

**The Digital Technology Assessment Criteria**

**For Health and Social Care (DTAC)**

# Pathway

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The assessment criteria is made up of five core components. Sections A and B will provide the assessors the context required to understand your product and support your evidence. The core assessment criteria is defined in section C1-C4. Section D details the key Usability and Accessibility principles required. Further frequently asked questions are available at the end of the document.

The core criteria in Section C will determine the overall success of the assessment of your product or service. The accompanying score provided from Section D will show the level of adherence to the NHS Service Standard.

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# A. Company information - Non-assessed section

Information about your Organisation and contact details.

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| **Code** | **Question** | **Options** |
| A1 | Provide the name of your company | EMIS Ltd |
| A2 | Provide the name of your product | Pathway |
| A3 | Provide the type of product | Software as a Service (SaaS) |
| A4 | Provide the name and job title of the individual who will be the key contact at your organisation | Mihan Mohamed (Product Director)  Jenny Hamilton (Product Owner) |
| A5 | Provide the key contact's email address | Mihad.mohamed@emishealth.com / Jenny.hamilton@emishealth.com |
| A6 | Provide the key contact's phone number | 0330 024 1269 |
| A7 | Provide the registered address of your company | Fulford Grange, Micklefield Lane, Rawdon, Leeds LS19 6BA |
| A8 | In which country is your organisation registered? | United Kingdom |
| A9 | If you have a Companies House registration in the UK please provide your number | EMIS LTD (02117205) |
| A10 | If applicable, when was your last assessment from the Care Quality Commission (CQC)? | Not applicable |
| A11 | If applicable, provide your latest CQC report. | Not applicable |

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# B. Value proposition - Non-assessed section

Please set out the context of the clinical, economic or behavioural benefits of your product to support the review of your technology. This criteria will not be scored but will provide the context of the product undergoing assessment.

Where possible, please provide details relating to the specific technology and not generally to your organisation.

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| **Code** | **Question** | **Options** | **Supporting information** |
| B1 | Who is this product intended to be used for? | **Clinical Support**  Pathway is provided for trained health care staff and administrative staff. Access is governed in the system by Role Based Access Control (RBAC), which is agreed with NHS Digital. Enabling the users to view a list of Patients which have been selected for a purpose of reviewing, contacting and potentially sharing the list and selected healthcare data with another healthcare provider to provide the appropriate care pathway for the selected Patients. |  |
| B2 | Provide a clear description of what the product is designed to do and of how it is expected to be used | Pathway  The aim of Pathway is to help optimise how care pathways are managed. EMIS work closely with the NHS, the Life Sciences industry, and other partners to create Pathway Modules that achieve this aim. These modules seek to identify cohorts of people across organisations that may benefit from an intervention, within or outside of their organisation, and provide actionable tools to support those healthcare professionals in managing the populations. In addition, Pathway will provide insights to stakeholder organisations to support service evaluation and improvement. Users with appropriate role-based access will be able to access Pathway from within EMIS Web as well as in a web application on most browsers. GP practices as data controller must accept the Pathway product T&Cs to view the different Pathway Modules available to them and then accept the T&Cs and the data sharing agreement of the individual Pathway Modules that they are interested in.GP practices and external healthcare providers (if Patients have been shared with them by the GP practices) can send templated communications directly to Patients via the Pathway product. | This question is a context question and therefore a high-level summary is required. |
| B3 | Describe clearly the intended or proven benefits for users and confirm if / how the benefits have been validated | Pathway has been created to enable proactive care for Patients. To do this, the product has been designed to be as efficient as possible for GPs to use.  The data sharing feature means that GPs can share Patient lists and relevant health data with other health care teams in the particular Pathway area and therefore not take on more work when they are already stretched.  It can also reduce the workload on GPs by removing the need to build their own searches and then use external systems to send messages to the selected Patients.  The largest benefit is for the Patients to receive care and or treatment for something they may not even have been aware that they needed.  Case study - https://www.emishealth.com/news-insights/collaborating-to-eliminate-hepatitis-c | This question is a context question and therefore a high-level summary is required.  If your product has had an evaluation or undergone clinical trials include this information. |
| B4 | Please attach one or more user journeys which were used in the development of this product  Where possible please also provide your data flows | Provided | This question is a context question, and it is expected that existing documentation will be provided.  GOV.UK provides guidance on [how to make a user journey map](https://designnotes.blog.gov.uk/2016/04/21/how-to-make-a-user-journey-map/) and what should be included.  Data flows enable the assessor to understand how data moves through a product. This may be included within a Data Protection Impact Assessment. If this is the case, please provide as a separate attachment for ease of review. |

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# C. Technical questions - Assessed sections

## C1 - Clinical safety

Establishing that your product is clinically safe to use.

You must provide responses and documentation relating to the specific technology product that is subject to assessment.

The DCB0129 standard applies to organisations that are responsible for the development and maintenance of health IT systems. A health IT system is defined as “product used to provide electronic information for health and social care purposes”. DTAC is designed as the assessment criteria for digital health technologies and C1 Clinical Safety Criteria is intended to be applied to all assessments. If a developer considers that the C1 Clinical Safety is not applicable to the product being assessed, rationale must be submitted exceptionally detailing why DCB0129 does not apply.

The DCB0160 standard applies to the organisation in which the health IT is deployed or used. It is a requirement of the standard (2.5.1) that in the procurement of health IT systems the organisation must ensure that the manufacturer and health IT system complies with DCB0129. The organisation must do so in accordance with the requirements and obligations set out in the DCB0160 standard. This includes personnel having the knowledge, experience and competences appropriate to undertaking the clinical risk management tasks assigned to them and organisations should ensure that this is the case when assessing this section of the DTAC.

If the Clinical Safety Officer or any other individual has concerns relating to safety of a medical device including software and apps, this should be reported to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting system: [Report a problem with a medicine or medical device - GOV.UK (www.gov.uk)](https://www.gov.uk/report-problem-medicine-medical-device).

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| **Code** | **Question** | **Options** | **Supporting information** | **Scoring criteria** |
| C1.1 | Have you undertaken Clinical Risk Management activities for this product which comply with DCB0129? | Yes | The [DCB0129](https://digital.nhs.uk/data-and-information/information-standards/information-standards-and-data-collections-including-extractions/publications-and-notifications/standards-and-collections/dcb0129-clinical-risk-management-its-application-in-the-manufacture-of-health-it-systems) standard applies to organisations that are responsible for the development and maintenance of health IT systems. A health IT system is defined as ‘“product used to provide electronic information for health and social care purposes”. | To pass, the developer is required to confirm that they have undertaken Clinical Risk Management activities in compliance with DCB0129. |
| C1.1.1 | Please detail your clinical risk management system | Provided | DCB0129 sets out the activities that must and should be undertaken for health IT systems. | To pass, the developer is required to evidence that a clinical risk management system is in place and that it is compliant with the requirements set out in DCB0129.  This should include:   * The clinical risk management governance arrangements that are in place * The clinical risk management activities * Clinical safety competence and training * Audits |
| C1.1.2 | Please supply your Clinical Safety Case Report and Hazard Log | Provided | Specifically, your DTAC submission should include:   * A summary of the product and its intended use * A summary of clinical risk management activities * A summary of hazards identified which you have been unable to mitigate to as low as it is reasonably practicable * The clear identification of hazards which will require user or commissioner action to reach acceptable mitigation (for example, training and business process change)   It should not include the hazard log in the body of the document - this should be supplied separately. | To pass, the developer is required to submit the Clinical Safety Case Report and Hazard Log that is compliant with the requirements set out in DCB0129. This should be commensurate with the scale and clinical functionality of the product and address the clinical risk management activities specified with the standard.  The Clinical Safety Case Report should present the arguments and supporting evidence that provides a compelling, comprehensible and valid case that a system is safe for a given application in a given environment at the defined point in the products lifecycle. It should provide the reader with a summary of all the relevant knowledge that has been acquired relating to the clinical risks associated with the product at that point in the life cycle:   * A clear and concise record of the process that has been applied to determine the clinical safety of the product * A summary of the outcomes of the assessment procedures applied * A clear listing of any residual clinical risks that have been identified and the related operational constraints and limitations that are applicable * A clear listing of any hazards and associated clinical risks that have been transferred, together with any declared risk control measures, that are to be addressed as part of the clinical risk management process in the organisation where the product is being deployed * A listing of outstanding test issues / defects associated with the product which may have a clinical safety impact.   The Hazard Log should record and communicate the on-going identification and resolution of hazards associated with the product. All foreseeable hazards should be identified, and the risk of such hazards should be reduced to acceptable levels.  A summary should also be provided to the assessor of identified hazards that the developer has been unable to mitigate to as low as it is reasonably practicable. It should also clearly identify the hazards which will require user or commissioner action to reach acceptable mitigation. |
| C1.2 | Please provide the name of your Clinical Safety Officer (CSO), their profession and registration details | CSO: Sarah Opoku-Boateng  Registered Pharmacist  GPhC: 2220314 | The CSO must:   * Be a suitably qualified and experienced clinician * Hold a current registration with an appropriate professional body relevant to their training and experience * Be knowledgeable in risk management and its application to clinical domains * Be suitably trained and qualified in risk management or have an understanding in principles of risk and safety as applied to Health IT * Have completed appropriate training | To pass, the developer must have a named CSO which can be through an outsourced arrangement.  They must be a suitably qualified and experienced clinician and hold a current registration with an appropriate professional body relevant to their training and experience. |
| C1.3 | If your product falls within the UK Medical Devices Regulations 2002, is it registered with the Medicines and Healthcare products Regulatory Agency (MHRA)? | Not Applicable | Pathway does not fall within the UK Medical Devices Regulation 2002 and is therefore not registered with the MHRA.  The MHRA provides guidance on medical devices to place them on the market in Great Britain and Northern Ireland, [regulatory requirements](https://www.gov.uk/guidance/regulating-medical-devices-in-the-uk) for all medical devices to be placed on the UK market, [conformity assessment](https://www.gov.uk/guidance/medical-devices-conformity-assessment-and-the-ukca-mark) and the UK Conformity Assessed (UKCA) mark, [classification of stand-alone medical device software](https://www.gov.uk/government/publications/medical-devices-software-applications-apps) (including apps) and [how to tell if your product falls within the UK Medical Devices Regulations 2002](https://www.gov.uk/guidance/borderline-products-how-to-tell-if-your-product-is-a-medical-device). | To pass, if the product falls within the UK Medical Device Regulations 2002 and is required to be registered with the MHRA, the product must have a valid registration.  It is currently possible that products do fall within the UK Medical Devices Regulations 2002 but are not yet required to be registered with the MHRA. |
| C1.3.1 | If yes, please provide your MHRA registration number | Not Applicable |  | To pass, the registration number must be valid. |
| C1.3.2 | If the UK Medical Device Regulations 2002 are applicable, please provide your Declaration of Conformity and, if applicable, certificate of conformity issued by a Notified Body / UK Approved Body | Not Applicable | Medical device manufacturers must ensure that their device complies with the relevant Essential Requirements of the legislation and draw up a Declaration of Conformity to declare this.  Class I devices with a measuring function and devices in Class IIa, IIb and III must undergo conformity assessment from an EU Notified Body or UK Approved Body which has been designated for medical devices, and be issued a certificate of conformity (commonly referred to as a “CE certificate” or “UKCA certificate”). | To pass, valid documentation appropriate to the risk classification of the device must be provided. |
| C1.4 | Do you use or connect to any third-party products? | Yes | If no, continue to section C2.  [DCB0129](https://digital.nhs.uk/services/clinical-safety/documentation#clinical-risk-management) contains the requirements in relation to third party products. |  |
| C1.4.1 | If yes, please attach relevant Clinical Risk Management documentation and conformity certificate | No evidence available  Pathway is connected to the third-party supplier, Amazon Web Services (AWS). Any new partners would be assessed and accredited on an individual basis through the Partner onboarding process. Specific 3rd party partners can be addressed directly for conformity. |  | To pass, a valid conformity certificate must be provided. The Clinical Risk Management documentation must meet the requirements detailed in question C1.1. |

## C2 - Data protection

## Establishing that your product collects, stores and uses data (including personally identifiable data) compliantly.

This section applies to the majority of digital health technology products however there may be some products that do not process any NHS held patient data or any identifiable data. If this is the case, the Data Protection Officer, or other suitably authorised individual should authorise this data protection section being omitted from the assessment.

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| **Code** | **Question** | **Options** | **Supporting information** | **Scoring criteria** |
| C2.1 | If you are required to register with the Information Commissioner, please attach evidence of a current registration.  If you are not required to register, please attach a completed self-assessment showing the outcome from the Information Commissioner and your responses which support this determination. | Provided  Reg no:  Z5514037 | There are some instances where organisations are not required to register with the Information Commissioner. This includes where no personal information is being processed.  The Information Commissioner has a [registration self-assessment tool](https://ico.org.uk/for-organisations/data-protection-fee/self-assessment/) to support this decision making. | To pass, the developer is required to submit evidence that they have a current registration with the Information Commissioner. This can be validated against the [Information Commissioner's Register of Fee Payers](https://ico.org.uk/about-the-ico/what-we-do/register-of-fee-payers/).  Alternatively, if the developer confirms they are not registered with the Information Commissioner because they are not required to do so, then a self-assessment from the Information Commissioner’s self-assessment tool should be attached which aligns to the product. |
| C2.2 | Do you have a nominated Data Protection Officer (DPO)? | Yes | Not all organisations are required to have a [Data Protection Officer](https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-officers/#ib1) (DPO). This is determined by the type of Organisation and core activities. The most common reason for organisations providing digital health technologies to have a DPO is due to the core activities involving processing health data (being a special category).  The Information Commissioner has a [self-assessment tool](https://digital.nhs.uk/services/clinical-safety/documentation#clinical-risk-management) to determine whether you must appoint a DPO. |  |
| C2.2.1 | If you are required to have a nominated Data Protection Officer, please provide their name.  If you are not required to have a DPO please attach a completed self-assessment showing the outcome from the Information Commissioner and your responses which support this determination. | Ian McKie  Privacy@emisgroupplc.com |  | To pass, the developer is required to confirm they have a DPO in place where this is mandated. Where a DPO one is in place if it is not required by the Information Commissioner then this will also constitute a pass.  Alternatively, if the developer confirms they do not have a DPO because they are not required to do so, then a self-assessment from the Information Commissioners self-assessment tool should be attached which confirms this and aligns to the product. |
| C2.3 | Does your product have access to any personally identifiable data or NHS held patient data? | Yes | The UK General Data Protection Regulation (GDPR) applies to the processing of [personal data](https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/).  If no, continue to question C2.4 |  |
| C2.3.1 | Please confirm you are compliant (having standards met or exceeded status) with the annual Data Security and Protection Toolkit Assessment.  If you have not completed the current year's assessment and the deadline has not yet passed, please confirm that you intend to complete this ahead of the deadline and that there are no material changes from your previous year’s submission that would affect your compliance. | Confirmed | The [Data Security and Protection Toolkit](https://digital.nhs.uk/data-and-information/looking-after-information/data-security-and-information-governance/data-security-and-protection-toolkit) allows organisations to measure performance against the National Data Guardian’s 10 data security standards. | To pass, the developer must confirm that they are compliant with the Data Security and Protection Toolkit Assessment. This should be validated against the [Data Security and Protection Toolkit database](https://www.dsptoolkit.nhs.uk/OrganisationSearch) and achieve Standards Met or Exceeded status.  Dependent on the date of the assessment versus the opening of the annual assessment period, it may be that a developer has not yet completed the toolkit. The developer is asked to confirm that they will complete the assessment and that they will maintain their compliance versus the previous year. |
| C2.3.2 | Please attach the Data Protection Impact Assessment (DPIA) relating to the product. | Provided | [DPIA’s](https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/) are a key part of the accountability obligations under the UK GDPR, and when done properly help organisations assess and demonstrate how they comply with data protection obligations.  The Information Commissioner has provided guidance on [how to complete a DPIA](https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/data-protection-impact-assessments-dpias/how-do-we-do-a-dpia/#how9) and a [sample DPIA template](https://ico.org.uk/media/for-organisations/documents/2553993/dpia-template.docx). | To pass, the developer must provide a DPIA that is compliant with the requirements set out under the General Data Protection Regulations. It should ensure that risks to the rights and freedoms of natural persons are managed to an acceptable level.  The DPIA should:   * Establish the context; taking into account the nature, scope, context and purposes and processing and the sources of the risk * Assess the risks; considering the particular likelihood and severity of high risks * Treat the risks; through mitigation and ensuring the protection of personal data and demonstrating compliance with the GDPR   It should include:   * A description of the envisaged processing operations and the purposes of the processing * An assessment of the necessity and proportionality of the processing * An assessment of the risks to the rights and freedoms of data subjects * The measures envisaged to address the risks and to demonstrate compliance with the GDPR |
| C2.4 | Please confirm your risk assessments and mitigations / access controls / system level security policies have been signed-off by your Data Protection Officer (if one is in place) or an accountable officer where exempt in question C2.2. | Confirmed |  | To pass, the developer must confirm that their Data Protection Officer or accountable officer has signed-off the risk assessments and mitigations / access controls and system level security policies. |
| C2.5 | Please confirm where you store and process data (including any third-party products your product uses) | UK only | Individual organisations within the Health and Social Care system are accountable for the risk-based decisions that they must take. | Individual organisations within the Health and Social Care system are accountable for the risk-based decisions that they must take.  Due consideration should be taken where data is processed outside of the UK.  Please note: It is a contractual requirement under the new GP IT Futures (GPITF) framework as it was in the GP System of Choice (GPSoC) framework, to host all data in England. |
| C2.5.1 | If you process store or process data outside of the UK, please name the country and set out how the arrangements are compliant with current legislation | N/A remains within UK | From 1 January 2021, the UK GDPR applies in the UK in place of the “EU GDPR’. The UK GDPR will carry across much of the existing EU GDPR legislation. The Department for Digital, Culture, Media & Sport has published two [Keeling Schedules](https://www.gov.uk/government/publications/data-protection-law-eu-exit) which show the changes to the Data Protection Act 2019 and EU GDPR.  The Information Commissioner has published guidance on [international data transfers](https://ico.org.uk/for-organisations/dp-at-the-end-of-the-transition-period/data-protection-now-the-transition-period-has-ended/the-gdpr/international-data-transfers/) after the UK exit from the EU Implementation Period. | Individual organisations within the Health and Social Care system are accountable for the risk-based decisions that they must take.  Due consideration should be taken where data is processed outside of the UK and should only be hosted within the European Economic Area (EEA) or a country deemed as adequate by the European Commission.  To pass, the developer must demonstrate that the country in which data is processed or stored is compliant with current legislation or the organisation's policy (should this differ). |

## C3 - Technical security

Establishing that your product meets industry best practice security standards and that the product is stable.

Dependent on the digital health technology being procured, it is recommended that appropriate contractual arrangements are put in place for problem identification and resolution, incident management and response planning and disaster recovery.

Please provide details relating to the specific technology and not generally to your organisation.

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| **Code** | **Question** | **Options** | **Supporting information** | **Scoring criteria** |
| C3.1 | Please attach your Cyber Essentials Certificate | Provided - Certificate attached | [Cyber Essentials](https://www.ncsc.gov.uk/cyberessentials/overview) helps organisations guard against the most common cyber threats.  The National Cyber Security Centre (NCSC) have published [cyber security guidance for small to medium enterprises](https://www.ncsc.gov.uk/section/information-for/small-medium-sized-organisations) (SME’s). | To pass, developers must have a valid Cyber Essentials certificate. Certification lasts for a period of 12 months so the certificate should be within date. This should be validated against the [IASME database](https://iasme.co.uk/certified-organisations/).  NHS organisations are required to have Cyber Essentials in place (and is now incorporated into the NHS Digital Data Security and Protection Toolkit (DSPT) for NHS Trusts and Foundation Trusts in 2021-22 assessments) and to mitigate risk within the supply chain, suppliers should hold Cyber Essentials. |
| C3.2 | Please provide the summary report of an external penetration test of the product that included Open Web Application Security Project (OWASP) Top 10 vulnerabilities from within the previous 12-month period. | Provided | The NCSC provides guidance on [penetration testing](https://www.ncsc.gov.uk/guidance/penetration-testing). The OWASP Foundation provides guidance on the [OWASP top 10 vulnerabilities](https://owasp.org/www-project-top-ten/). | To pass, the developer must evidence that the product has undergone an external penetration test that included the OWASP top 10 vulnerabilities.  The penetration testing / summary report must demonstrate there are no vulnerabilities that score 7.0 or above using the [Common Vulnerability Scoring System](https://www.first.org/cvss/) (CVSS). |
| C3.3 | Please confirm whether all custom code had a security review. | Yes - Internal code review  Security, privacy and information governance are at the heart of our business and values. EMIS operates according to the highest standards in this area and has rigorous security policies in place led by our Group Security function. EMIS are regularly audited for compliance to ISO standards including ISO27001, NIST guidelines, SOC 2 and OWASP recommendations.  Within this framework, EMIS has dedicated Solution Architecture and Security Architecture teams. These teams ensure that security by design principles are adhered to in all elements of new product and solution design, including but not limited to functional design, software development and cloud infrastructure. The team also continuously review our existing solution set through formal penetration testing and other processes to optimise our functional security.  Within Pathway, we use existing access systems which have their own security reviews (User Groups, Role Based Access Control and the enforcement of MFA). We have tools built into our deployment process which continuously check for security updates and vulnerabilities, we implement any fixes for things detected as soon as possible. | The NCSC provides guidance on [producing clean and maintainable code](https://www.ncsc.gov.uk/collection/developers-collection/principles/produce-clean-maintainable-code). | To pass, the developer must confirm that an internal or an external custom code security review has been undertaken. An external review is preferable; however an internal code review would meet the baseline requirement. |
| C3.4 | Please confirm whether all privileged accounts have appropriate Multi-Factor Authentication (MFA)? | Yes | The NCSC provides guidance on [Multi-Factor Authentication](https://www.ncsc.gov.uk/guidance/multi-factor-authentication-online-services). | To pass, the developer must confirm yes that all privileged accounts have MFA. |
| C3.5 | Please confirm whether logging and reporting requirements have been clearly defined. | Yes | The NCSC provides guidance on [logging and protective monitoring](https://www.ncsc.gov.uk/collection/mobile-device-guidance/logging-and-protective-monitoring).  To confirm yes to this question, logging (e.g., audit trails of all access) must be in place. It is acknowledged that not all developers will have advanced audit capabilities. | To pass, the developer must confirm yes that logging and reporting requirements have been clearly defined. |
| C3.6 | Please confirm whether the product has been load tested | Yes | Load testing should be performed. | To pass, the developer must confirm yes that load testing has been performed. |

## C4 - Interoperability criteria

Establishing how well your product exchanges data with other systems.

To provide a seamless care journey, it is important that relevant technologies in the health and social care system are interoperable, in terms of hardware, software and the data contained within. For example, it is important that data from a patient’s ambulatory blood glucose monitor can be downloaded onto an appropriate clinical system without being restricted to one type. Those technologies that need to interface within clinical record systems must also be interoperable. 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. It allows it to be replicated and scaled up and opens the market for innovation by defining the standards to develop upfront.

This section should be tailored to the specific use case of the product and the needs of the buyer however it should reflect the standards used within the NHS and social care and direction of travel.

Please provide details relating to the specific technology and not generally to your organisation.

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| --- | --- | --- | --- | --- |
| **Code** | **Question** | **Options** | **Supporting information** | **Scoring criteria** |
| C4.1 | Does your product expose any Application Programme Interfaces (API) or integration channels for other consumers? | No | The NHS website developer portal provides guidance on [APIs and the NHS](https://developer.api.nhs.uk/).  Government Digital Services provide guidance on [Open API best practice](https://www.gov.uk/government/collections/api-design-guidance). | To pass, developers must demonstrate that they have API’s that are relevant to the use case for the product, follow Government Digital Services Open API Best Practice, are documented and freely available and that third parties have reasonable access to connect.  APIs should adopt generally accepted standards of data interoperability for the NHS or social care dependent on the use case for the product.  If the product does not have API’s and there is a legitimate rationale for this considering the use case of the product then the buyer can accept this rationale. |
| C4.1.1 | If yes, please provide detail and evidence:   * The API’s (e.g., what they connect to) set out the healthcare standards of data interoperability e.g., Health Level Seven International (HL7) / Fast Healthcare Interoperability Resources (FHIR) * Confirm that they follow Government Digital Services Open API Best Practice * Confirm they are documented and freely available * Third parties have reasonable access to connect   If no, please set out why your product does not have APIs. | Our product is an application which fully developed in house and therefore has not got a need to expose API’s to external companies |  |  |
| C4.2 | Do you use NHS number to identify patient record data? | No | NHS Digital provides guidance on [NHS Login for partners and developers](https://digital.nhs.uk/services/nhs-login/nhs-login-for-partners-and-developers). | To pass, developers should confirm that if a product uses an NHS number to identify a patient record, that it uses NHS Login.  NHS Digital provides a list of all current [digital health and social care services that integrate with NHS Login](https://digital.nhs.uk/services/nhs-login/nhs-login-for-partners-and-developers/nhs-login-integrated-partners-and-services).  If a product does not use NHS Login to establish a verified NHS number, then a legitimate rationale should be set out and the security and appropriateness of the methodology should be considered. |
| C4.2.1 | If yes, please confirm whether it uses NHS Login to establish a user’s verified NHS number.  If no, please set out the rationale, how your product established NHS number and the associated security measures in place. | We do not use NHS Login as the product is not intended for citizen users but rather clinical or administrative personnel. The product sits within EMIS Web and therefore uses that login system. |
| C4.3 | Does your product have the capability for read/write operations with electronic health records (EHRs) using industry standards for secure interoperability (e.g. OAuth 2.0, TLS 1.2) | Yes  Ability to access data which is specifically relevant for the Pathway module and display this to the authorised users of the application (read operation). |  | To pass, developers should confirm that the product has the capability to read/write into EHRs using industry standards for secure interoperability.  If a product does not use industry standards, then a legitimate rationale should be set out and the security, usability and appropriateness of the methodology should be considered. |
| C4.3.1 | If yes, please detail the standard | For authentication we use AWS cognito and Azure B2C and for connections we use TLS (1.2 or greater) |
| C4.3.2 | If no, please state the reasons and mitigations, methodology and security measures. |  |
| C4.4 | Is your product a wearable or device, or does it integrate with them? | No | If no, continue to section D. | To pass, the developer must evidence compliance with ISO/IEEE 10073 |
| C4.4.1 | If yes, provide evidence of how it complies with ISO/IEEE 11073 Personal Health Data (PHD) Standards. | No evidence required | [Access the ISO Standard.](https://www.iso.org/standard/46493.html) This is a paid-for document. |

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# D. Key principles for success

The core elements defined in this section will form part of the overall review of the product or service and is a key part to ensuring that the product or service is suitable for use. The assessment will set a compliance rating and where a product or developer is not compliant highlight areas that the organisation could improve on with regards to following the core principles.

This section will be scored in relation to the [NHS service standard](https://service-manual.nhs.uk/service-standard). This will not contribute to the overall Assessment Criteria as set out in Section C.

## D1 - Usability and accessibility - scored section

Establishing that your product has followed best practice.

Please note that not all sections of the NHS Service Standard are included where they are assessed elsewhere within DTAC, for example clinical safety.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Code** | **Question** | **Options** | **Supporting information** | **Weighted score** | **Scoring criteria** |
| D1.1 | **Understand users and their needs in context of health and social care**  Do you engage users in the development of the product? | **Yes** | [NHS Service Standard Point 1](https://service-manual.nhs.uk/service-standard/1-understand-users-and-their-needs-context-health-and-care) | 10% | Developers should be awarded 10% if they demonstrate that user need has been taken in account through user research, search data, analytics or other data to understand the problem.  The submission should confirm that the developer has considered, and tested user needs with appropriate stakeholders (stakeholders will differ depending on the product) and that as the product continues to iterate user engagement has continued.  If the developer selects working towards it and/or can only partially evidence the requirement, for example user need has only partially been considered or it is not considered on an ongoing basis they should be awarded 5%.  If the developer selects no to this question or cannot provide evidence that user need has been considered, they should be awarded 0%. |
| D1.1.1 | If yes or working towards it, how frequently do you consider user needs in your product development and what methods do you use to engage users and understand their needs? | At EMIS we have a dedicated user-centred design team, known internally as the Product Experience & Design (PXD) department.    The PXD Department in total comprises 30+ professionals who are dedicated to understanding the end users of their respective products and who also have access to specialist training subscriptions so that they can continuously improve their skills and keep up to date on UX best practice.    The team activities adhere to both the NHS Service Standard as well as the ‘six principles of human centred design’ ISO 9241-2010:2010. We ensure an evidence based approach to design transitioning from understanding users early in Discovery to feeding solutions with the insights. We continuously validate and iterate ideas and solutions with end users as well as our internal clinical colleagues. The following graphic shows our process for user centricity and we have demonstrated where the process addresses the NHS Service Standards specifically pertaining to user centricity and ways of working, as well as the ISO principles. |
| D1.2 | **Work towards solving a whole problem for users**  Are all key user journeys mapped to ensure that the whole user problem is solved, or it is clear to users how it fits into their pathway or journey? | Yes | [NHS Service Standard Point 2 and Point 3](https://service-manual.nhs.uk/service-standard/2-and-3-work-towards-solving-a-whole-problem-and-provide-a-joined-up-experience) are often dealt with by teams together. | 10% | Developers should be awarded 10% if they attach supporting information showing that the product solves a whole user problem or that it is clear to users how it fits into their pathway or journey.  If the developer selects working towards it and can provide evidence that goes some way to explaining how the whole user problem is solved or only partially explains how the product fits a user journey, they should be awarded 5%.  If the developer selects no to this question or cannot provide evidence that shows the user journey or how the product fits into the pathway or journeys, they should be awarded 0%. |
| D1.2.1 | If yes or working towards it, please attach the user journeys and/or how the product fits into a user pathway or journey | Provided  As part of our Define and Design stage the team engage with the product requirements, work with our internal clinical colleagues and iteratively design solutions with external end users to optimise clinically safe experiences. These activities as well as our clinical safety reviews, ensure we adhere to ‘Service Standard 16 – Make your service clinically safe’. |
| D1.3 | **Make the service simple to use**  Do you undertake user acceptance testing to validate usability of the system? | Yes | [NHS Service Standard Point 4](https://service-manual.nhs.uk/service-standard/4-make-the-service-simple-to-use) | 10% | Developers should be awarded 10% if they attach supporting information showing user acceptance testing to validate usability of the product.  If the developer selects working towards it and can provide evidence that goes some way to demonstrate that user acceptance testing is being used to validate usability of the system, they should be awarded 5%.  If the developer selects no to this question or cannot provide evidence that shows user acceptance testing to validate usability of the system, they should be awarded 0%. |
| D1.3.1 | If yes or working towards it, please attach information that demonstrates that user acceptance testing is in place to validate usability. | Provided.  The system is tested internally prior to release.  As we transition our products from Development into Pilot we continue to engage closely with end users, observing how they use our new solutions, capturing any usability issues as well as any clinical safety considerations which might be missed. On a recent project it was during this process, before rolling our product out to all end users that we captured and quickly remedied how, due to the data format, the design did not display the content in the order HCPs needed to consume it. |
| D1.4 | **Make sure everyone can use the service**  Are you international Web Content Accessibility Guidelines (WCAG) 2.1 level AA compliant? | Working towards it | [NHS Service Standard Point 5](https://service-manual.nhs.uk/service-standard/5-make-sure-everyone-can-use-the-service)  The Service Manual provides information on [WCAG 2.1](https://www.gov.uk/service-manual/helping-people-to-use-your-service/understanding-wcag) level AA.  The Government Digital Service provides guidance on [accessibility and accessibility statements](https://www.gov.uk/guidance/make-your-website-or-app-accessible-and-publish-an-accessibility-statement), including a sample template. | 20% | Developers should be awarded 20% for WCAG 2.1 level AA compliance.  Developers should be awarded 5% for working towards it.  If the developer selects no to this question, they should be awarded 0%. |
| D1.4.1 | Provide a link to your published accessibility statement. | This does not exist yet | 10% | Developers should be awarded 10% for a published accessibility statement that includes the information below:   * Whether the website or app is ‘fully’, ‘partially’ or ‘not’ compliant with accessibility standards * If it is not fully compliant, which parts do not currently meet accessibility standards and why * How people can get alternatives to content that is not accessible to them * How to contact you to report accessibility problems and a link to the website that they can use if they are not happy with your response   If an accessibility statement is not included or it does not contain the required information listed above the developer should be awarded 0%. |
| D1.5 | **Create a team that includes multi-disciplinary skills and perspectives**  Does your team contain multidisciplinary skills? | Yes | [NHS Service Standard Point 6](https://service-manual.nhs.uk/service-standard/6-create-a-team-that-includes-multidisciplinary-skills-and-perspectives) | 2.5% | Developers should be awarded 2.5% for confirming they have a multi-disciplinary team.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.6 | **Use agile ways of working**  Do you use agile ways of working to deliver your product? | Yes | [NHS Service Standard Point 7](https://service-manual.nhs.uk/service-standard/7-use-agile-ways-of-working) | 2.5% | Developers should be awarded 2.5 % if they confirm they use agile ways of working.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.7 | **Iterate and improve frequently**  Do you continuously develop your product? | Yes | [NHS Service Standard Point 8](https://service-manual.nhs.uk/service-standard/8-iterate-and-improve-frequently) | 5% | Developers should be awarded 5% if they confirm they continually develop their product.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.8 | **Define what success looks like and be open about how your service is performing**  Do you have a benefits case that includes your objectives and the benefits you will be measuring and have metrics that you are tracking? | Yes | [NHS Service Standard Point 10](https://service-manual.nhs.uk/service-standard/10-define-what-success-looks-like-and-be-open-about-how-your-service-is-performing) | 10% | Developers should be awarded 10% for confirming that the benefit case includes objectives and metrics that can be tracked.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.9 | **Choose the right tools and technology**  Does this product meet with NHS Cloud First Strategy? | Yes | [NHS Service Standard Point 11](https://service-manual.nhs.uk/service-standard/11-choose-the-right-tools-and-technology)  [NHS Internet First Policy](https://digital.nhs.uk/services/internet-first). | 5% | Developers should be awarded 5% for confirming the product meets cloud first and / or internet first.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.9.1 | Does this product meet the NHS Internet First Policy? | Yes |
| D1.10 | **Use and contribute to open standards, common components and patterns**  Are common components and patterns in use? | Yes | [NHS Service Standard Point 13](https://service-manual.nhs.uk/service-standard/13-use-and-contribute-to-open-standards-common-components-and-patterns) | 5% | Developers should be awarded 5% for confirming common components and patterns are used.  If the developer selects working towards it or no to this question, they should be awarded 0%. |
| D1.10.1 | If yes, which common components and patterns have been used? | We have developed standard UI components which are used across our EMIS-X branded products (including Pathway). These components are built using the material design framework |
| D1.11 – James Waterfall from here onwards | **Operate a reliable service**  Do you provide a Service Level Agreement to all customers purchasing the product? | Yes | [NHS Service Standard Point 14](https://service-manual.nhs.uk/service-standard/14-operate-a-reliable-service) | 10% | Developers should be awarded 10% offering a service level agreement, reporting on performance and having an uptime of 99.9% or above.  If the developer does not provide a service level agreement and / or reporting on performance, they should be awarded but has an uptime of 99.9% or above they should be awarded 5%.  If the developer has an uptime of 99% or above, they should be awarded 2.5%.  If the developer has an uptime of less than 99%, they should be awarded 0%. |
| D1.12 | Do you report to customers on your performance with respect to support, system performance (response times) and availability (uptime) at a frequency required by your customers? | Yes, via EMIS Now support system. |
| D1.12.1 | Please attach a copy of the information provided to customers | Available on EMIS Now |
| D1.12.2 | Please provide your average service availability for the past 12 months, as a percentage to two decimal places | 100% |

# Supporting documentation

Please ensure that when providing evidence, documents are clearly labelled with the name of your company, the question number and the date of submission.

Possible documents to be provided are:

* A11 - CQC Report – N/A
* B4 - User journeys and data flows –
* C1.1.1 - Clinical Risk Management System
* C1.1.2 - Clinical Safety Case Report
* C1.1.2 - Hazard Log
* C1.3.2 - UK Medical Device Regulations 2002 Declaration of Conformity and if applicable Certificate of Conformity
* C1.4.1 - Clinical Risk Management documentation and Conformity certificate for third party suppliers
* C2.1 - Information Commissioner's registration or completed Self-assessment Outcome Tool
* C2.2.1 Completed Information Commissioner’s Self-Assessment Outcome Tool
* C2.3.2 - Data Protection Impact Assessment (DPIA)
* C3.1 - Cyber Essentials Certification
* C3.2 - External Penetration Test Summary Report
* C4.4.1 - If a wearable, evidence of how the product complies with ISO/IEEE 11073 Personal Health Data (PHD) Standards – N/A
* D1.2.1 - User Journeys and/or how the product fits into a user pathway or journey
* D1.3.1 - Supporting information showing user acceptance testing to validate usability
* D1.12.1 - Customer Performance Report