SLAUGHTER AND MAY

RESPONSE TO ISSUES STATEMENT
DATED 17 MAY 2023

Anticipated acquisition by UnitedHealth Group Incorporated of EMIS Group Plc

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AMZL/LJEN/JSJE/SXZJ/AXYN/JFXW/JXYR
31 May 2023

Response to Issues Statement in anticipated acquisition by UnitedHealth Group Incorporated of EMIS Group PLC dated 17 May 2023 ("Response")

1. Executive summary

Introduction

1.1 This Response contains the observations of UnitedHealth Group Incorporated ("**UH**")[1] and EMIS Group PLC ("**EMIS**")[2] on the CMA's Issues Statement of 17 May 2023 (the "**Issues Statement**") concerning the acquisition by UH *via* Bidco[3] of EMIS (the "**Transaction**").

1.2 It sets out the key reasons why the Transaction cannot be expected to result in a substantial lessening of competition (**"SLC**") within any market or markets in the UK as a result of the combination of UH and EMIS (the "**Combined Entity**").[4] In doing so, this Response addresses the issues raised in the Issues Statement and supplements the submissions made by the Parties in Phase 1 and Phase 2 thus far, as well as the presentations made during the product demonstrations on 4 and 9 May 2023, and the site visit on 24 May 2023.

1.3 In particular, the Parties do not consider that the Transaction will lead to an SLC in respect of either the supply of MO software in the UK or the supply of PHM services in the UK, in light of:

(i) the Parties' stated **intentions and rationale** for entering into the Transaction (as set out in Section 2 below);

(ii) the **role of the NHS** in setting and constantly adapting the terms of engagement with primary care technology suppliers, as the only material customer, an active regulator and the data controller (as set out in Section 3 below);

(iii) a **lack of ability or incentive** on the part of the Combined Entity to pursue a partial foreclosure strategy in relation to the supply of MO software (as set out in Section 4 below); and

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[1] The relevant UH business for the purposes of the Transaction in the UK is Optum UK. Optum UK's relevant activities are: (i) Medicines optimisation ("**MO**") software aimed at outcome and cost optimisation of prescription medicines. Optum UK's primary MO offering is called ScriptSwitch Prescribing ("**ScriptSwitch**"), which helps GPs make safe and cost-effective prescribing decisions; and (ii) a limited number of analytics software tools and wraparound advisory services focussed on population health management ("**PHM**").

[2] The relevant products offered by EMIS are: (i) EMIS Web, a primary care electronic patient record ("**EPR**") system which provides primary care clinicians (i.e. GPs) with a tool to record, consult and manage patient health information; and (ii) EXA, a data analytics system that provides customers including various NHS bodies, GPs, and healthcare software providers with a tool to organise EPR data.

[3] Bordeaux UK Holdings II Limited, or Bidco, is an affiliate of Optum Health Solutions (UK) Limited ("**Optum UK**") and a subsidiary of UH, the US-headquartered ultimate parent company of Bidco and Optum UK. EMIS, Bidco, Optum UK and UH are collectively referred to as the "**Parties**", and each, a "**Party**".

[4] Contrary to the position in the CMA's Phase 1 decision dated 17 March 2023 ("**Phase 1 Decision**"), as set out at paragraph 22 of the Issues Statement.

(iv) a **lack of ability or incentive** on the part of the Combined Entity to pursue a partial foreclosure strategy in relation to the supply of PHM services (as set out in Section 5 below).

The Parties' intentions and the rationale for the Transaction

1.4 As set out in more detail in Section 2 below, there are three core elements to the deal rationale:

(i) an investment in a stable and profitable UK healthcare company that aligns with UH's corporate mission and long-term growth strategy;

(ii) building UH's UK reputation through the EMIS reputation; and

(iii) [✂]:

1.5 The deal rationale for the Transaction is not based on any perceived ability or incentive to foreclose MO or PHM rivals. Optum UK's [✂] products in MO and PHM are largely irrelevant to UH's decision to acquire EMIS, and to the wider rationale.

1.6 The Transaction rationale and deal valuation are instead based on the fact that the acquisition of EMIS is a valuable enough proposition to make the deal worth doing in its own right, regardless of the products and services offered by Optum UK. UH will invest in EMIS in order to provide new areas of strategic support for the NHS and to improve the quality and customer service offered.

Any partial foreclosure could not result in an SLC

The NHS sets the terms of trade in the primary care technology sector as the only material customer, an active regulator and the data controller

1.7 The Issues Statement notes that in the Phase 1 Decision the CMA found that total foreclosure of any competitors as a result of combining the Parties' complementary activities is not realistic due to the NHS rules and standards to which EMIS is subject.[5]

1.8 The CMA has instead focussed on partial foreclosure. The partial foreclosure theory of harm however fails to take into account the broad range, and practical impact, of the combination of a variety of constraints imposed by the NHS on EMIS (and which will continue to be imposed on the Combined Entity):

(i) The NHS is not only the Parties' only material customer in the UK (and will continue to be the Combined Entity's only material customer in the UK), but it is also the creator, operator and enforcer of a wide range of relevant frameworks and standards as well as the data controller.

[5] Paragraph 27 of the Issues Statement.

(ii) The NHS is an umbrella organisation that has multiple types of feedback mechanisms and ways of detecting and monitoring complaints such that the NHS ultimately operates as one entity. [6]

(iii) In essence, the NHS rigorously and flexibly governs market behaviour and sets the rules of the environment in which the Parties (and the Combined Entity, post-Transaction) operate (as discussed in detail in Section 3 below).

The Combined Entity would have neither the ability nor incentive to pursue a partial foreclosure strategy in respect of MO software

1.9 The Combined Entity will not be able to partially foreclose MO rivals by pursuing any one or more of the foreclosure mechanisms set out in the Issues Statement, for the particular reasons set out in Section 4 below and taking into account the constraints which the NHS imposes on any activities which interface with EMIS Web.

1.10 Importantly, in the event of a noticeable degradation of an MO rival's product (or of any future MO product developments, were such degradation possible), each of (or at least one of) the MO team within an Integrated Care Boards ("**ICB**") / Integrated Care Systems ("**ICS**"), GPs and the impacted MO rival would promptly notice the degradation, and escalate the issue within the NHS.

1.11 MO products are a small part of a GP's prescribing workflow but importantly enable the NHS to lower its medicines expenditure by suggesting medicine switches to GPs and are therefore tools that deliver cost savings to the NHS on a continuous basis. It is therefore clear that the NHS would be incentivised to act in response to any complaints of partial foreclosure to prevent such foreclosure from occurring.

The Combined Entity would have neither the ability nor incentive to pursue a partial foreclosure strategy in respect of PHM

1.12 Importantly, PHM is not nascent and is not an economic market, but rather is a "*way of working*" that has existed for decades and will likely continue to grow and develop incrementally. PHM is currently a "buzzword" term rather than an economic activity. In addition, Optum UK has [✂] discrete PHM activities in the UK, with [✂].

1.13 The Combined Entity will not be able to partially foreclose PHM rivals by pursuing any one or more of the foreclosure mechanisms set out in the Issues Statement, because (i) EMIS is not the gatekeeper to primary care data (primary care data is owned by the NHS as the data controller and EMIS cannot refuse access or dictate the purpose for which that data is used); (ii) there are NHS mandated routes of access to primary care data; (iii) EMIS cannot target any partial foreclosure strategy at PHM rivals (EMIS does not usually know who is accessing data for PHM purposes – Optum UK, for example, has no direct relationship with EMIS is respect of its PHM offering); (iv) primary care data is in any event not necessary for a PHM provider to compete in the UK; (v) additional services provided by EXA Explorer are not necessary to

[6] For example, in the context of MO software (and as described further in Section 4 below), although MO products are procured by ICBs and ICSs they are ultimately used by GPs and by MO teams (who sit within each ICB / ICS).

provide PHM products or services in the UK (and were this to change, such analytics can also be provided by a number of alternative suppliers), [7] and (vi) access to primary care data is regulated, monitored and enforced by the NHS.[8]

1.14 In the future, in addition to the above (i) Optum UK considers that the Federated Data Platform ("**FDP**") will provide a core and additional route to access primary care data and will provide ICSs with a set of core capabilities and nationally developed solutions supporting key NHS priorities (such as care coordination), and (ii) any future PHM interfaces would need to meet the NHS's requirements of openness and interoperability. In any event, the PHM theory of harm is particularly speculative given the CMA is concerned with EMIS's ability to control access to data through custom interfaces or EXA, yet EMIS is not aware of PHM rivals that use a custom interface or EXA solely to supply PHM services.

No incentive to partially foreclose

1.15 Any potential *de minimis* gains from the alleged partial foreclosure strategies would be speculative, short lived and immaterial relative to the known, permanent and material losses the Combined Entity would incur if the NHS decided to act against EMIS. Any attempted foreclosure would be putting at risk:

(i) EMIS's business, generating revenues of £164.8 million in the UK in 2021.

(ii) Optum UK's business, generating revenues of c. £[✂] in the UK in 2022.

(iii) UH's US revenues derived from customers. In the US, Optum counts [✂] health insurance companies as customers, many of which are [✂]. Those customers, who account for c. $[✂] of revenue, trust that Optum would not disadvantage them [✂]. Any evidence, or even accusation, of conduct of foreclosing competitors of one UH subsidiary for the benefit of another UH subsidiary, even if this were to take place in a small market in the UK, would be disastrous for these relationships.

(iv) UH's £1.24 billion investment in EMIS.

(v) UH's ability to use its UK success to [✂] to other [✂].

1.16 In material and stark contrast, the potential gain in MO is no more than £[5-10] million[9] and the potential gain in PHM is highly uncertain (if any) given the CMA's theory of harm relates to: (i) foreclosure of services that will be reliant on custom interfaces or on EXA services; and (ii) being able to maintain such foreclosure for a sufficient duration despite the constraints which the NHS imposes on EMIS (and will continue to impose on the Combined Entity).

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[7] EXA Explorer is a self-service tool which is used to connect users to the primary care data held within EXA (which is a copy of the data held on EMIS Web). It was designed for data engineers and business intelligence (BI) analysts to use for the purposes of exploring, querying and analysing the primary care data held by EMIS.

[8] For further detail, see section 5 below.

[9] This is an estimate of FDB's sales from GP clinics using EMIS, estimated as the MO market size (£[10-20] million) multiplied by FDB's share in MO ([60-70]%) multiplied by EMIS's share in EPR ([50-60]%).

1.17 Even a small probability of the large losses outlined above materialising would outweigh the small and/or highly uncertain potential gains, resulting in no incentive to partially foreclose.

2. The strategic rationale for the Transaction is clear and strongly pro-competitive

2.1 The deal rationale for the Transaction is set out clearly and succinctly in UH's internal documents (and supports the points raised above):

> "[✂]"[10]

2.2 In summary, there are three core elements to the deal rationale: (i) investing in a stable and profitable UK healthcare company that aligns with UH's corporate mission and long-term growth strategy; (ii) building UH's UK reputation in a single-payer healthcare system through immediate recognition; and (iii) [✂]:

(i) Investment (a stable and profitable UK healthcare company). UH saw EMIS as an attractive investment. The Transaction represents a sensible investment in a company with a history of a productive relationship with the NHS, strong financials and a stable and profitable business model. EMIS is a financially successful company with sizeable 2021 turnover of c. £168 million ([✂] times Optum UK's), robust past profits, and steady predicted growth. Post-Transaction, UH will invest in EMIS in order to provide new areas of strategic support for the NHS and to improve the quality and customer service offered. UH and Optum UK can offer expertise in many areas; such that the Transaction is not only about investment but also [✂].

(ii) Reputation (immediate brand name recognition). UH wants to build a meaningful relationship with the NHS [✂] having operated via Optum UK for around 20 years. [✂] EMIS has strong recognition within the market and the NHS and EMIS has "*strong relationships with UK health care organisations*".[11] EMIS is a company that is built on interoperability, with an intimate understanding of the central importance of furthering the NHS's interoperability goals. Consequently, UH, as a company that is also built on interoperability, plans to [✂].[12] UH saw EMIS as an investment that would give UH the UK presence [✂].

(iii) [✂]. The NHS is the paradigm of a single-payer system, with a significant budget and a global reputation. [✂] in the UK single-payer system would [✂].

This strategy is evident from UH's internal documents, for example: [✂].[13]

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[10] [✂], UH Board Document.

[11] [✂], UH Board Document.

[12] [✂], UH Board document.

[13] [✂], UH Board Document [✂].

The UK was prioritised as [✂] to this [✂] in part because UH already has [✂] presence in that market through Optum UK.[14] [✂].

UH was therefore focussed on identifying an acquisition target that would allow UH to immediately partner with the NHS at scale and build a [✂] relationship with the NHS.

2.3 The deal rationale for the Transaction is not based on any perceived ability or incentive to foreclose MO or PHM rivals. Optum UK's [✂] products in MO and PHM are largely irrelevant to UH's decision to acquire EMIS, and to the wider rationale. The Transaction rationale and deal valuation are instead based on the fact that the acquisition of EMIS is a valuable enough proposition to make the deal worth doing in its own right, regardless of the products and services offered by Optum UK.

2.4 Any attempted foreclosure would risk damaging EMIS's brand in the UK, which would hamper UH's goal of gaining a [✂] and using the Transaction as [✂] to [✂]. Attempted foreclosure would risk destroying UH's investment in EMIS and the entire value of the deal. Introducing such a risk – no matter how small – for some marginal gains in MO and PHM makes no rational business sense.

2.5 UH's mission is to help make health (and care) systems work better for everyone, and the Parties are committed to continuing this mission in the UK and globally by bringing high-quality, long-term capital to the NHS and the broader UK economy. UH acquires dozens of companies each year and has no history of engaging in any attempted foreclosure strategy. This would be counter to UH's core strategy of working to improve interoperability and creating further opportunities for new products, services, and partnerships with third parties.

3. The NHS sets the terms of trade in the primary care tech sector as the only material customer, an active regulator and the data controller

The role of the NHS

3.1 The role of the NHS is of crucial importance in the primary care tech sector in the UK.

3.2 The NHS is not only the Parties' only material customer in the UK (and would be the Combined Entity's only material customer in the UK), but it is also the creator, operator and enforcer of a wide range of relevant frameworks and standards. In essence, the NHS governs market behaviour and sets the rules of the environment in which the Parties (and the Combined Entity, post-Transaction would) operate.

3.3 Through a wide range of mechanisms, the NHS places equal access, fair pricing, unconstrained customer choice, interoperability and data sharing with respect to primary care EPR systems at the heart of the healthcare tech sector in the UK. It takes prompt, robust, and proportionate action where it considers that its suppliers fall short of those standards.

3.4 The NHS also updates (and will continue to update) its requirements as needed on an ongoing basis, and as technology and supplier behaviour develops and its demands change over time.

[14] Although Optum UK has been active in the UK market for c. 20 years, [✂].

The NHS may at any time change the terms of trade for purchasing EPR systems, including in connection with the price and terms of access for third parties, sponsoring new market entry where it considers that to be of benefit to healthcare providers.

3.5 As a result, the commercial conduct of the Parties is fundamentally shaped by, and must be responsive to, the NHS's procurement preferences, the long- and short-term goals and policies of the NHS, and the regulatory frameworks and standards which the NHS sets and continuously adapts.

3.6 To do business with the NHS on a day-to-day basis, the Parties therefore need to take into account multiple constraining factors that are not comparable to constraining factors in other markets, including by way of example: NHS satisfaction with the quality and standard of service provided; clinical safety obligations; data security obligations; and NHS standards relating to interoperability. From the Parties' perspective (as would be the case for the Combined Entity), the NHS has a wide range of tools available to achieve its preferred outcomes and makes use of those tools in a broad and purposive way.

3.7 Set out below are further details relating to: the multiple levels of engagement that the Parties have with NHS entities at all levels of the healthcare sector; the important role that the NHS plays as the Parties' only material customer; the way in which the NHS regulates compliance with its frameworks and standards; and the NHS's position as the data controller in relation to patient data.

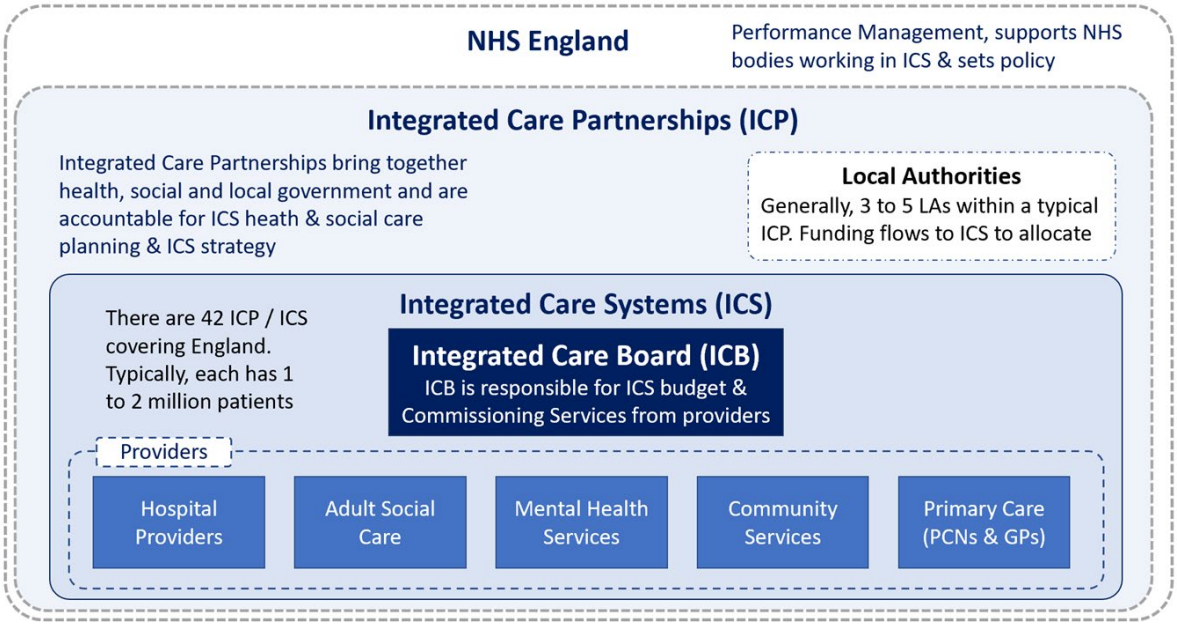
3.8 The aggregation of, and interplay between, all of the different ways in which the NHS is involved in the primary care sector produces a strong constraint on the Parties' commercial conduct today, which would not change following the Transaction. It would be clear to the Combined Entity, as it is clear to the Parties today, that there would be no ability or incentive to pursue the types of foreclosure strategies outlined by the CMA in Phase 1 (and referenced in the Issues Statement) with regard to MO or PHM, knowing that any such strategy could only ever be short-lived, unsuccessful, commercially irrational, and counterproductive.

Key stakeholders in the NHS

3.9 The NHS is a multi-layered and highly integrated organisation, and the Parties have relationships with the NHS at a range of different levels.[15]

[15] See Figure 3.1 above.

Figure 3.1 – NHS England Structure[16]



3.10 As set out in more detail below, these relationships involve frequent points of contact with all levels, and the various NHS entities have a wide range and significant number of formal and informal channels of communication, with one another (for example, from a GP perspective, through (i) GP "representative committees" at ICB level, (ii) consultations on procurements at ICB level, and (iii) monthly meetings of the Joint GP IT Committee (comprised of members of the BMA and RCGP) and NHS England, such that any potential issues with suppliers are addressed in a prompt and robust way.

3.11 In England,[17] NHS England (which sits at the top of Figure 3.1 above) is the national organisation which creates NHS policy and strategy.[18] NHS England reports into the Department of Health and Social Care, which is responsible for NHS matters under the direction of the Secretary of State. Part of NHS England's remit, which is most relevant to this matter, is setting NHS frameworks for procurements, carrying out required regulatory interventions, providing oversight to information processing and promoting interoperability in IT systems.

3.12 Within NHS England, the Parties have strategic relationships from executive board level down to operational relationships with specific teams. In respect of EMIS, these interactions are further exemplified below (see paragraph 3.41).

3.13 The Heath and Care Act 2022 established 42 ICSs. ICSs are groups of health and care organisations in a particular local area (including, amongst others, hospital providers, adult social care organisations, mental health services, community services and GP practices). The

[16] The structure of the NHS in Wales and Scotland is similar to the structure of the NHS in England. ICBs are replaced by Health Boards in Wales and by Scottish Health Boards in Scotland.

[17] The position differs in each of Wales, Scotland and Northern Ireland.

[18] NHS England recently merged with NHS Digital and assumed responsibility for all of NHS Digital's activities.

aim of the ICS is to encourage these bodies to work together to agree a strategic, integrated approach to healthcare in the relevant area.

3.14 As set out in the diagram at Figure 3.1 ICBs form part of the ICSs. ICBs were introduced to replace NHS Clinical Commissioning Groups. The ICB has responsibility for planning NHS services to meet healthcare needs in the area covered by the ICS. This includes procurement of IT systems for the area.[19] ICBs need to secure value for money from all their allocated resources from NHS England and are responsible for day-to-day frontline care delivery.

3.15 The users of EPR systems and MO products are GP practices providing primary care services. In the context of primary care EPR products, although ICBs are the contractual counterparty for procurement of EPRs, GPs are the final decision makers as to which EPR system to use.

The NHS as the customer

3.16 The NHS is the only material customer of EMIS's primary care EPR and Optum UK's MO and PHM offerings. Commercially, Optum UK and EMIS (in respect of its most important product, EMIS Web) are entirely dependent on the NHS for making any sales and revenue.

Setting the terms of trade

3.17 As the only customer of EMIS Web and other primary care EPR systems, the NHS may at any time change the terms of trade for the procurement of these systems, including in connection with price and terms of access for third parties.[20]

3.18 The NHS's position as sole customer of these products permits it to introduce new buying frameworks which facilitate its preferences and ensure commercial advantage for itself and other suppliers to it. For example, the NHS set up the GP IT Futures Framework ("**ITF**")[21] and the corresponding Commercial Standard and Interoperability Standard three years ago.

3.19 ITF was set up, in part, to ensure access to NHS data stored in, and interoperability with, EPR systems for third-party suppliers to the NHS on favourable terms (and, by extension, to prevent EPR suppliers from engaging in the kind of behaviour envisaged by the theories of harm set out by the CMA in Phase 1 and referenced in the Issues Statement). In the context of the NHS's role as the only material customer, an active regulator and the data controller, ITF has to date

[19] NHS England has direct relationships with each ICB. There is daily discourse between NHS England and ICBs about a range of operational, performance, financial, safety, quality and strategic issues. NHS England also has direct relationships with NHS trusts and NHS foundation trusts (for example, acute hospitals, mental health organisations and community services), which form part of ICS's. The relationship between NHS England, ICBs and trusts/foundation trusts is a richly interdependent network, within which there are hard accountability lines, contractual arrangements and collaboration requirements.

[20] By way of example, through ITF the NHS capped the price for EPR systems at £1.26 per patient, per annum. This amount cannot be varied by EMIS.

[21] The NHS has also recently introduced a change in the technical requirements needed to sell under the Catalogue by launching the Tech Innovation Framework ("**TIF**") in June 2022. TIF runs parallel to ITF. The contractual terms of ITF and TIF are very similar, and the Catalogue is now shared across both ITF and TIF. Furthermore, alongside TIF, the NHS is taking steps to replace ITF (which will expire with the new framework – the Digital Primary Care Framework).

been successful in preventing any such behaviour, and this would not change as a result of the Transaction.

3.20 In addition to the Interoperability and Commercial Standards, the NHS also implemented the IM1 Standard alongside ITF.[22] This mandates minimum standards for the provision of a range of interfaces with EPR systems, which suppliers (including EMIS) must make available to other third-party suppliers to the NHS to enable seamless communication and exchange of NHS data between various systems. Such interfaces must be provided by EMIS to third-party suppliers to the NHS on the NHS's particular terms and are paid for by the NHS (not the relevant third-party supplier).

Shaping market structure

3.21 The NHS's sponsorship of new entrants into the UK primary care EPR market is further evidence of its role as a sophisticated customer. Specifically, TIF was introduced by the NHS to encourage a shift in the structure of the market for EPR systems to its benefit. This was done in particular by facilitating entry by new providers of IT systems in primary care and requiring the adoption of more modern and interoperable cloud and web-based technologies by suppliers to the NHS.

3.22 In November 2022, the NHS named Eva Health Technologies, The Flame Lily Healthcare (CheckUp Health), MedicalDirector (Telstra's EPR solution, which the NHS has sponsored to bring to the UK from Australia), John White PM, Medicus Health (which the Parties understand is piloting a new EPR in Birmingham), Ouris Health, and Oxford Digital Health as new suppliers under TIF.

3.23 The Parties do not have insight into the plans of these new entrants in all cases but note that in addition to Telstra and Medicus, some other of these new entrants may seek to provide primary care EPR solutions. [✂].

3.24 The NHS is actively supporting new entrants to bolster their position, with a view to securing a greater range of choice for itself as the customer. For example, the NHS set up the TIF Early Adapter Support programme under which ICBs, GP practices and PCNs are encouraged by NHS England to switch to a new EPR system. It also hosted the Tech Innovation Framework Expo 2023 in February this year[23] which provided an opportunity for staff at GP practices to meet with the suppliers who are developing new EPRs.

Creating its own "marketplace"

3.25 The NHS has set up its own buying catalogue for procurement of primary care IT systems (the "**Catalogue**"). The Catalogue is akin to a digital marketplace and is itself highly sophisticated. The Catalogue has been deliberately designed by the NHS to enable procurement of products

[22] The Interoperability Standard, Commercial Standard and IM1 Standard continue to be foundational to the NHS's approach to procurement of primary care EPR systems, and the regulation and governance of the market for primary care EPR systems. These fundamental NHS standards equally apply to procurements under TIF and the incoming Digital Primary Care Framework

[23] "Event: Tech Innovation Framework (TIF) Expo 2023" (digital.nhs.uk).

on a "mix and match" basis (by both NHS bodies and third-party suppliers to the NHS) and in accordance with pre-agreed terms, including on pricing.

3.26 Before a product can be sold at all under an NHS framework and listed for sale on the Catalogue, it needs to have been approved by the NHS as compliant with all relevant standards and capabilities. These standards and capabilities are mandated, and essentially reflect the NHS's buying preferences. The NHS is thereby also the decision maker on: (a) whether EMIS products can go to market via the Catalogue; and (b) whether EMIS has priced its products appropriately.

3.27 The NHS retains sole discretion to remove a supplier from the Catalogue for future procurements. To the extent that a supplier is not complying with the relevant frameworks and standards imposed by the NHS, the NHS quickly becomes aware and takes action. This is not expected to change post-Transaction. A number of suppliers listed on the Catalogue are currently in remediation and are displayed on the Catalogue with the following warning message to NHS bodies, reflecting NHS England's ability to share information with the wider NHS (and likely negatively impact sales):

> *"This Catalogue Solution is in remediation while the supplier works to meet compliance with the required standards.*
>
> *It can still be ordered while the work is carried out, however if this situation is not remedied within an agreed timeframe the Solution will be suspended from the Buying Catalogue."*[24]

Examples of the NHS as the customer constraining EMIS

3.28 By way of example of the NHS's strength as the only material customer in setting the terms of trade in the market for procuring primary care IT systems and shaping the market in which the Parties operate, the Parties note the following instances of NHS active intervention:

(i) In late 2022, the NHS refused to list new functionality for an EMIS product, [✂], on the Catalogue because it considered that EMIS had not put in place a hazard log and clinical safety case, which is required by the NHS's standards and capabilities in relation to such products. EMIS then had to provide the NHS with a range of evidence to assure the NHS that the standards were met before the NHS would list the product, and EMIS could sell it to the market. This is an example of the NHS taking steps to ensure that the products it procures at all levels meet its particular specifications as a customer.

(ii) The Parties have multiple points of contact with the NHS at various levels, all of which can and do provide feedback to EMIS and all of which communicate with one another (see paragraph 3.41 below). By way of example, in March 2023, EMIS alerted EMIS Web users (GP practices) that it would begin the removal of a feature called the "**Panic Button**" from EMIS Web in June 2023. The Panic Button is used by GPs to respond to a personally threatening situation or a collapsed patient and sends an alert to other

[24] See, for example, Dr.iQ: "Description Dr.iQ" (buyingcatalogue.digital.nhs.uk).

IT systems around the practice. EMIS intended to remove this feature following complaints via EMIS's support desk that the feature did not always work as it should (as a result of issues with the customer's local IT environment rather than with the product itself). EMIS was concerned that the inconsistency of the Panic Button made it unsafe.

The Panic Button is a long-standing feature of EMIS Web which is additional to the core EMIS Web offering. EMIS is not required to provide the Panic Button under ITF or any other framework. Despite this, following a communication to customers that it would be removed, the NHS intervened at various levels. GP practices complained to EMIS via various channels, and this issue was also escalated to ICB level, and then to NHS England.[25]

NHS England told EMIS on a weekly compliance monitoring call that EMIS must continue to provide the Panic Button feature going forward, despite the absence of a formal contractual requirement. EMIS confirmed to its users that it would continue to provide the Panic Button,[26] and a working group has been set up between EPR suppliers and NHS England to consider the option of having the Panic Button added as a requirement in an NHS standard in the future, to ensure that various NHS stakeholders have access to the feature.

The NHS as an active regulator

3.29 As explained at paragraph 3.18 above, the NHS sets the terms of trade with EPR providers by way of frameworks, including contractual agreements and supporting standards as the only customer for EPR systems in the UK. EMIS (and, post-Transaction, the Combined Entity) must comply with these agreements and standards, not only because the NHS is its only material customer, but also because the NHS can sanction EMIS for any non-compliance.

[25] "EMIS to remove 'panic button' used by GPs in aggressive situations" (pulsetoday.co.uk).

[26] "EMIS to keep 'panic button' after pressure from GPs" (pulsetoday.co.uk).

Broadly interpreting evolving frameworks and standards

3.30 The NHS's frameworks and standards, which address equal access, fair pricing, unconstrained customer choice, interoperability and data sharing with respect to primary care EPR systems are interpreted, monitored and applied by the NHS on a broad and purposive basis. Many of the requirements contained within the relevant standards are principles-based, such as the Market Responsibility Provisions in the Commercial Standard. As a result, the NHS's frameworks and standards will provide protection to rivals of the Combined Entity even if the alleged foreclosure mechanisms "*fall outside of the NHS mandated standards*".[27]

3.31 Moreover, the NHS's interoperability principles, as delineated in the Interoperability Standard, include the following guiding principles that must be applied to all matters related to interfaces with EPR systems such as EMIS Web:

(i) "*Interoperability is more important than supporting customisation. Use the base definition of Standards wherever possible. Extend only by addition and by exception. Do not view integration as a source of competitive advantage*";

(ii) "*Use open and government standards. Design systems up front to support information sharing. This covers both alignment with Open Standards and the use of Open APIs*."

3.32 Further, the NHS has adopted standards to ensure that its healthcare software systems can effectively communicate with each other, for logical and important commercial reasons. A non-negotiable for a technology supplier to the NHS is being able to interact and work with other technology suppliers to the NHS.

3.33 These standards and requirements include but are not limited to: the Open API Policy; requirements in the GP Systems of Choice framework; requirements contained in GP IT Futures; and embodied in associated documents such as the Interoperability Standard and the Commercial Standard; and TIF.

3.34 'Openness and interoperability' means at its very core that *"Open APIs are those APIs that have been exposed to enable other systems to interact with that system, and those APIs have been sufficiently documented that the available functionality is discoverable, fit for purpose and re-usable"* (Open API Policy). Suppliers to the NHS must ensure that any APIs built since the introduction of the Open API Policy are 'open' in this sense.[28] This includes APIs which fall within the NHS's IM1 Standard, but it also includes any other APIs which those suppliers build and maintain for use in third party products connected to supply to the NHS.[29]

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[27] Phase 1 Decision, paragraph 13.

[28] APIs built for MO suppliers are addressed separately in Section 4.

[29] The Parties noted a diversity of terms being used in the Phase 1 Decision to describe APIs, in their view not always consistently with the Parties' understanding (e.g. "custom integrations" is not a term which is commonly used in this area and does not have a clear meaning).

3.35 The NHS can and does intervene with respect to any issue raised regarding EMIS Web, even if the concern is not formally covered by the specific provisions of the relevant framework and related standards. Further examples of this are provided at paragraph 3.49 below.

3.36 Frameworks for procurement of GP IT systems are intended and designed by the NHS to be updated and "move with the times" as technology develops. ITF has been amended iteratively since its creation. NHS Digital (now NHS England) also recognised the need to introduce mandated interfaces by way of the IM1 Standard, alongside ITF. The IM1 Standard is not fixed, and the NHS can and does bring additional interfaces under its remit wherever it considers it appropriate.

3.37 An example of this relates to **EMIS's Partner API**. The Partner API is a means by which third parties can interact with data held in EMIS Web. It has existed for many years and is made available to EMIS "partners" directly from EMIS outside the context of the Commercial Standard, Catalogue, and associated documents.

3.38 The NHS received feedback from users, potential users and competitors at regular meetings of the GP IT Futures Market Governance Group that the Partner API had different capabilities when compared to newly mandated IM1 interfaces, and that it included additional data fields. Following dialogue with, and ultimately instruction from, the NHS, the Partner API was made available as a mandated IM1 interface (IM1 Partner), which would be free to access for all NHS-approved third-party suppliers to the NHS.

3.39 Similarly, the NHS has recently issued the third iteration of its **Service Management Regime** ("SMRv3") since the start of ITF, which included updates to the required service levels to help drive supplier behaviours.

Closely monitoring behaviour

3.40 The NHS closely monitors its suppliers' behaviour to ensure they are complying with the provisions of its frameworks and the broad principles contained within them, in order that it can engage in continuous, open and active enforcement and principles-based administration.

3.41 There are multiple formal and informal routes by which the NHS: (i) communicates requirements and improvement areas for EMIS; (ii) detects any non-compliance with frameworks; (iii) identifies any exclusionary or exploitative conduct; and (iv) monitors complaints, both from within the NHS and from its other third-party suppliers. In the case of EMIS, these include (*inter alia*):

(i) **Weekly gold calls**: These occur every week and are attended by senior representatives from EMIS and the NHS. The gold call is used to discuss any variety of operational issues that the NHS wishes to raise with EMIS.

(ii) **Market Governance Group meetings**: These meetings occur every month and are attended by NHS England, EMIS, many of its partners and other stakeholders in ITF. The Market Governance Group is used for raising market issues and complaints. By way of example, as explained during the site visit the CMA attended on 24 May 2023, complaints about the availability of the EMIS Partner API were made via these

meetings and ultimately resulted in the EMIS Partner API being made available as an IM1 interface.

(iii) **Service Management**: NHS England operates a service management regime which governs availability and response times for IM1 interfaces. Non-compliance with this regime can result in the loss of IM1 Connection Fees paid by NHS. Any failure to meet service management obligations also constitutes a breach of the relevant framework agreement.

(iv) **Social media**: EMIS users participate in a Facebook group, the "EMIS Web FB User Group", which has approximately 12,800 members and at least 10 posts a day. This group is often used as a means for EMIS Web users to discuss problems they are experiencing with EMIS Web and to coalesce around particular complaints, including in relation to third-party products. EMIS monitors activity on this group, and it provides EMIS with a key insight into the views of its users.

(v) **National User Group**: This is a non-profit organisation which has been set up to support EMIS users to get the best possible use out of EMIS Web. It represents members and operates completely separately and independently from EMIS. The Group raises collective complaints to EMIS.

(vi) **Audits**: NHS England has broad rights to carry out audits of EMIS, and does audit EMIS, for compliance with frameworks under both the ITF and the TIF.

3.42 If EMIS (or the Combined Entity) took any action that made it more difficult for GPs to use third party solutions which they had procured, EMIS would face significant pressure from NHS England centrally. EMIS (or the Combined Entity) would also face significant pressure from ICBs, and from GP practice users of EMIS Web. EMIS has regular, direct contact with GP practices through its account management team who have calls / in-person meetings with about [✂] GP practices a week, and through its support desk which takes around [✂] calls a week from GP practices). In EMIS's experience, GP practices are a vocal customer base, quick to raise any concerns which they might have.

3.43 The NHS also closely monitors procurement behaviour. ICBs have full visibility over EMIS's and Optum UK's current and historical procurement data (along with the data of their competitors) and would have the information and means to detect, for example, anomalies in pricing or service offerings.

Swiftly taking enforcement action when required

3.44 There are a range of different enforcement mechanisms created by and available to the NHS when it is dissatisfied with a supplier's conduct.

3.45 Examples of the enforcement mechanisms available to the NHS include:

(i) **Imposing fines** on suppliers for failing to meet the required service levels (which include requirements in relation to the various IM1 interfaces).

(ii) **Terminating the Catalogue Agreement, and suspending or entirely removing the supplier from the Catalogue**. The NHS has the power to remove a supplier "for convenience for any reason at any time on giving no less than 90 days' written notice to the Supplier"[30] – no allegation or evidence of a breach is required. The NHS can therefore remove a supplier's product, and all of that supplier's related current and future revenue streams (where the NHS is their sole customer), if the NHS is dissatisfied with that supplier. As discussed above in paragraph 3.43, the NHS closely monitors procurement behaviour.

(iii) **Terminating the Framework Agreement, and so removing the supplier from the relevant framework**. Again, the NHS can do so for any reason following 30 days' notice. The NHS can also terminate individual call off contracts (or even specific service lines).

(iv) **Initiating one or more of the various remediation processes** available to the NHS under the frameworks and Catalogue (which can include remedial plans which the supplier must follow).

(v) **Seeking orders for specific performance of particular obligations**, claiming for damage or making a claim under an indemnity.

(vi) **Amending the relevant framework** and standards going forwards, as discussed above.

(vii) **Bringing proprietary interfaces within the IM1 Standard**, thereby preventing EMIS from charging any commission for fees for the API(s) in question.

3.46 The implementation of any of the above enforcement mechanisms against EMIS (or post-Transaction, the Combined Entity) could do significant harm to EMIS's business, its relationship with its only material customer, and its bottom line. Importantly, harm to its business would not necessarily be restricted to the offending product (EMIS Web) but could extend to a number of other products offered by EMIS – with catastrophic implications.

3.47 Previous primary care EPR providers have been removed from the Catalogue for failing to meet their obligations. [✂]:

(i) [✂].

(ii) In October 2019, NHS Wales cancelled its contract with Microtest because of a number of performance issues, including delays in supplying clinical software to GP practices in Wales, and failures to meet the integration requirements of NHS Wales within the relevant timescales.

3.48 Further, it is the NHS itself (as the sole buyer of EPR systems in the UK) which sets the terms of trade, determines the structure of the market, and chooses which suppliers to procure from. The NHS also designs the specifications and terms for the products and services it procures

[30] NHS Digital Care Services Catalogue, clause 44.2.

from suppliers, and determines such specifications and terms to its own commercial advantage. The NHS has complete discretion in this regard. Even without the abovementioned enforcement mechanisms, it would not be rational for EMIS to disregard the NHS's rules and regulations, nor the NHS's requirements (such as with the Panic Button), which reflect its procurement requirements as EMIS's only material customer.

NHS as an active regulator constraining EMIS

3.49 The Parties note the following instances of active NHS governance. Each of these examples draw upon the NHS's unique market position as both the only material customer and the regulator in the markets in which the Parties operate:

(i) [✂] is a third-party supplier that provides a data broking service to the NHS. [✂] historically extracted data for this purpose from EMIS's Patient Data Extract Service ("**PDES**") which has now been phased out because it is technically obsolete (i.e. it is not cloud-based and runs on old hardware and operating systems).

It was expected and agreed that [✂] would switch to extracting data through IM1 Bulk, which EMIS is required to operate for any NHS-approved supplier under the terms of the Commercial Standard, Interoperability Standard and IM1 Standard.

[✂] raised concerns with the NHS Digital (now NHS England) that it would struggle to undertake the necessary testing required to move to IM1 Bulk by the end of 2022. As a result of those concerns, and despite [✂] being given significant notice and no longer being party to a formal contract with EMIS, the NHS required EMIS to continue providing PDES extracts to [✂] (notwithstanding EMIS taking steps to phase-out PDES) until [✂] completed the IM1 onboarding process.

Further, NHS Digital (now NHS England) required EMIS to add additional data fields to IM1 Bulk, which were not previously required by the NHS, in order to satisfy [✂]. EMIS must now provide those additional data fields to all users of IM1 Bulk.

(ii) [✂] is an application used to make referrals [✂] from other clinical settings. [✂] is not procured under ITF or TIF, but works with EMIS Web. In May 2022, NHS Digital (now NHS England) raised a complaint that it considered EMIS was effectively limiting a referral message [✂], which affected [✂] ability to access inbound referral messages.

The relevant person at NHS Digital (now NHS England) (a "Senior Commercial Lead", part of a dedicated organisation within NHS managing commercial suppliers) contacted EMIS, outlining their concerns, and commented that: "[✂]"

EMIS understands that the NHS became aware of an issue with [✂] as a result of a complaint by a third-party supplier to the NHS.

Notwithstanding the fact that [✂] is procured outside of ITF, the NHS quickly applied the provisions and principles of the Commercial Standard and required EMIS to interoperate with its competitor products. EMIS quickly made changes to the [✂] product to address the NHS's concerns.

(iii) The **Patient Access** app (an EMIS app used to book GP and pharmacy appointments) was designed and implemented by EMIS, and was the first of its kind. The NHS identified the merits of the Patient Access app, and the interface used to connect it with EPR systems. The NHS decided that it would mandate the Patient Access app model as part of GP Systems of Choice in 2014 (the framework which proceeded ITF). This model is now a key part of the NHS, and is utilised by the NHS App itself (as well as numerous competitor apps).

This capability was an important driver of revenue and innovation for EMIS, but the NHS's decision to mandate it prevented EMIS from making any further profit from it. The NHS can use its position as market regulator (and sole customer of EMIS Web) to shape and reshape the rules of the game in the provision of EPR systems and related products.

The NHS as the data controller

3.50 EMIS has no control over the use of the data which it stores for its NHS customers.

3.51 Individual GP practices are the data controllers of the patient data held in EMIS Web and other EPR systems. EMIS (and TPP and Cegedim) are data processors in respect of this data, and can therefore only use the data, or make the data available, in accordance with instructions from the relevant GP practice.

3.52 This position has been confirmed by the Information Commissioner's Office ("**ICO**") in the context of an issue raised to it in relation to providing patients with access to their medical records in November 2022. In a letter sent to the NHS, which EMIS was sighted on as an interested party, the ICO stated that: "[✂]". The ICO also explained that evidence was provided by NHS England of "[✂]".

3.53 EMIS also cannot use, or make available, the NHS data held in EMIS Web unless (i) like any other supplier to the NHS it has been instructed to do so by the relevant data controller(s); and (ii) even then, only in accordance with the data controller's particular instructions. EMIS also cannot ignore an instruction to make the NHS's data available to other NHS-authorised data processors.

4. The Combined Entity would have neither the ability nor incentive to pursue a partial foreclosure strategy in respect of MO software

4.1 The Issues Statement notes that at Phase 1 the CMA accepted that total foreclosure of rival suppliers of MO software is not possible because "*EMIS Web is subject to various NHS rules and standards*" such that the CMA does not consider total foreclosure "*to be realistic*".[31]

4.2 Nevertheless, the CMA considered at Phase 1 (as referenced in the Issues Statement) that the Combined Entity could partially foreclose rival MO software suppliers through the following mechanisms:[32]

(i) worsening the quality of MO rivals' products and ability to innovate, including by withholding support or delaying upgrades (the "**product degradation mechanism**");

(ii) worsening integration with EMIS Web and the user interfaces, thereby rendering rivals' products less attractive (the "**user mechanism**");

(iii) raising the costs for MO rivals (the "**costs mechanism**"); and / or

(iv) gaining access to MO rivals' commercially sensitive information such that their ability to improve quality or innovate is impaired (the "**CSI mechanism**").

4.3 For the reasons set out below, the Combined Entity would not have the ability or the incentive to pursue any of these partial foreclosure mechanisms. If implausibly it did, the harm resulting from the partial foreclosure mechanisms (whether considered separately or collectively) would not be sufficient to result in an SLC.

Background to MO

The NHS is the only MO customer, and there is rigorous competition for supply

4.4 MO products are a small part of a GP's prescribing workflow but importantly offer value to both the NHS and to GPs.[33] The products enable the NHS to lower its medicines expenditure by suggesting medicine switches to GPs and therefore deliver cost savings to the NHS on a continuous basis.[34] The products also assist GPs by suggesting medicine switches based on best-practice prescribing.

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[31] Phase 1 Decision, paragraph 10.

[32] Issues Statement, paragraph 28(c).

[33] The NHS recognises that it needs a "*step change in the way that all healthcare professionals support patients to get the best possible outcomes from their medicines*" and that "*medicines optimisation represents that step change*". See: Royal Pharmaceutical Society, "Medicines Optimisation: helping patients make the most of medicines", as endorsed and supported by the NHS (england.nhs.uk).

[34] So far as EMIS is aware, First DataBank ("FDB") [✂] according to publicly available sources, has saved the NHS £300 million over four years. See: "FDB's OptimiseRx achieves savings of £300 million for the NHS" (digitalhealth.net).

4.5 At present, Optum UK has one primary competitor with respect to its MO offering: FDB, with whom Optum UK competes vigorously. FDB's OptimiseRx product is a popular market leader and is currently used by [60-70]% of ICBs. FDB's OptimiseRx offers more functionality and more [✂] than Optum UK's ScriptSwitch product.

4.6 The customers of Optum UK's and FDB's MO products are sophisticated NHS bodies (ICSs, led by ICBs), who are supported by the wider NHS system and UK Government. These customers extract significant value from MO products and are clearly motivated to ensure that chosen MO products are being used by GPs. In England, the relevant NHS organisation for the procurement of MO products is an ICS, led by an ICB which is responsible for planning and funding most NHS services in the area covered by the ICS. MO team leads within each ICS, often sitting at ICB level, drive the approach to MO procurement, with input from GPs.[35] MO team leads play a crucial role in the adoption, implementation and administration of MO products within the UK, and are responsible for ensuring utilisation by GPs within their ICS.[36]

4.7 MO products are almost always procured through open and public procurements via frameworks and standards created by the NHS (see Section 3 above for the NHS's role in setting the terms of trade). While procurement criteria weightings differ for each procurement process, the highest weightings are typically applied to quality and price. In Optum UK's experience, quality refers to the functionalities offered by the MO product (i.e., the content and analytics offering) and does not relate to the quality of the interface, which is of less interest to ICBs.[37]

MO products rely on a variety of interfaces

4.8 As the Parties have detailed previously to the CMA (including at the site visit), MO products utilise a number of interfaces (both standard and customised) with primary care EPR systems.

4.9 While the provision of the proprietary customised interfaces which each of ScriptSwitch and OptimiseRx use is not required under the IM1 Standard, contrary to the CMA's findings at Phase 1 (as referenced at paragraph 28(d) of the Issues Statement), those interfaces are nonetheless subject to the constraints imposed by the NHS (as described at Section 2 above). For example, the interoperability principles contained in the Interoperability Standard, and the Market Responsibility Provisions contained in the Commercial Standard apply to the provision of any interface with EMIS Web, whether customised or not. As already explained and exemplified above (see paragraph 3.30), the regulatory frameworks and standards are interpreted,

[35] Contrary to the statement at paragraph 17 of the Issues Statement, the users of MO software are not only the individual GP practices. While GPs use MO software when it pops up at the point of prescribing, MO teams within ICS's also use MO software to create prescribing rules and monitor their implementation. For example, MO teams engage with ScriptSwitch content manager and ScriptSwitch analytics, both of which are [✂] and not integrated with EPR systems.

[36] The procurement process is similar in Wales and Scotland. In Wales, the relevant organisation for MO procurement is a Health Board, with the MO team leads within each Health Board setting overall direction. Likewise, in Scotland, National Services Scotland, guided by Scottish Health Boards and the MO teams within them, is responsible for MO procurement.

[37] This is evidenced by the fact that recent investment in ScriptSwitch has been directed at improving non-interface aspects of the ScriptSwitch product (for example, updates to content manager and the introduction of features such as quantity limits).

monitored and applied by the NHS on a broad and purposive basis (see the examples described in paragraphs 3.35 to 3.39 and 3.49(i) above).

4.10 Further, proprietary interfaces can be, and have been, brought within scope of the IM1 Standard and the Commercial Standard (see the examples described in paragraphs 3.36 to 3.39 above). The NHS is also able to revise the IM1 Standard and broaden its scope at any time.

4.11 Additionally, the NHS is continuing to prioritise interoperability (see paragraphs 3.30 to 3.34 above). Going forward, the NHS will also require that all interfaces which EPR providers create are compliant with the NHS Open API Policy (see paragraph 3.33 above). In accordance with the NHS's policy, Optum UK preference is to use as many interfaces covered by the IM1 Standard as possible for the purpose of Population 360 (its pipeline MO product), including IM1 Partner.

4.12 The Parties expect that EPR providers would also be required by the NHS to develop interfaces for any new entrants in MO in accordance with this market-wide approach.[38]

<u>The Combined Entity will not be able to pursue the foreclosure mechanisms set out in Phase 1 and referenced in the Issues Statement</u>

4.13 For the particular reasons set out below and considering the constraints which the NHS imposes on any activities which interface with EMIS Web (as outlined above in Section 3), the Combined Entity will not be able to partially foreclose MO rivals by pursuing any one or more of the foreclose mechanisms set out in the Issues Statement. To suggest otherwise would be a fundamental misunderstanding of the environment in which the Parties operate.

The product degradation mechanism

4.14 As regards any potential degradation of the MO product (or lack of support with respect to future developments with regard to the product), the Parties note the following:

(i) EMIS has no control over the design, development or content of Optum UK's ScriptSwitch, and there is no evidence to suggest that this would not also be the case for any new entrant in MO.

(ii) In the case of ScriptSwitch, upgrades are developed and rolled out by Optum UK and not by EMIS.

(iii) In the case of FDB, [✂].[39] Further, EMIS does not have any control over the operation or functionality of, or over any updates to, FDB's OptimiseRx [✂].

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[38] This market-wide approach is reflected in the NHS Digital Technology Assessment Criteria, which state that "*Application Programme Interfaces (APIs) should follow the Government Digital Services Open API Best Practices, be documented and freely available and third parties should have reasonable access in order to integrate technologies. Good interoperability reduces expenditure, complexity and delivery times on local system integration projects by standardising technology and interface specifications and simplifying integration".*

[39] EMIS provided limited support to [✂], for example, by providing advice in relation to the specific specification requirements for EMIS Web.

The user mechanism

4.15 First, the Parties note that no change to the user interface or workflow is possible without the express agreement of the MO supplier (this would otherwise breach clinical safety management process obligations and could risk harming patients).[40] For example, pursuant to Optum UK's partnering contract with EMIS:

(i) EMIS is required to provide Optum UK [✂] advance written notice prior to introducing a substitute interface [✂].

(ii) EMIS is required to maintain an efficient and effective support function to [✂].

(iii) EMIS shall provide back-up support and updating of an interface [✂].

4.16 The terms of FDB's partnering contract with EMIS also contain support obligations.

4.17 Second, in relation to the limited changes that EMIS could unilaterally make to an interface, any amendment to the interface capable of even hypothetically changing competitive outcomes would be noticed very quickly by several impacted parties:

(i) **GPs**. A delay in the operation of the interface would be noticed by GPs, who use MO products on a regular basis throughout the day and who are typically under significant pressure to keep to patient appointment times. Any delay which is actually meaningful to the user quickly becomes obvious and represents a clear disruption to the workflow of the GP (who cannot do anything while they wait for the interface to appear, as the EPR system is essentially frozen until the pop-up workflow is complete).[41]

(ii) **ICS MO teams**. ICS team members – whose primary responsibility is to ensure effective implementation of MO products actively monitor the implementation and use of MO products procured by their ICB. This team has a direct customer relationship with the MO supplier.[42] If an MO product was underperforming or being used less, the MO team would quickly become aware of this and raise it with the MO supplier. Similarly, if an MO provider had discussed a future interface development with an MO team (and such development fell within the limited control that EMIS has vis-à-vis the MO product), the MO team would monitor the development and notice (for example) any meaningful delays and flag it to the MO supplier.

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[40] In particular, manufacturers of health IT software must comply with the NHS DCB0129 standard ('Clinical Risk Management: Its Application in the Manufacture of Health IT Systems'), designed to help such manufacturers evidence the clinical safety of their products.

[41] As discussed further below, the ScriptSwitch interface allows GPs to provide feedback directly to the ScriptSwitch service team simply by typing a few words describing the issue into a box. This feedback can relate to the suitability of the proposed medication switches or to the technical operation of the interface. Optum UK considers it likely that OptimiseRx would offer a similar feedback function to GPs (and any new entrant could also do so in the future).

[42] For example, Optum UK provides MO teams with account management and customer reporting tools (including [✂]), which provide them with actionable insights into the way in which ScriptSwitch is (and is not) being used and allows them to view usage trends [✂]. As far as EMIS is aware, FDB provides MO teams with similar performance monitoring tools – MO teams would therefore notice and respond to a degradation of FDB.

(iii) **The impacted MO supplier**. MO suppliers also actively monitor the performance and usage of their MO products.[43] If a future interface development was somehow being frustrated or delayed (and such development fell within the limited control that EMIS has vis-à-vis the MO product), the impacted MO supplier would quickly become aware of this.

4.18 Third, upon being noticed, the degradation would be reported and escalated within the NHS until resolved. The numerous routes by which a hypothetical degradation would be reported and escalated include the following:

(i) **GPs would raise a complaint directly with EMIS, the MO supplier (for example, via the feedback button) and/or the relevant MO team within their ICS (with subsequent NHS escalation if the issue is not rectified),** if their prescribing workflows were interrupted or delayed. Given the number of prescriptions a busy GP might do (potentially on the order of 5-10 per hour), even a relatively low level of degradation would be sufficient to motivate the GP to complain through the feedback box.

(ii) **The MO team (within the ICS) would raise a complaint directly with EMIS and/or the MO supplier (with subsequent NHS escalation if the issue is not rectified).** As the party responsible for procuring (through the relevant ICB) and overseeing the successful implementation of the MO program, the relevant ICS MO team would complain upon becoming aware that a procured MO product (or a future development to an MO product) had been degraded. Given that performance monitoring is among this team's primary responsibilities, even a relatively low level of degradation would be sufficient to motivate the MO team to complain.

(iii) **The impacted MO supplier would raise a complaint directly with EMIS and/or the NHS (with subsequent NHS escalation if the issue is not rectified).** As the ultimate owner of the impacted product, the MO supplier would complain upon becoming aware – either through direct performance monitoring or through complaints received from GPs and/or the MO team – that their MO product (or a future development to their MO product) had been degraded.

4.19 In each instance, if the issue was not rectified promptly by EMIS, it would be escalated within the NHS without hesitation. As discussed in detail in Section 3 above, the various NHS entities have a wide range and significant number of formal and informal channels of communication, such that any potential issues with suppliers are addressed in a prompt and robust way.

4.20 Fourth, if EMIS failed to rectify the relevant degradation, it is implausible that the NHS stakeholders would ignore any one or more of the complainants listed above. The NHS is the ultimate payor for MO products and procures MO products under frameworks and competitive

[43] For example, the ScriptSwitch Service Desk (sometimes referred to as the ScriptSwitch "**heartbeat**") allows the ScriptSwitch service team to monitor the performance of ScriptSwitch [✂] using metrics such as [✂] and the [✂]. In addition, the ScriptSwitch interface allows GPs to provide feedback directly to the service team. GPs use this function on a regular basis (Optum UK receives approximately [✂] feedback submissions per month), including for the purpose of providing technical feedback in addition to provide substantive feedback on the suitability of suggested prescription switches. As far as EMIS is aware, FDB has similar performance monitoring tools – FDB would therefore notice and respond to any degradation attempt.

tender processes precisely for the purpose of fostering competition and promoting choice for ICBs. As noted above, MO products continuously deliver a real cost saving to ICBs, which gives ICBs a direct financial incentive to monitor and ensure the effective deployment of MO products and related interfaces with EPR systems. The NHS would not countenance degradation of FDB (or future MO products), as this would directly harm ICSs (as well as GPs as end-users) and would undermine the open and competitive environment the NHS is seeking to foster across the healthcare system. Further, EMIS's experience suggests that many GP practices have a [✂] preference for using OptimiseRx over ScriptSwitch, as it has more [✂] functionality – suggesting that complaints in the FDB context would be even more likely.

4.21 Further and importantly, it is worth noting that any change to FDB's interface would likely be perceived by GPs as an issue with the performance of the EMIS Web product, because of the nature of the interface. Degrading the interaction between EMIS Web and OptimiseRx, would appear to GPs as an issue with EMIS Web – for example, that EMIS Web was incurring delays in functioning – rendering any attempted foreclosure an even riskier strategy for the Combined Entity to pursue. This is explained further below in the context of incentives.

The costs mechanism

4.22 The Combined Entity would not be able to pursue a foreclosure strategy by anti-competitively raising FDB's (or any new entrant's) costs through "*increasing commission rates affecting rivals' ability to price competitively*".[44]

4.23 First, any increase in the revenue share paid by the MO suppliers would need to be agreed contractually (at the point of renewal of the contract) with the MO supplier and therefore communicated to the impacted MO supplier, such that the MO supplier would have noticed and be able to respond (including by complaining to the NHS).

4.24 Second, as a result of any increased prices charged to it, to the extent that the increase in revenue share is unreasonable, unfair and/or not reflective of commercial realities, the impacted MO supplier would complain and escalate the matter to one of a number of NHS stakeholders if required (were this not the case, the impact on the supplier of the rising revenue share cannot be sufficient to warrant any concern). The NHS frameworks also cap the pricing of access to EPR systems.[45]

4.25 Third, the NHS (via one of its many stakeholders) would swiftly intervene following a complaint. In addition to being an active regulator, the NHS is also the only customer of the MO products and the payer for MO products, and would ultimately be the party incurring the difference in cost. The NHS stakeholders could then take any of those actions outlined in Section 3 above rather than incur the unwarranted cost increase.

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[44] Issues Statement, paragraph 28(c).

[45] For example: (i) the General Principles of the Commercial Standard hold that suppliers "*shall not obtain profit or other commercial benefit from unreasonably delaying or excluding any potential Consumer Supplier's access to NHS Data through available Interfaces*"; and (ii) the Supplier Code of Conduct mandates that *"[w]hilst we accept that our suppliers make a fair profit margin in return for the risk they are accepting and the commitments and investments they make in order to be able to deliver services for us, we expect suppliers not to exploit an incumbent or monopoly position, an urgent situation or an asymmetry of capability or information to impose opportunistic pricing*".

The CSI mechanism

4.26 The Combined Entity will not have access to rivals' CSI such that current and future MO software rivals may be deterred from investing and innovating.

4.27 First, EMIS does not receive information that it considers to be commercially sensitive beyond the agreed revenue share rates and associated information. As noted above, details with respect to the FDB product [✂] and developments related to [✂] are not shared with EMIS.

4.28 Second, post-Transaction, EMIS will be [✂] to Optum UK. Therefore Optum UK's MO business (including ScriptSwitch and Population 360 and the teams who work on these) will be [✂] to EMIS Web. Strict barriers preventing the sharing of CSI between the two entities will be in place (and already are in place, to the extent needed) to ensure that no CSI could flow to potentially competing sections of the business and staff will be provided with regular compliance training on their obligations. Guardrails such as these are entirely commonplace, and their adoption would be in line with both Optum UK and EMIS's longstanding commitment to comply with all relevant laws, as well as with organisational best practice and good governance.

4.29 Third, Optum UK and EMIS are required to comply with strict conflict of interest rules with respect to which they have a strong record of compliance. For example, the Public Contracts Regulations state that contracting authorities (e.g. NHS England) *shall* take measures to prevent, identify and remedy conflicts of interest and ensure the equal treatment of all economic operators; and that where such conflict cannot be effectively remedied, the authority may exclude an operator in a procurement procedure under those regulations. The NHS has never had to act against either Optum UK or, so far as EMIS senior management is aware, EMIS, in this regard.[46]

[46] For completeness, the UH group has comprehensive, sophisticated and robust organisational conflict of interest ("**OCI**") vetting and management processes in place, whereby procurements processes (including NHS procurement processes) are reviewed by a compliance team and escalated to a dedicated conflicts of interest team, if necessary. If an OCI is identified, a mitigation plan is designed and implemented with business and legal approval and support. This mitigation plan is monitored throughout the lifecycle of the given bid / contract award.

No incentive to foreclose

Any attempt at partial foreclosure is highly likely to have a disastrous impact on the Combined Entity's relationship with the NHS, thereby undermining the deal rationale

4.30 The CMA at Phase 1 considered that any losses from foreclosure would be low as GP practice customers would be unlikely to switch their EPR system, based on the low levels of switching in the past and significant switching costs. Therefore, any gain in MO would give rise to an incentive to foreclose.

4.31 This comparison does not reflect the assessment of probable gains and losses that the Combined Entity would (hypothetically) be making.

(i) Potential gains are limited to FDB's sales to GP practices which use EMIS Web. A rough estimate suggests the maximum potential revenue gain from totally foreclosing FDB (which the CMA has acknowledged is not possible) would be approximately £[5-10] million.[47] Considering that the theory of harm relates to partial foreclosure rather than total foreclosure, the potential gain is significantly less than approximately £[5-10] million.

(ii) Potential losses go beyond the EPR customers that the Combined Entity could lose. By foreclosing a competitor, the Combined Entity risks harming its reputation and incurring more severe punishments from the NHS. If these losses are large, then even a small probability of incurring such losses would outweigh the limited gains from foreclosure and imply a lack of incentive to foreclose.

4.32 Potential losses from pursuing a foreclosure strategy are indeed large given the risk of being punished by the NHS:

(i) EMIS's business generated revenues of £164.8 million in the UK in 2021. With the NHS as the single customer for many of EMIS's products, EMIS would be putting at risk the majority of its business if the NHS decided to no longer procure EMIS's products. At the very least, this could include removing EMIS Web from the Catalogue, which generated revenues of around £[✂] in 2021. For the reasons explained above, each of the foreclosure mechanisms considered in Phase 1 (and referred to in paragraph 28(c) of the Issues Statement) would either be noticed by or notified to the NHS. Regardless of the route of complaint, the NHS would become aware of the Combined Entity's behaviour and would act. For obvious reasons, this would have a negative effect on the Combined Entity's relationship with the NHS as well as its reputation more broadly, which would far exceed any immaterial partial foreclosure gains in MO software.

In addition, degradation would likely appear to GPs as a reliability issue with EMIS Web rather than with the FDB product. Such reputational damage, regardless of the cause,

[47] FDB's revenue from sales to GP clinics using EMIS is estimated at £[✂], based on the MO market size (£[10-20] million) multiplied by FDB's share in MO ([60-70]%) multiplied by EMIS's share in EPR ([50-60]%). This figure is then multiplied by [✂] % to account for EMIS's [✂]% revenue share on FDB sales, to give an estimated potential revenue gain of £[5-10] million.

would be highly likely to create switching away from EMIS to rival EPRs, in addition to any direct NHS punishment. This would have knock-on effects beyond EMIS Web. EMIS would lose *all* revenues associated with that customer, including revenue that those customers generated for EMIS through its partners (which includes MO partners such as FDB and Optum UK as well as a significant number of non-MO partners). By way of example, if an ICB decided to switch EPR systems, EMIS would not only lose the revenue paid directly by that ICB for the EPR system but would also lose its share of the revenue generated by that ICB for use of partner products (as those products would now be accessed via, for example, TPP).

(ii) Optum UK's business generated revenues of c. £[✂] in the UK in 2022. As above, with the NHS [✂] of this revenue, [✂] Optum UK's revenue would be at risk from NHS punishment.

(iii) UH's business could also be affected. The deal rationale is contingent on the Combined Entity being a trusted support to the NHS and developing its reputation domestically so as to grow in the UK [✂]. Maintaining a good relationship with the NHS is therefore critical to UH's £1.24 billion investment in EMIS. There could also be further consequences to UH as an organisation. By way of an illustrative example, in the US, Optum counts [✂] as customers, many of which are [✂]. Those UH competitors account for c. $[✂] in revenue. [✂]. Any evidence, or even accusation, of conduct of foreclosing competitors of one UH subsidiary for the benefit of another UH subsidiary, even if this were to take place in a small market in the UK, would be disastrous.

4.33 Even a small probability of the losses outlined above materialising would vastly outweigh the small potential gains in a partial foreclosure of MO rival and as such the Combined Entity would have no incentive to pursue the partial foreclosure strategies outlined in the Issues Statement. The theory of harm set out by the CMA in Phase 1 and referenced in the Issues Statement understates EMIS losses by failing to consider the holistic effects discussed at paragraphs 4.31(ii) and 4.32 above and by placing overdue emphasis on backward-looking primary care EPR switching rates.

4.34 The CMA in Phase 1 also did not present or refer to any evidence that a significant number of customers (i.e. the ICBs who also procure the EPR system) would likely switch to ScriptSwitch from FDB rather than seek to correct the issue quickly and efficiently with EMIS directly or via further escalation within the NHS.

4.35 The lack of ability and/or incentive to foreclose is demonstrated by EMIS's current conduct vis-à-vis third-party suppliers that it competes with. In the UK, EMIS is required by the NHS to treat suppliers equally in terms of access to NHS data and interoperability with EMIS Web and that is what EMIS does, despite the fact that it deals with partners who directly compete with EMIS – the NHS as the regulator and the most material customer leaves EMIS with no other choice.

No effect on competition

4.36 Even if it could be established that there is an ability and incentive to partially foreclose (which the Parties have shown would not be the case), there would, in any event, be no effect on competition and certainly no SLC.

5. The Combined Entity would have neither the ability nor the incentive to pursue a partial foreclosure strategy in respect of PHM services[48]

5.1 The Issues Statement notes that the Phase 1 Decision found a realistic prospect of an SLC in relation to the supply of PHM services in the UK.[49] According to the Phase 1 Decision, the Combined Entity would have the ability and incentive to use EMIS's position in primary care EPR systems to reduce the competitiveness of Optum UK's PHM rivals, for example by worsening rivals' integration with EMIS Web (which holds certain primary care data) and raising costs through EXA Explorer.[50]

5.2 The CMA also notes in the Issues Statement that it will take a forward-looking approach and considers both the current and future nature of PHM in the UK.

Background to PHM

PHM is not an economic market

5.3 As described above (see paragraph 1.12), PHM is best described as a "*way of working*"[51] rather than an economic market. The Issues Statement notes that in the Phase 1 Decision the CMA found that "*PHM was a nascent and evolving market, with significant uncertainty around how it will evolve and differing views on what products and services constitute PHM*."[52] Similarly, the CMA in the Phase 1 Decision notes that part of Optum UK's rationale for the Transaction is the "*potentially significant gains in PHM*."[53] The decision notes that while it is "*clear that not all of the value of the Merger is accounted for by PHM […] a significant value is attributable to PHM.*"[54] This reflects a significant misunderstanding of PHM in the UK.

5.4 PHM is a term which has been used in healthcare for decades. The PHM approaches to healthcare have changed incrementally as the demographics and patterns of ill health have changed in recent decades. For example, in the twentieth century, the focus was on the treatment of infectious diseases. In the twenty-first century, the focus has shifted to treating an aging population with chronic conditions such as diabetes, chronic obstructive pulmonary

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[48] For the avoidance of doubt, and largely for the same reasons as set out in this Response, the Parties do not consider that such a foreclosure strategy – even if the ability and incentive to pursue it existed – would have any effect on competition within the relevant frames of reference.

[49] See the Issues Statement, paragraph 31.

[50] See the Issues Statement, paragraph 31.

[51] See NHS England, "Population Health and the Population Health Management Programme" (england.nhs.uk): "*Population health is one of our core strategic aims for integrated care systems (ICSs); to improve physical and mental health outcomes, promote wellbeing and reduce health inequalities across an entire population, with a specific focus on the wider determinants of health (things like housing, employment, education).* ***Population Health Management is a way of working*** *to help frontline teams understand current health and care needs and predict what local people will need in the future*" (emphasis added).

[52] Issues Statement, paragraph 18.

[53] See the Phase 1 Decision, paragraph 214(b).

[54] See the Phase 1 Decision, paragraph 214(b).

disease, cardiovascular disease, and renal disease. Individuals increasingly have 'multimorbidity' (i.e. they suffer from multiple conditions).

5.5 Whilst there is increasing adoption of the term "PHM" by a wider range of suppliers, this is merely reflective of the fact that PHM has become an "industry buzzword". The underlying approach is a well-established way to tackle the modern challenge of multimorbidity and to increase efficiency of clinical teams. More specifically, the Parties note the following:

(i) The term "Population Health Management" was used in academic literature at least as early as 1993, in an article proposing that town councils are the appropriate level for "population health management programs".[55] The term became more widespread in academic literature in the late 1990s.[56]

(ii) PHM approaches to healthcare have existed in the UK for 35 years:

(a) The NHS number was introduced in 1995 and its use became mandatory in 1997, creating the potential for linking data more easily across the NHS.[57]

(b) In 2002 the Health and Social Care Act 2001 was implemented. The act created greater integration between health and local authority services. It also introduced Payment by Results to reimburse hospitals and provided a source of secondary data from hospitals that could be linked with primary care data.[58]

(c) In 2014, the NHS's "Five Year Forward View" promoted *"[b]ringing together hospital, GP, administrative and audit data to support the quality improvement, research, and the identification of patients who most need health and social care support*". This prompted the testing of new patient segmentation models and approaches to payment.[59]

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[55] Brigitte Berrat, "Town Councils: a suitable level for population health management programs" *Cahiers d'études et de recherches francophones / Santé* Vol 3(5), Sep-Oct 1993.

[56] See e.g.: Peter Churgin and Kirk Strawn, "Population Health Management with Computerized Patient Records" *Effective Clinical Practice* 1998(1), pp61-65; Samuel Forman and Matthew Kelliher, "Status one : breakthroughs in high risk population health management" 1999. More recent examples include:

- An abstract published in 2009 by the Marshfield Clinic titled "Marshfield Clinic: Health Information Technology Paves the Way for Population Health Management" (collections.nlm.nih.gov).
- A publication in 2011 by Mathematica Policy Research titled "Exploring the Promise of Population Health Management Programs to Improve Health" (mathematica.org) which states that: "*PHM programs are a set of interventions designed to maintain and improve people's health across the full continuum of care—from low-risk, healthy individuals to high-risk individuals with one or more chronic conditions. PHM has elements in common with disease management, preventive services, and health promotion, but differs in both the scope of services and definition of target populations.*"

[57] "NHS Number and the systems used to manage them: an overview for research users" (closer.ac.uk).

[58] "A simple guide to Payment by Results" (assets.publishing.service.gov.uk).

[59] "Five Year Forward View" (england.nhs.uk).

(d) In 2017, the term 'population health management' was used by the NHS in the "*Next steps for the NHS Forward View*". It was used to summarise the approach proposed for shifting systematically to anticipatory care for individuals.[60]

(e) Optum UK has consistently supplied PHM equivalent tools and advisory services, to varying degrees of success, to the UK market since 2010.

5.6 Since around 2010, the NHS and other stakeholders in the UK have been moving towards a more integrated system of care where multiple sources of data can be used to tailor interventions to improve the health of a population. This has been a steady process over time as data and analytics develops – continued steady progress is expected (there is no evidence to suggest otherwise). As is clear from the above, what has differed throughout the years has been the nomenclature used for the same core objectives as well as the development of technology to deal with increasing numbers of data sources and increasing volumes of data to be combined and analysed. However, the fundamental concept and objective of PHM as a way of working – identifying who to help and how – has remained the same for decades.

Optum UK's PHM offering in the UK

5.7 The Parties consider there to be three general categories within PHM: (i) advisory services; (ii) analytics tools; and (iii) secure data processing platforms (which can be used to link multiple data from multiple sources). Optum UK [✂] offers [✂] advisory services and analytics tools in the UK. It does not provide a secure data processing platform and therefore only (i) and (ii) are relevant to the CMA's investigation. Currently, Optum UK offers its advisory services and PHM products without any interaction with EMIS directly – it sources its data *via* a Commissioning Support Unit ("**CSU**"). For the avoidance of doubt, EMIS is not active in PHM.

No partial foreclosure

5.8 The Issues Statement notes that the Phase 1 Decision found a realistic prospect of an SLC in relation to the supply of PHM services in the UK.[61] According to the CMA in Phase 1, the Combined Entity has the ability to use EMIS's position in EPR systems to reduce the competitiveness of Optum UK's rivals, for example by worsening rivals' integration with EMIS Web (which provides access to primary care data).[62]

5.9 This is incorrect for a number of reasons (as discussed further below): (i) EMIS is not the gatekeeper to primary care data; (ii) there are NHS mandated routes of access to primary care data; (iii) EMIS cannot target any partial foreclosure strategy at PHM rivals – Optum UK for example obtains the relevant data indirectly, mostly through a CSU; (iv) primary care data is in any event not necessary for a PHM provider to compete in the UK; (vi) additional services

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[60] "Next steps on the NHS Five Year Forward View" (england.nhs.uk).

[61] See the Issues Statement, paragraph 31.

[62] See the Issues Statement, paragraph 31.

provided by EXA Explorer are not necessary to provide PHM services in the UK; and (vii) access to primary care data is regulated, monitored and enforced by the NHS.

5.10 In the future, taking into account the CMA's forward-looking approach, in addition to the above: (i) the FDP will, in Optum UK's view, provide a core and additional route to access primary care data; and (ii) any future PHM interfaces would need to meet the NHS's requirements of openness and interoperability.

The Combined Entity will not be able to partially foreclose rival's access to primary care data following the Transaction

5.11 The Combined Entity will not be able to partially foreclose PHM rivals by restricting or worsening access to primary care data held by EMIS.

5.12 EMIS is not the gatekeeper to primary care data (now nor in the future) because (i) it is not in control of the data, (ii) there are NHS mandated routes of access to the data and (iii) EMIS cannot target any partial foreclosure strategy at PHM rivals.

EMIS is not the gatekeeper to primary care data

5.13 The relevant GP practice is the data controller, not EMIS. Therefore EMIS (as the data processor) can only act in accordance with the instructions of the data controller. EMIS has no additional rights to, or control over, the primary care data. The NHS (through the GP practices), as the data controller, instructs data processors (including EPR providers such as EMIS), as to when to provide the data and to whom. EMIS therefore cannot prevent Optum UK's PHM rivals from accessing such data if EMIS is instructed by the data controller to provide access.

There are NHS mandated routes of access to the data

5.14 Primary care data is extracted from EPR systems, such as EMIS Web, using an NHS mandated IM1 interface:

(i) In line with the NHS's requirements in this regard, EMIS operates an IM1 interface for data extraction, which is called "IM1 Bulk". IM1 Bulk is a mandated interface, the specifications of which are set by the NHS through the IM1 Standard.

(ii) Under the Commercial Standard, EMIS must make this data extract available to any NHS approved third party, in accordance with the NHS's instructions.

(iii) IM1 Bulk extracts are paid for by the NHS by way of an NHS set cost covering Connection Fee, and not by the relevant third-party supplier (i.e. data extraction through IM1 Bulk is free).

EMIS cannot target any partial foreclosure strategy at PHM rivals

5.15 Even if EMIS could control or restrict third party access to the NHS data it holds on its primary care EPR, it would have no ability to target any foreclosure strategy at Optum UK's PHM rivals since EMIS does not usually know which parties are accessing the NHS data for PHM purposes

(and does not require that information to provide access to the data). Under the GDPR, EMIS's role as an EPR data processor is merely to enable access to or transfer of data. EMIS therefore would not usually know the purpose for which the recipient intends to process the data (unless voluntarily informed). EMIS acts under the instruction of the data controller who requires that they make the data available to particular recipients.

5.16 By way of example, Optum UK has no direct relationship with EMIS Web in respect of its PHM offering. This is accepted by the CMA in its Phase 1 Decision.[63] The relevant data (which is controlled and owned by the NHS), is held on EMIS Web and is accessed by Optum UK (by choice) through a third party or an NHS data processor (usually a CSU).[64] Optum UK does not pay CSUs with respect to the data received. Instead, the data access is mandated by the NHS as data controller. Optum UK has no plans to integrate its PHM offering with EMIS or its rivals because it is more cost-effective (and thus profitable) to source the required data through CSUs or under the IM1 standard.

5.17 It is therefore clear that there is no basis to suggest that the position described above regarding access to primary care data, and EMIS's lack of ability to target any foreclosure strategy at Optum UK's PHM rivals, will differ to any extent following the Transaction.

Primary care data is in any event not necessary for PHM

5.18 In any event, while primary care data may be useful for the provision of PHM services, it is not a must-have for all PHM projects. Optum UK and its rivals can, and do, compete without access to primary care data:[65]

(i) For example, Optum UK assisted [✂] in addressing health inequalities in the local area and concluded that people with learning disabilities wait longer and use four times more emergency care while waiting for planned care. This was done by analysing data on waiting lists from hospitals, community data and mental health data. No primary care data was utilised.

(ii) In addition, in February 2021 the Population and Person Insight ("**PAPI**") dashboard created by Outcomes Based Healthcare and the AGEM CSU was launched within NHS Viewpoint. PAPI provides the "Bridges to Health" segmentation model[66] to support CCGs to take a "data-driven" approach to understanding population health, and uses

[63] See the Phase 1 Decision, paragraph 166.

[64] Optum UK chooses to access primary care data via CSUs (instead of, for example, sourcing such data directly from EPR systems) because CSUs have the capacity to more cost efficiently link this data with data from other sources (e.g., secondary care data) and pseudonymise this data. CSUs source the relevant data via legacy custom routes (customer-defined queries), which are best described as simple queries by which particular data can be pulled from a database using query templates. While certain CSUs pay a fee to EMIS, this fee is not related to data extraction (which the CSUs can obtain for free) but instead derives from their subscription to EXA, through which they obtain data analytics.

[65] For example, Data for hospital services can be obtained either directly from the hospital (not usually direct from the EPR but more often from a hospital data warehouse) or via the Data Services for Commissioners that are a part of NHSE and operate by CSUs.

[66] The 'Bridges to Health' model is a person-focused segmentation approach, with the principal goal of "pursuing the health of each population segment" – see "'Bridges to Health' Summary" (outcomesbasedhealthcare.com).

national data sets only (secondary care, emergency care, community services and specialised services data). It did not utilise primary care data.[67]

Additional services provided by EXA Explorer are not necessary for PHM

5.19 The Phase 1 Decision states that some PHM suppliers rely on EXA Explorer (EMIS's data analytics tool) instead of a direct connection to EMIS Web, and that the Combined Entity could "*increase costs to rival PHM suppliers" for the use of [EXA Explorer].*"[68]

5.20 It is the case that only one user of EXA Explorer is also a PHM provider in the UK. However, even so and importantly, EMIS is not privy to whether the data extracted by suppliers to the NHS via EXA Explorer is being used for the purposes of PHM or otherwise.

5.21 Moreover, PHM providers do not need the data analytics services of EXA in order to compete – there are many providers of data analytics software that can be used as an alternative to EXA Explorer. To the extent that the Combined Entity did decide to raise the costs of EXA Explorer (to the extent possible given that the price of EXA Explorer is capped on the NHS's Catalogue), Optum UK's PHM rivals would simply be able to extract the necessary data (at no cost to them via IM1 Bulk) and perform analytics services either in-house or using another service provider such as Oracle/Cerner ([✂]).[69]

5.22 Use of EXA Explorer is therefore in no way a requirement to compete successfully in the UK as a PHM service provider. EXA's Explorer's role in PHM is limited to the organisation and formatting of the data and is not specifically useful for carrying out PHM activities, that require more than just primary care data. It should be noted for completeness that EMIS currently provides access to primary care data to several data analytics providers that compete with EXA Explorer – namely [✂] – and has taken no steps to foreclose these companies. In addition, that [✂] has recently elected to move from EXA Explorer to IM1 (for the purposes of extracting NHS data which EMIS holds), which EMIS understands was for economic reasons.

5.23 In addition, PHM competitors are able to procure EXA Explorer from the NHS Catalogue, where the price is capped by the NHS. Should the Combined Entity attempt to raise prices for PHM providers, such a strategy would be unsuccessful because the PHM providers would be able to purchase the services 'on-Catalogue' and benefit from the price capped by the NHS.[70]

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[67] See "Launch of the Population and Person Insight (PaPI) report to improve understanding of patient healthcare needs!" (outcomesbasedhealthcare.com).

[68] See the Issues Statement, paragraph 31(c)(i).

[69] EXA Explorer is a relatively new product, with only 27 customers in 2021. It is a cloud-based analytics system which utilises "off the shelf" components to analyse primary care data for clinical management. The same data formatting and analytics services can be provided from the likes of Deloitte, KPMG, PwC, McKesson, and IBM, as well as in-house for some companies.

[70] EMIS notes that EXA has now been [✂] noting that it is a new product, EMIS expects [✂], going forward.

The role of the NHS means that access to primary care data is regulated, monitored and enforced, and will continue to be in the future

5.24 The Phase 1 Decision stated that the NHS "*standards and frameworks*" in place that monitor the Parties would *"[…] be insufficient to protect all types of rival PHM services and suppliers.*" This is not correct, nor does it reflect a comprehensive understanding of the constraints imposed upon the Parties currently, and the constraints that would continue to apply to the Combined Entity in the future. The NHS has determined and controls the frameworks and standards under which the Parties operate. The frameworks and standards evolve, and new frameworks and standards are adopted, to keep up with changing technological advancement and changing market conditions.

5.25 Any true rival to Optum UK's PHM offering would have access to all required EMIS primary care data, since an IM1 Bulk extraction is wholly sufficient for PHM activity. For example, EMIS is aware that [✂] access data through IM1 Bulk and contracts indirectly with NHS England.[71] This makes any foreclosure theory unviable.

5.26 In addition, as noted in Section 3 above, the relevant NHS stakeholders are the data controllers. EMIS therefore does not own or control the NHS's data which it holds. As explained further in Section 3, EMIS cannot use NHS data held by EMIS unless it has been instructed to do so by the relevant data controller - and even then, only in accordance with the data controller's particular instructions. As a provider of a software solution which holds patient data, EMIS is intrinsically governed by data protection laws. Acting contrary to the data controllers' instructions would breach those laws. Breach of data protection laws would result in substantial damage to EMIS's reputation and viability as a credible business.

5.27 The NHS is an active and robust regulator, and pays particularly close attention to EMIS, as a "key supplier" – see Section 2 above for further details.

<u>The Combined Entity will continue to not be able to partially foreclose rival's access to primary care data in the future</u>

The FDP will provide a core and additional route to access primary care data

5.28 Taking into account the CMA's forward-looking approach noted in the Issues Statement, the NHS's current investment in the FDP which will enable every hospital trust and ICS to connect and share information between them, should be reflected in that assessment.[72] The NHS is investing £480 million in the FDP.[73] According to the NHS the, "*[…] 'federated' data platform means that every hospital trust and [ICS] will have their own platform but they are able to connect and share information between them where this is helpful. For example, to discharge*

[71] See Figure 1 in the Parties' Response to the Issues Letter dated 22 February 2023.

[72] See "Digitising, connecting and transforming health and care" (england.nhs.uk).

[73] See "Federated Data Platform Palantir juggernaut looks set to continue" (digitalhealth.net).

a patient from hospital into a care setting (when the appropriate data sharing agreements are in place)."[74]

5.29 Importantly, population health and person insight is one of five initial use cases for the FDP which will provide data and segmentation tools to enable population health management locally.[75]

5.30 The FDP is planned to have national, regional, ICS, and trust data platforms, with common data structures and standards supporting integration. Optum UK considers that these "*secure data environments*" are eventually expected to include all relevant NHS data sources. Assuming the FDP initiative goes ahead, therefore, PHM providers in the future will (in addition to the above) be able to access everything they need including primary care data through the FDP. This will be, in Optum UK's view, the core route to data for PHM rivals in addition to accessing this data through EMIS/TPP (whether directly or indirectly).[76] Optum UK understands that at least two ICSs have already announced that they will be conducting all their PHM activity through the FDP.[77]

5.31 Any suggestion that EMIS Web is the gatekeeper in respect of primary care data is therefore further undermined by the FDP initiative.

The sector is tightly monitored by the NHS and will be in the future

5.32 As noted above (see paragraph 5.14), extraction of NHS primary care data can take place *via* an NHS IM1 interface for free. The Issues Statement notes that the Phase 1 Decision found that that any foreclosure strategy by the Combined Entity is currently unlikely in circumstances "[…] *where suppliers can rely on NHS mandated interfaces [and therefore] the [Combined] Entity may have less ability to engage in foreclosure strategies […]*".[78] However, the Issues Statement the Phase 1 Decision found that goes on to state that while any foreclosure strategy by the Combined Entity may not currently be feasible, "*custom integration and co-operation is expected to become more important in the future as PHM suppliers innovate and develop new products.*"[79] This unfounded statement is highly speculative (and contrary to the evidence that is available).

5.33 First, the Parties consider that the references in the Phase 1 Decision to 'custom integration' are unclear. The Parties do not recognise this characterisation of the market, and in fact consider the opposite to be true. In addition, given that APIs need to be developed and made

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[74] See "Digitising, connecting and transforming health and care" (england.nhs.uk).

[75] "NHS Federated Data Platform and Associated Services" (england.nhs.uk). The other four use cases are vaccination and immunisation, elective recovery, care coordination, and supply chain

[76] Optum UK is of the view that the FDP will do away with the need for individual sign-offs by data controllers and will centralise the relevant data much more efficiently.

[77] "More than half of ICSs lack 'crucial' health management systems" (hsj.co.uk).

[78] See the Issues Statement, paragraph 31(c).

[79] See the Issues Statement, paragraph 31(c)(i).

available on an open and interoperable basis, there can be no foreclosure concerns arising from 'custom integrations', however they are construed.

5.34 Second, were the NHS to have any remaining concerns about the nature of API connections in PHM, the NHS would be well within its power to bring the customised technology within the IM1 interface (as per the examples considered in Section 3 above and given the NHS's importance as a customer) if it considered it necessary or preferable to do so. Proprietary interfaces can be, and have been in the past, brought within scope of the IM1 Standard and the Commercial Standard (including Partner API and Patent Access), and it is also open to the NHS to revise the IM1 Standard and broaden its scope at any time (as the NHS has previously done).

5.35 It would therefore be safe to assume that, should the current IM1 Standard or data access be insufficient to meet the needs of PHM providers in the future, the NHS would take steps to bring any required additional functionality within the scope of the relevant IM1 interface as it has done before (see paragraph 3.36 above) and in accordance with its unique role in the healthcare technology market.

No economic incentive to foreclose

5.36 The Issues Statement suggests that according to the Phase 1 Decision post-Transaction, the Combined Entity could realise significant gains in the PHM market by implementing certain foreclosure mechanisms, and that it could have the incentive to do so because the resultant losses of EPR system customers would be small based on low levels of customer switching.[80] Similarly to MO, this implies that any gain would result in an incentive to foreclose given that losses are limited. This assessment is incorrect.

5.37 With respect to gains, the Issues Statement notes that according to the Phase 1 Decision – without evidence – that the Combined Entity would expect to win in the PHM market despite that Optum UK: "*has a relatively small position in PHM services in the UK and there [are] a large number of competitors […].*"[81] Any potential gains from foreclosure should be treated as highly uncertain due to Optum UK's [✂]. To illustrate – Optum UK [✂] had a share of [0-5]% in the market for PHM products or services in 2022. There is therefore no guarantee that customers would switch to Optum UK in the event of partial foreclosure by EMIS (assuming that the partial foreclosure was successful).

5.38 In addition, it is not clear whether and how many PHM rivals will be using customer interfaces or EXA Explorer to provide PHM services in the future, which makes it even more difficult to gauge the size of any potential gains. As such, any assessment of incentives should take into account the uncertain nature of any potential gains from foreclosure.

5.39 As is discussed in more detail in paragraph 4.32 above, with respect to losses, as was the case for MO, the assessment of potential losses noted in the Issues Statement in Phase 1 (as referenced in the Issues Statement) is too simplistic and ignores the loss of EMIS revenue beyond EPR when a GP practice switches away from EMIS Web (e.g., lost partner revenue) as

[80] See the Issues Statement, paragraph 31(d).

[81] See the Issues Statement, paragraph 31(d).

well as the risk of reputational harm to EMIS, Optum UK and UH. In addition, it does not consider the possibility that EXA customers will chose to switch to other rival data solutions or obtain and format the data themselves. This would jeopardise EXA's revenues of £[✂] in 2022 – as well as future EXA revenue growth. As mentioned in the MO incentives discussion, attempted foreclosure would be putting at risk: (i) EMIS's business, generating revenues of £164.8 million in the UK in 2021; (ii) Optum UK's business, generating revenues of c. £[✂] in the UK in 2022; (iii) UH's £1.24 billion investment in EMIS; (iv) UH's wider business including c $[✂] of US revenues that are currently derived from [✂]; and (v) UH's potential to [✂].

5.40 Even a small probability of the large losses outlined above materialising would outweigh the highly uncertain potential gains, resulting in no incentive to foreclose. Optum UK's weak position in this market makes any foreclosure strategy even less likely to be profitable.

5.41 There is also no reason to think that the size of the possible returns available in PHM under a potential foreclosure strategy will increase in the future to such an extent as to make any foreclosure strategy worthwhile. The NHS announced in January 2023 that £2 billion has been allocated to help digitise the NHS frontline and social care sector, with only a fraction of this funding going towards the FDP.[82] A small portion of the FDP funding (Optum UK estimates about 15%, although it does not know for certain) has been allocated to PHM within the FDP[83] and there is no other PHM allocation with respect to the NHS going forward. There is no budget for the growth anticipated by the CMA.

5.42 It is also important to note that EMIS has not "self-preferenced" before, despite offering products that rely on EMIS and compete with suppliers relying on EMIS. As noted above, a number of the suppliers which EMIS deals with are also its competitors at some level.

No effect on competition

5.43 Even if it could be established that there is an ability and incentive to partially foreclose PHM rivals, this would have no material effect on competition. The Combined Entity will not be in a position to engage in a targeted foreclosure strategy given the identity of the PHM suppliers and/or the use by third parties of data held on and extracted from the EMIS EPR is usually unknown to EMIS. Consequently, and given the fragmented nature of the market, any foreclosure strategy could not have a significant impact on overall competition in the market.

5.44 Further, any potential effects from a foreclosure strategy are also wholly speculative. No PHM supplier (including Optum UK) would currently be impacted by the conduct that the Issues Statement suggests might be pursued by the Combined Entity via EMIS.

6. Conclusion

6.1 The Transaction brings together businesses with complementary market activities and a common aim of supporting the NHS. As described in more detail at the site visit, the investment

[82] See "Better insights, better decisions, better health" (england.nhs.uk).

[83] Of this, the Optum UK portion represents [✂]% of the total envelope for the FDP.

in EMIS by UH will benefit the NHS generally, will dramatically improve the primary care data EPR system, and will generally benefit primary care providers and UK residents more generally.

6.2 The Phase 1 Decision presented partial foreclosure theories of harm that are unrealistic and that could not materialise in practice. There is no plausible theory of harm in relation to the Transaction, and no SLC that can satisfy the Phase 2 standard of proof.