NHS Education for Scotland
Equality Impact Assessment Report

Name of function, policy or programme: Digital Delivery Plan
NES directorate or department: Digital Group

Name of person(s) completing EQIA: David Rome, Kristi Long
Individuals or groups contributing to EQIA: NES Digital Senior Management Team

Date Report Completed: 14/10/2016

1. Define the function[1]

- What is the purpose of the function?
  To deliver a single unified Digital platform (Turas) that puts the user at the centre of that universe – aligning for the first time access to a wide variety of functions including Trainee Programme Management, access to Learning and Portfolios forma single entry point.
- Who does the function benefit and what is the relevance of the function to those groups?
  The function benefits all Healthcare Professionals in Scotland in supporting their career and lifelong learning – which in turn keys in NHS Education for Scotland's mission statement to ensure that patients and their families get the best healthcare possible from well trained and educated staff.
- How are they affected or will they benefit from it?
  Turas will deliver a modern, user-focused, single digital entry point to every aspect of their career and learning management through well-designed technology. Moreover, its "intelligence" will be able to push learning and other aspects to the user pro-actively. Finally, data flows both in and out of other NHS bodies will ensure that any other system the user still uses can integrate seamlessly with Turas to truly bring NHS digital systems together
- What results/outcomes are intended?
  To not only bring together NES Learning and Management systems but also bring together all NHS digital systems.
- What is NES's role in developing and delivering the function?
  NES lead on the technical development and implementation of the Turas system
- Who are the partners in developing and delivering the function and what are their roles?
  NES have a strategic relationship with PA Consulting to market the system to a wider national and international community but also use a number of agencies to manage the technical delivery of the Turas system

[1] [1] In this document, 'function' is used broadly to cover all the areas of work for which impact assessment is required, as defined in the Regulations. This includes policy, programme, project, service and function, among others.

2. Evidence used to inform assessment

Briefly summarise or list the types of evidence you have used in this EQIA. (Evidence may include surveys, statistical data; consultation responses, in-depth interviews, academic or professional publications, scoping studies). You may also attach a bibliography or list of references.

Summary of demographic profile of NHSScotland workforce

The Information Services Division of NHS National Services Scotland reports on the profile of the NHS workforce. Their summary information on the demographic profile of the NHS workforce is limited, and for most professions they report on only on age and gender of staff in post.
http://www.isdscotland.org/Health-Topics/Workforce/Publications/data-tables.asp

According to the most recent Equality and Diversity tables:

7% of staff identified themselves as disabled, with significant variation between boards. It is likely this this figure is an underestimate of the actual representation of disabled people working in the service, as other research has highlighted barriers to declaring disability in the workplace.

There are significant gaps in the data on ethnicity.

A copy of summary tables of the workforce by age and by gender & working pattern are attached as an appendix. These illustrate the predominance of women in many of the professional groups in NHSScotland. Nursing and midwifery, administrative and support services are staff groups marked by an older age demographic.

There are, thus, significant gaps in the information available to us on the demographic profile of NHS staff, who are the core users of our digital products. In particular, we have very limited information on disability, and most boards do not hold information centrally on specific impairments by staff group, or on the types of assistive technology used by their staff.

In some NES educational programmes, demographic data on specific user groups (eg, medical trainees, specific staff groups) will be held locally and can be used to inform specific product developments.

NES carried out a literature review of digital inclusion in learning in health care, which identified the following issues for consideration:

Access to digital environments/ICT.

A number of factors impact on access to ICT and digital environments:

- Age – older people may have less access to ICT or access ICT differently, using different technologies, software, or different ICT practices.
- Disability – although some disabled people are agile adopters of technology. Disabled people may adopt different technologies. This is highly intersectional with income.
- Income is strongly related to access to ICT, particularly networked computers.
- Gender – women's access to/use of ICT at home has been shown in some studies to be more contingent, with women more likely to give priority access to computer to children or others in family. Women who are lone parents are also disproportionately represented in lower income groups.
- Professional group – in NHS, professional group strongly impacts access to ICT or empowerment to use ICT in the workplace.
- Geography – broadband connectivity varies, with gaps in some remote/rural areas but also in many acute service environments.

Accessibility and usability of digital environments

- Very significant issue for disabled people, affecting people in terms of sensory impairment, cognitive issues, mobility (eg, input devices, navigation, etc).
- Issues relate to navigation (ease, logic, layout), interoperability with assistive technologies), ability to read screen, accessibility/useability of multimedia content, accessibility of PDF content, accessibility of interactive content.
- Also issues relating to age, particularly re font size, contrast, personalisation.
- Issues arising from hardware or connectivity limitations which impact on usability – these often arise for people with lower incomes, or in remote/rural areas with limited connectivity, or where software is not regularly updated (eg, health boards. Also, older users often do not update software regularly).

'Digital literacies' and skills for digital learning

- Arises for people of all ages, but issues may be different at different ages. (That is, younger people may require support for different skills for digital learning than older learners).
- Lack of transferability of digital skill from one domain (eg, social media for interaction) to another (eg, social media for learning).
- Particular issues for: those with less educational experience (lower 'educational capital' – significant implications for widening access agenda)

- There may be additional issues for disabled learners who may also have to add digital skills for use of assistive technology and thus require more time for skills development.

Inclusivity of digital products (eg, learning resources, information resources)

- Issues of appropriateness of language, educational activity design, assessment, instruction, range of educational approaches/activities.
- Support for range of learning styles
- In health service, issues highlighted particularly include:
    - Dyslexia and specific learning difficulties
    - Differences in educational backgrounds – different levels/contexts of learning (range of issues here, including different types of education, different levels of educational experience, international education)
    - Language – eg, ESOL – both spoken and literacy
    - Literacies – reading, writing, maths, digital
- Overlaps with issues re digital literacies/skills for learning highlighted above

3. Results from analysis of evidence and engagement

Our review of the evidence highlighted the following issues for consideration in development and implementation of the Digital Delivery Plan:

3.1 Accessibility: Improving the accessibility of digital offerings is a key aim of the plan. In order to achieve this, it will be necessary to assure the accessibility of:

3.1.1 Digital Platform(s) – the infrastructure used to deliver content must be easy to access by the users and must meet relevant accessibility standards.

3.1.2 Digital Content – this refers to publications, e-learning modules, films or other types of content which will be hosted on digital platforms. This must be developed and delivered so that it meets user needs and is accessible to those who will access it.

Accessibility is important to a wide range of users, but it is particularly relevant for:

- Disabled people, who may experience a range of different types of barriers to access, usability and satisfactory user experience of digital platforms and content.

- People on lower incomes, who may have less access to digital technologies, including broadband access.
- Users in some remote or rural environments, who may have limited connectivity.
- People who have limited literacy, digital literacy or English language skills, which may impact on learning.

3.2 Digital Literacies: Research highlights the importance of developing digital literacies for working with digital products (eg, e-portfolio, software packages, etc) and for learning with digital resources (eg, e-learning content, online courses, self-directed digital learning, etc). Research also indicates that digital literacies developed for one mode (eg, working with computers or smartphones) may not necessarily transfer to others (eg, learning using computers or smartphones), and that the specific learning needs for developing digital literacies can be affected by a number of intersecting factors, including age, socio-economic background, educational experience, other literacies (eg, reading, writing, English language fluency), or specific learning differences such as dyslexia. Some disabilities may also have impact on digital literacies development.

There is a need to consider development of digital literacies in relation to:

- producing digital products and content (this may be specific to NES staff)
- working with digital systems (platforms, software) (for staff and service users)
- digitally mediated learning (for staff and service users)

3.3 Equality and diversity data and analytics:

NES's digital systems will hold data on trainee heal professionals, and, via user profiles, on users of the digital products accessed via the Turas system. It will be important to consider what equality and diversity related data should be collected and analysed in order to support NES to deliver its general equality duties and the commitments of its Inclusive Education and Learning Policy in the delivery of its educational functions broadly, and also to gather information on the accessibility and usability of the Turas platform and the digital systems and products accessed via the platform for the purpose of improving their quality.

Data collection and analytics in the Turas system would initially have three main aims:

- to provide analytics on trainee attainment and progression for vocational and postgraduate training programmes, enabling NES to monitor differences in attainment by protected characteristic in its educational quality management processes.
- To collect data on users of NES digital products via learner profiles in order to improve intelligence on learner diversity, learner engagement,

and learner needs.

- To enable link between learner feedback on learning programmes and demographic data, improving intelligence on how diversity impacts learner experience.

3.4 Systems support, feedback and engagement

It will also be important to consider how systems for support, complaints & feedback and engagement both take account of and help us to understand stakeholder diversity. Some of the specific issues to consider in this area are as follows:

- How will systems support be set up to provide support for users who may access products in less traditional ways – eg out of hours? This may be particularly relevant for women, support workers, shift workers, who may have less access to computers or protected learning time in work.
- How does systems support take account of the different digital literacies needs of learners from varying backgrounds?
- Are systems support processes disability-proofed – do they understand interfaces with assistive technologies?
- Are appropriate data linkages in place to analyse complaints and feedback from different demographic groups?
- Are complaints and feedback systems set up to collect feedback on accessibility?
- How are we engaging with diverse stakeholders?

4. Actions taken or planned in response to issues identified in the analysis

Issue identified	Action to be taken in response to issue	Responsibility	Timescale (indicate whether actions have already been completed, or provide timescale for carrying out the action)	Resources required	What is the expected outcome?
E&D data should not be a stand-alone area but the data should be captured via business areas and defined by the PO	Product Owners to define where and when data is required and built into functional areas	Product Owners	December 2016	n/a	A robust anonymous E&D reporting suite can be built by our BI team
Browser issues / access to video and eLearning etc. IE v8 is min. specification	Digital Director to liaise eHealth Leads to press the need to ensure NHS Scotland staff have access to computers with this minimum standard, from their workplace	Digital Director	December 2016	n/a	All NHS Scotland staff have access to our systems from compatible computers
WiFi / Connectivity issues in Rural and Remote areas	Turas records tickets saying that there are connectivity issues and NES to report out the scale of this issue	Turas Development Team	December 2016	n/a	We can identify and report in detail the scale of the issue
Accessibility – ensure our product is designed and tested in accordance with Level AA Conformance to Web Content Accessibility Guidelines 2.0	Turas delivery teams to ensure that product is developed against these standards and Testing / UAT communities explicitly test against them	Turas Testing Teams & UAT community	December 2016	n/a	Turas passes explicit Pen Testing in this area

Issue identified	Action to be taken in response to issue	Responsibility	Timescale (indicate whether actions have already been completed, or provide timescale for carrying out the action)	Resources required	What is the expected outcome?
Digital Content is designed robustly against NES Digital Content Standards	In house teams are trained and given easy access to the approved standards and then follow them rigidly. External agencies that are awarded work are given full sight of the standards in tender documentation and are only awarded contract if they sign up to follow them	Digital Management, Procurement Teams and NES Business Team who first commissioned work	On-going	NES digital content standards NES Digital and Business teams to sign off and approve learning developed before deployment	All eLearning produced buy any agency, internal or external, strictly follow the standards laid out and therefore can easily be introduced to the Turas platform technically but also be seen as branded as NES digital learning to the user
Mobile compatibility Mobile 1st where appropriate	Ensure design and testing is Mobile 1st	Turas Testing Teams + UAT community	Already underway / Complete	n/a	Turas can be accessed via a wide range of devices, thus not impacting on users preference or skills
Support tickets with accessibility issues	Turas records tickets saying that there are accessibility issues and NES to report out the scale of this issue	Turas Support Team	December 2016	n/a	We can identify and report in detail the scale of the issue, and furthermore enhance the system as appropriate to close any gaps

Issue identified	Action to be taken in response to issue	Responsibility	Timescale (indicate whether actions have already been completed, or provide timescale for carrying out the action)	Resources required	What is the expected outcome?
Digital Literacy	Strong Agile development principles ensure that a constant feedback loop exists to ensure product is intuitive	Turas UX, Testing Teams + UAT community	Already underway / Complete	n/a	Turas is a system that has been rigorously tested to ensure it is as initiative as possible to the widest cross section of users
Ability to report out users by Scottish Index of Multiple Deprivation (SIMD)	Clean the user postcode data to ensure we have a robust, clean set of data to analyse	Digital Business Intelligence Unit	April 2017	Postcode checking software required	A suite of reports to analyse our users by geographic location, to identify SIMD score
Known E&D Data Specification	Creation of an E&D Data Specification for Turas	E&D Leads	August 2016		A clearly understood E&D data specification to report against
E&D reporting suite	Creation of an E&D Data Reporting on Turas	Digital Business Intelligence Unit	Commencing after previous action		A robust anonymous E&D reporting suite.

5. Risk Management

In this assessment, have you identified any equality and diversity related risks which require ongoing management? If so, please attach a risk register identifying the risks and arrangements for managing the risks.

Any risks identified in this process should be added to the appropriate project or organisational risk register. See the NES risk management guidance for advice on identifying and scoring risks, or take advice from your directorate's risk champion.

None Identified

6. Consideration of Alternatives and Implementation

Note that if the impact assessment indicates that a function will negatively discriminate, either indirectly or through discrimination arising from disability, the function must be objectively justified[2]. This may require taking legal advice. If the function is to be objectively justified, outline the justification here, including analysis of any alternatives. See the guidance notes for instructions.

None Identified

7. Monitoring and Review

Monitoring and review of equality impact should ideally be part of a wider monitoring or review process.

Please explain how the function will be monitored and reviewed, including:

What data will be collected, at what time?
Data will be collected on an ongoing basis, automatically by the system

What analysis of the data will be undertaken?
Various reporting triggers will be identified, developed and used depending on the measure in question

Are there specific targets or indicators to be monitored?
Unknown

How will results of monitoring be reported, when, and to whom?

- Results will be reported by Project Leads and reported to the monthly Senior Management Team meeting, held on the second Monday of the month
- Exceptions will be reported by the Digital Director to the Operational Leads Group

[2] Direct discrimination cannot be justified other than on very narrow grounds in relation to age. If the EQIA indicates that a function discriminates directly, it should not be implemented.

When will you review the function, taking into account any monitoring information?
Turas will be reviewed and assessed every time a MVP is launched, and will be monitored on an annual basis via Pen Testing

Who will be responsible for leading this review?
Digital Director

Sign off (by accountable director)

Christopher Wroath

Date 18/10/2016