. can be estimated. In addition, several recent Governmental strategic documents have been published (Paperless 2020, Accelerated Access Report, Life Sciences Industry Strategy and Wachter Report) which emphasise the need for the NHS to develop skills and capacity in Clinical Informatics and to capitalise on digital and technology research and innovation.

The GOSH Digital Strategy therefore aims to address these issues and has identified a need for focused Digital Health Research and Innovation capability which is currently unmet by any hospital. GOSH therefore aims to become the leading digitally advanced hospital in England, improving patient care and outcomes and acting as a research and innovation exemplar for the wider NHS and internationally.

The vision for DRIVE is to create an early phase technology and informatics unit for the front-line of the NHS, aiming for rapid translation into clinical practice rather than policy or public health developments such as Farr/HDRUK etc. The unit itself will be a space for NHS clinicians, NHSD technologists, UCL computer science MSc/PhD students and Industry partners to work in collaboration. The intention is
that solutions and capability created will be independent of paediatric/adult practice, Electronic Health Record (EHR) type and can be scalable across the wider clinical NHS and AHSNs.

DRIVE’s key focus will be in exploring, piloting and fostering the use of cross-sector commodity technologies and products to quickly and economically address needs within health and care.

Background – NHS Digital
NHS Digital is the national information and technology partner to the health and care system. It is responsible for the design, build, deployment and operation of key national systems, and the sponsorship, support and enablement of the design, build, deployment and operation of regional and local systems.

It seeks to maximise the utilisation of the external market, both specialist providers within the health and care sector and cross-sector providers of commodity technology or technical solutions, which might be readily adapted from other sectors to the health and care sector. As such, its interests in more rigorously exploring the 3rd party market of commodity products and services is very much aligned with those of the DRIVE Program.

We see the potential for deployment of cross-sector commodity technology across many different areas of our work. Our first three areas of focus will be:

- **The use of commodity integrated-communication technologies to drive collaboration across the system, including video and secure messaging channels as well as traditional email, and integration of these functions with NLP technologies to enable voice-to-text automation and automated coding of terminology from voice streams**

- **Exploring how best to gain from the explosion in ML, NLP and other AI technologies to enable better leverage of the hugely-rich data within the health and care system to derive new insights about effective and efficient approaches to clinical service provision and to management of the NHS system**

- **Exploring the use of commodity cloud data management and hosting services from hyper-cloud providers to deliver national platforms to facilitate alignment to NHS data standards, particularly FHIR messaging and SNOMED CT to ICD-11 mapping**

We expect multiple other areas of mutual interest to arise as the DRIVE unit becomes an increasing portal for commodity technology providers to demonstrate the applicability of their systems for use across health and care.

The DRIVE unit will be a ‘hot-house’ for this exploration activity, a rich environment for NHS Digital technologists to work alongside industry and academic colleagues in this work, and the launchpad for concepts which can be ‘scaled-up’ within our delivery programs or within regional and local technology programs across the system.
Governance
NHSD CEO will sit on the Digital Strategy Steering Group which will shape the direction of the DRIVE Program and the evolving nature of the partnership between DRIVE and NHS Digital.

NHSD Chief Commercial Officer will sit on the DRIVE Board which will oversee the operational efficiency and effectiveness of the program.

Project Initiation
Projects will be agreed jointly between NHS Digital Executive and the DRIVE Executive Team and approved by the DRIVE Board. These Projects will be described in separate Collaboration Agreements which will outline information governance, intellectual property ownership, commercial arrangements and rights of use.

Funding
An initial contribution of £1m capital will be made by NHSD toward fit out, equipment and infrastructure costs for the set-up of the DRIVE unit, and the initial programs of collaboration. Subsequently, individual projects will be funded separately at the point of initiation.

Reporting
Progress on the relationship will be reported to the GOSH DRIVE Board as a standing agenda at each meeting and by the NHSD CEO and Chief Commercial Officer to the NHSD Executive Board quarterly.

Duration
This MOU is at-will and may be modified by mutual consent of authorised officials from GOSH/NHSD. This MOU shall become effective upon signature by the authorised officials and will remain in effect until modified or terminated by any one of the partners by mutual consent.

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