

Making Good Tech Decisions: a NES Digital Service perspective

Through the Scottish Government's Digital Health & Care Strategy (2018), the NES Digital Service (NDS)'s remit is to develop and deliver a Scotland-wide infrastructure for clinical and care data - known as the national digital platform – which also includes a range of practitioner and citizen-facing applications which sit upon it.

This document provides an outline of how the NDS platform approach and wider methodologies might support third sector organisations making decisions around technology procurement or development.

(This document is a work in progress and likely to raise specific questions. These will help us both to shape the document further and also help us understand how best to engage and provide a service for third sector organisations/other interested audiences).

One way of understanding NDS's work is that we are creating reusable building blocks which can be used by public, private and third sector organisations, to minimise duplication and maximise appropriate access to the information needed at point of care. There are a range of components that make up software, whether you are making it or procuring it. Some of those same components are general – i.e. required by many types of health and care software such as the systems which allow people to log on and access the system, cloud data storage, a way of indexing service users.

When we talk about the platform being made up of building blocks, these are the building blocks we mean. Because when there is a shared index of service users, then you can put information against the same record rather than it being fragmented. When there is a single way of authenticating practitioner users and logging on then they no longer have to manage dozens of individual usernames and passwords.

Whilst being made by a team within an NHS national board (NHS Education for Scotland), we will be making some of these platform components available to organisations outside of the public sector. For example when a third sector organisation is able to use the same service user index, any data logged by the third sector system will be logged on an individual's care record on the platform and therefore accessible by other parts of the sector.

Relevant technology areas of interest

For any third sector organisation, digital technology covers a diverse range of functions and contexts such as hardware provision to staff, your website and social media, and other channels you use to engage with people and database systems.

While we appreciate and welcome organisations who have a strong holistic approach and are growing their digital maturity across the board, the areas where NDS have most interaction with our platform work are the systems and services (practitioner and/or citizen-facing) which:

- create and visualise information relevant to an individual care record
- are used at point of care
- directly support practitioners to make decisions about an individual's care

These therefore are the contexts where we welcome most engagement with regards alignment with our work to ensure decisions made today and in the near future accord with the emerging NDS-enabled landscape. Contexts not included here are likely to be less directly relevant to our 20/21 work and so we may not have capacity to provide input due to capacity in the first instance.

Principles for alignment with the national digital platform

When designing, developing or commissioning such technology in the future **in the context of the platform**, there are some key elements to consider:

Building block re-use. The components or building blocks that NDS are making include where and how data is stored, a means to authenticate practitioners onto the platform, and an index of citizens against which to attach care data. When procuring a new system that involves reading or writing care data about an individual, there will be scope as our work continues for that system to adopt or connect with platform-level building blocks e.g. using the same patient index. Later in 20/21 we shall be publishing guidance as to how to use national digital platform components.

Action: When assessing a new digital solution, understand how it could best make use of platform building blocks – now or in the future - such as indexing.

Standards. The platform will make use of open standards through the use of approaches such as [openEHR](#), [HL7 FHIR](#) and [SNOMED CT](#). We will provide detailed guidance on their usage later in 20/21 but the key thing to understand is if the systems you use can work with these standards. For example, openEHR is a key factor which allows us to move past the current landscape of siloed data storage and into a nationwide central care data repository.

Action: When assessing any new digital system that will record health and care data, understanding if it is currently compliant with these standards and if not, understanding the work required to make it compliant.

Information governance & compliance. The – wholly appropriate – cost of a third-party system aligning with the national digital platform is ensuring that it complies with information governance, security and other compliance factors. We will be publishing compliance requirements later in 20/21.

Action: When assessing a new data product, identify any restrictions around data sharing with third parties.

Digital First Service Standard (for makers). If researching, designing or developing your own digital services, we encourage you to review the Scottish Government's [Digital First Service Standard](#) which also includes alignment with the Scottish Approach to Service Design. While only a requirement when launching a new digital service or redesigning an existing service in the public sector, it does provide an outline of good practice processes.

Action: review the Digital First Service Standard documentation.

Models of engagement with the platform

There are three ways in which you could potentially connect your existing or future systems to the platform:

Scenario 1: Integrating an existing system with the platform. Care data about an individual would then be linked to the wider health and data for that person on the platform. The reason to do this would be to read/write to other platform-held data e.g. anticipatory care plans.

Scenario 2: New system integration with the platform. When implementing a new system, it is specified with openEHR and other platform components at initiation. This again would be done to support a use case or care pathway valuable to you.

Scenario 3: NDS develops a system to serve your needs. A product opportunity related to your work is made part of our work plan and we work in a highly collaborative relationship on design and delivery, as per the Scottish Approach to Service Design.

These scenarios are not formalised 'service offerings' available on a routine basis but describe potential approaches for increased third sector interaction and shaping of the platform. Please note that our formal commission comes from Scottish Government and so any integrations have to be aligned with a relevant item in our work plan. We are keen to hear about approaches, pathways or use cases that you feel align with our work. In the first instance, please contact rohan.gunatillake@nes.scot.nhs.uk