NHS Digital

Identity Verification and Authentication Standard for Digital Health and Care Services Version 2.0 - Specification and Implementation Guidance

March 2020

Information and technology
for better health and care

Data Coordination Board

This information standard (DCB3051) has been approved for publication by the Department of Health and Social Care under section 250 of the Health and Social Care Act 2012.

Assurance that this information standard meets the requirements of the Act and is appropriate for the use specified in the specification document has been provided by the Data Coordination Board (DCB), a sub-group of the Digital Delivery Board.

This information standard comprises the following documents:

- Change Specification
- Specification and Implementation Guidance.

An Information Standards Notice (DCB3051 Amd 7/2020) has been issued as a notification of use and implementation timescales. Please read this alongside the documents for the standard.

The controlled versions of these documents can be found on the NHS Digital website. Any copies held outside of that area, in whatever format (e.g. paper, email attachment), are considered to have passed out of control and should be checked for currency and validity.

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Contents

Glossary of Terms

The following terms and abbreviations are used throughout this standards document:

Term or Abbreviation	Definition and further information
Health and care organisation	Any NHS or non-NHS provider, organisation, company, or authority offering health and care services including social care.
Digital health and care services	A health or care service provided by an NHS or non-NHS organisation that is either wholly or partly available digitally, including social care services.
Delegated access	The sharing of a person's access to digital health and care services with another person who they nominate to be able to act on their behalf. In this case both parties must have mental capacity.
Proxy access	The sharing of a person's access to health and care services with another person when there is a legitimate need to do so but the person is not able to take responsibility for delegating this themselves. For example: A parent claiming access to a child records, and Lasting Power of Attorney.
Child	A child is defined by the Children's Act 1989 as a person under the age of 18 years. For the purposes of this standard young people (aged 16 or 17) are presumed to have sufficient capacity to make their own decisions regarding access to digital health services and to consequently decide on their own medical treatment, unless there's significant evidence to suggest otherwise. Children under the age of 16 may have capacity to make their own decisions and therefore in line with existing Patient Online guidance it is recommended that services regularly assess their capacity and to adjust any proxy access accordingly.
Identity Verification	Verification of identity evidence that may be presented by a person to support proving their identity.
Physical Comparison	Comparing the likeness of a person to trusted photo documentation that they have presented to support proving their identity. For example: a passport or driving licence.
Authentication	Authentication of a person's identity. Credentials issued and checked on subsequent visits.
Clinical Authorisation	Authorising a person to access a health or care service, ensuring that no harm would be caused to that person by providing the access. May be required before a person can access a health or care service. The process may also include checking for data that is confidential to

	a third person and redacting harmful or third-party confidential data before access can be authorised.
Registry	Where granted access is recorded and referred to, and the audit trail of who checked and granted the access.
GPG44	See References section below.
GPG45	See References section below.
GDS	The Government Digital Service is part of the Cabinet Office and handles the digital transformation of government.
NHS Digital	The national provider of information, data, and IT systems for commissioners, analysts and clinicians in health and social care in England, particularly those involved with the NHS.
PCAG	The Privacy and Consumer Advisory Group advises the government on how to provide users with a simple, trusted and secure means of accessing public services.
DCB	The Data Coordination Board is a national body that approves the publication of standards for use across health and social care.

References

The following documents are referenced throughout this document:

Ref. No.	Document Title (click for link)	Further information (click blue document titles for links)
1	GPG45	Good Practice Guide 45 "Identity proofing and verification of an individual" is a document by the Cabinet Office that provides guidance on the identity proofing and verification of an individual using online services.
2	Guidance for registered pharmacies providing pharmacy services at a distance, including on the internet	Guidance for registered pharmacies providing pharmacy services at a distance, including on the internet Sets out the requirements for distance selling and online pharmacies.
3	Standards for Online and Remote Providers of Sexual and Reproductive Health Services	Standards for Online and Remote Providers of Sexual and Reproductive Health Services sets out the requirements for the provision of sexual health services
4	GPG44	Good Practice Guide 44 "Authentication credentials for online government services" is a document by the Cabinet Office / Government Digital Service that relates to the use of identity credentials to support user authentication for online government services.
5	GPG43	Good Practice Guide 43 "Requirements for Secure Delivery of Online Public Services", which sets out an approach to determining the necessary components to deliver public services securely online.
6	Patient Online: The Toolkit	Patient Online: The Toolkit is a document by the Royal College of GPs that summarises expert opinion and feedback explaining what online access involves, provides key messages for a number of key stakeholder groups, and outlines future steps to support practices with Patient Online. Patient Online: The Toolkit can be found at: http://www.rcgp.org.uk/patientonline
7	Good Practice Guidance on Identity Verification for Patient Online	Good Practice Guidance on Identity Verification for Patient Online Services in Primary Care is a document by NHS England to help General Practice apply consistent good practice in identity management when providing patients access to online services such

	Services in Primary Care	as booking appointments, ordering repeat prescriptions, and viewing clinical records.
8	Getting started with records access: Guidance for general practice	Getting started with records access: Guidance for general practice is a document by the RCGP about getting ready for online records access for when patient-facing services become available online.
9	Coercion: Guidance for general practice	Coercion: Guidance for general practice is a document by the RCGP about online access to practice services and records providing new and additional opportunities for coercive behaviour, and the available measures to minimise risk to patients.
10	Countersigning passport applications and photos	Countersigning passport applications and photos is a GOV.UK online guide to the countersigning requirements for passport applications and photos.

1 Introduction

What is this standard for?

This standard provides a consistent approach to identity across digital health and care services. It describes why and how a person should prove their identity to access digital health and care services. For example: their GP practice, their local hospital, and their social care provider.

NHS Digital has worked on this standard in conjunction with many key clinical and privacy stakeholders including NHS England and NHS Improvement, the Care Quality Commission, the Royal College of GPs, the Joint GP IT Committee, and the Privacy and Consumer Advisory Group.

The defined standards and principles in this document are to enable co-ordination of effort and to avoid duplication of effort. Elements considered by this standard include:

- identity verification
- identity authentication
- clinical authorisation
- typical example transactions.

This standard will be updated as and when required. The national Data Coordination Board (DCB) will approve the publication of all versions.

Feedback on this standard is welcome at any time. Comments can be sent to: nhslogin@nhs.net

What is not covered by this standard?

This document does not cover:

- the technical solutions or the user experiences required to implement this standard
- unique identifiers such as NHS Number
- cyber security, threat detection, or other related disciplines.

Identity verification forms part of a holistic approach to securing digital health and care services. A comprehensive risk-based approach to security is required, along with recognition of what threats can *and cannot* be mitigated through identity verification alone. See also GPG43 "Requirements for Secure Delivery of Online Public Services".

Who does this standard apply to?

Any NHS or non-NHS provider, organisation, company, or authority that provides identity services for individuals accessing online digital health or care services must adhere to this standard.

What about other available identity standards?

This standard is intended to co-exist with other general identity standards such as GPG45 "Identity proofing and verification of an individual", and also with identity standards that exist for other specialised areas such as distance selling in pharmacies

(https://www.pharmacyregulation.org/sites/default/files/document/guidance_for_registered_pharmacies_providing_pharmacy_services_at_a_distance_including_on_the_internet_april_2019.pdf) and those for online and remote sexual health services (https://www.fsrh.org/standards-and-guidance/documents/fsrhbashh-standards-for-online-and-remote-providers-of-sexual/)

Why is this standard needed?

The NHS wants to put people in control of their own health and care so that they can make informed decisions. The NHS also wants to support people such as carers and family members who need to access a person's health and care services on their behalf.

Digital health and care services contain a person's information and will allow a person to record decisions and preferences about their care that will affect them. For example: organ donation, end of life preferences, and data choices. Digital health and care services will also allow a person to record data about themselves to influence their care. For example: blood sugar levels, heart rate readings, and inhaler usage. It is therefore important that only the correct person has access.

An online identity will make it easier and quicker for a person to access online health and care services, but it must be done in a safe, consistent, and reliable manner.

The necessary security must be put in place, but without making access to digital health and care services so complex or time-consuming that people are deterred from using them.

What is required?

An important part of verifying a person's identity involves performing a physical comparison; comparing their likeness to trusted photo documentation. For example: a passport or driving licence. This can be done entirely online (dependent on the individual) using a laptop, smartphone, tablet, or other similar device in a convenient location. For example: at home or work.

For some people, it may not be possible to do this entirely online, and it may therefore be necessary for a person to verify their likeness to trusted photo documentation by travelling to a physical location. For example: their local hospital or their GP practice. It is anticipated that there will not be a charge for this service.

If a person doesn't have sufficient evidence to verify their identity, it may be possible for a health or social care professional who knows the person to reliably vouch for them and confirm who they are. For example: the person's GP, nurse, consultant, or social worker.

2 Identity in Digital Health and Care

The need for digital identity

Health and care organisations require ways for people to access online services to enable more efficient diagnosis, treatment, self-care, and care of others.

Health and care organisations also have a legal requirement:

- to adhere to the General Data Protection Regulation (GDPR), Data Protection Act 2018, and other relevant legislation;
- to ensure that confidentiality is respected in relation to all health and care information accessible to members of staff (including doctors, nurses, clerical staff, and others) – to respect the common law duty of confidence and provide a duty of care.

Delivering services online has significant implications for how we deliver health and care services in future. Controls that are typically built implicitly into the healthcare process (e.g. via a GP consultation) such as trust, privacy, clinical safety and security now need to be delivered digitally. People expect their information to be appropriately protected, but also that they can access information easily when needed.

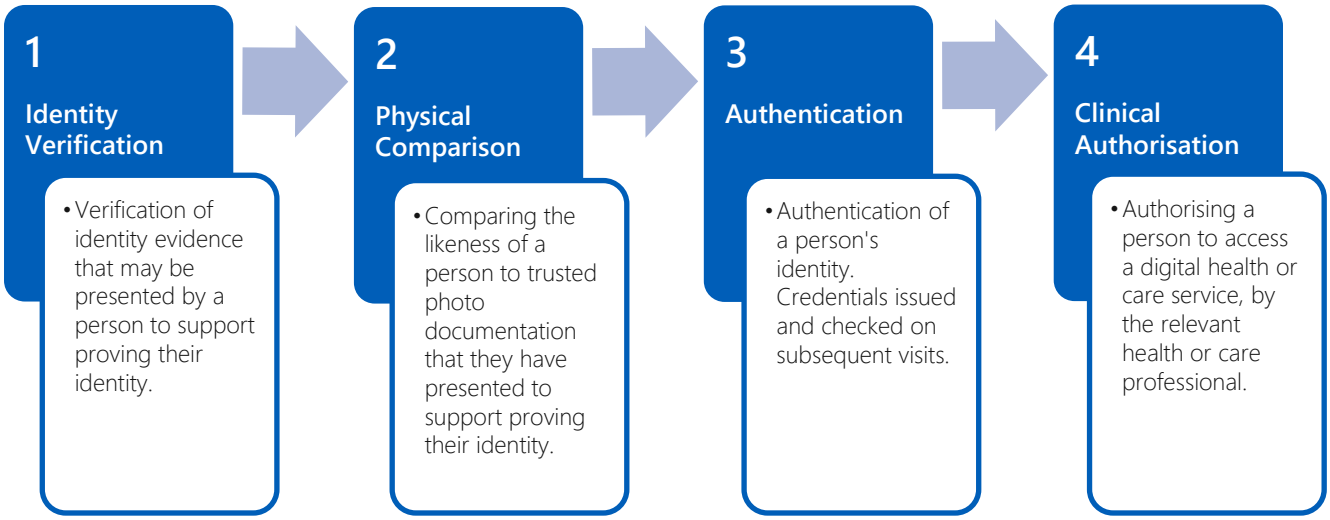
Health and care online services are distinctly different from other online services such as banking, insurance, and retail. Financial loss is potentially recoverable and insurable by financial organisations, but a person's health or care information obtained fraudulently cannot be recovered and its unauthorised sharing and use cannot be undone.

Since any health or care information relating to an individual is considered sensitive, information held by health and care services must only be accessible online by the person to whom it belongs, or a person with delegated access (see Section 6). Controls need to be put in place to protect this sensitive information; there is a need for a person to have to prove their identity to be able to access the information using a digital health or care service. A possible solution could involve performing a physical comparison of the person and a trusted identity document that they have provided, such as a passport or a driving licence.

Where there is a need for a person to have to re-prove their identity due to lost or invalid credentials (e.g. a forgotten password, or lost phone), this must be carried out to the same standards as the initial verification; this may involve re-presenting of documentation or physical presence.

Overview of identity verification and authentication

The following diagram shows the four key steps of identity verification and authentication that are described throughout this standard below:



3 Identity verification

Identity management is a complex problem and a term that is often interpreted in different ways. Therefore, a common language is needed to reach a common understanding of the requirements. For understanding identity verification this document is based on the following terms and concepts:

- the process should enable a legitimate individual to prove their identity in a straightforward manner whilst creating significant barriers to those trying to claim to be somebody they are not
- the individual shall expressly declare their identity
- the individual shall provide evidence to prove their identity
- the evidence shall be confirmed as being valid and/or genuine and belonging to the individual
- checks against the identity confirm whether it exists in the real world
- the breadth and depth of evidence and checking required shall differ depending on the level of assurance needed in verifying that the identity is real and belongs to the individual.

A person's record at their registered GP practice may already exist, possibly going as far back as their birth, and will continue to the end of their life. Therefore, there is a requirement to bind the individual to their existing medical record.

Standard levels of assurance as identified in GPG45 are not always directly applicable to the NHS and each element within the identity verification process needs to be assessed separately.

Please also see "Appendix A – General principles for identity verification and authentication" and "Appendix B – PCAG Privacy Principles".

Requirements for identity verification

To sufficiently bind a person asserting their identity to an existing medical record, the following is required:

1. An item of official photographic identity (such as a passport or driving licence) from the list in section 4.3.4 of GPG45.
2. Know that the document appears to be genuine
3. A physical comparison between the photographic identity and the person asserting their identity, and to link the asserted identity to the medical record. Examples of ways of carrying out physical comparison may include:
    a. Being physically present at the point of identity verification
    b. Online services which enable live comparison of the individual with photographs held on legal documents (such as driving licence or passport)
4. The individual is not deceased, by reference to an Authoritative Source such as the Personal Demographics Service (PDS).

Face-to-face vouching

Face-to-face vouching can be used where a person does not have the appropriate photographic evidence, or in any situation in which a health or care professional meets the requirements:

1. Vouching is different to countersigning that is used for passport and driving licence applications (as detailed in Countersigning passport applications and photos).
2. The objective of face-to-face vouching is to reliably link a person to an existing health and care record under which they are being treated. For example: a **GP may vouch that the person requesting digital access to GP online services is the person to whom the GP record relates**.
3. Only a health or care professional who has authorised access to a person's health and care record (i.e. they are trusted) can authorise the link between the record and that person via face-to-face vouching. This vouching can be delegated to appropriate staff where the individual being verified is well known to the organisation.
4. Face-to-face vouching should be accompanied by appropriate supporting evidence if it is required in the opinion of the health or care professional carrying out the vouching (examples of this supporting evidence may include utility bills, council tax bills or other items from Section 4.2.3 of GPG45.

5. Where necessary (for example the person is not well known to the staff) the vouching can be supported with clinical questions against the record, this must be carried out by clinical staff with access to the individuals medical record – see NHS England Good Practice Guidance on Identity Verification for Patient Online Services in Primary Care.

Please also see "Appendix C – GPG45 element scoring".

Auditing identity verification

The process of identity verification, however implemented, will need to be audited. In order to support this, information should be recorded appropriately so that it is possible to:

- identify who carried out the identity verification process
- determine what Identity Evidence was presented by the Applicant
- determine that the evidence presented appeared to be genuine.

4 Authentication

After having their identity verified, authentication is the technical process for a person to prove who they are each time they access an online health or care service.

This usually means 'logging on' to a system with a username and password. Sometimes an additional step is required, known as two-factor authentication (2FA), such as entering a code sent in a text message to the person's mobile phone.

Generally, authentication factors fall into one of the following three categories:

1. something you have - such as a code sent in a text message to a mobile phone
2. something you know - such as a password, passphrase, or memorable information
3. something you are - such as a fingerprint, iris scan, or facial recognition (i.e. biometrics)

A digital health or care service can be accessed using one of two types of authentication (strong authentication or basic authentication), depending on various factors such as the sensitivity of the service and the information that can be accessed and/or recorded.

See "Why is this standard needed?" in Section 1. An online health or care service must choose the authentication type that best suits its security and access requirements, for example refer to the General Pharmacy Council document "Guidance for registered pharmacies providing pharmacy services at a distance, including on the internet".

Strong authentication

Standard Level of Assurance (LOA) 2 authentication from GPG44 to prevent replay attacks (a replay attack is the capturing of credentials and someone else re-using them) and to ensure access is by the authenticated individual. This is summarised as using:

- two-factor authentication (as described above)
- a mechanism to prevent replay attacks.

Basic authentication

A basic form of authentication such as the usual approach of using a username and password. This may be deemed adequate for services such as booking GP appointments.

Please also see "Appendix D – Authentication and verification transactions".

5 Clinical authorisation

Clinical authorisation is a separate concept to authentication which must occur before a person is given access to a record held by a specific service. For example, if a person is granted access to their hospital care record it does not give automatic access to other records such as those held by their GP or community nurse; each health and care service must follow its own process for authorising people to access the record which they have responsibility for. Clinical authorisation is the process used to determine whether an authenticated person is allowed access to a specific digital health or care service. For example: their clinical record (and if so, what part of their record). If clinical authorisation is not required to access a particular online health and care service, then access should be allowed by default.

As a general guide for all services, the RCGP guidance for general practice about "Getting started with records access" lists the following points which must be considered:

- the need to check for and remove any third-party data that wasn't intended to be viewed by the person to whom the record belongs
- records to be checked thoroughly to minimise the risk of patient harm, where necessary including redaction and deferring access until it has been discussed with the patient
- whether the patient is at risk of coercion to share access to online services unwillingly (see Coercion: Guidance for general practice)
- managing access by children or their parents
- patients who lack the mental or physical capacity to use online services themselves
- awareness of the RCGP's Patient Online: The Toolkit information governance risk register.

For further guidance in a GP context see Applications for Record Access (https://www.rcgp.org.uk/-/media/996DD37C8FE54B43BD5CE2B449BF5D70.ashx).

6 Delegated and proxy access

It is important for a person to be able to share their access to certain online health and care services with other nominated people.

In delegated access, a person with capacity may make the decision to allow another person to act on their behalf. This could be for a number of reasons such as helping them to make appointments or to re-order prescriptions.

Proxy access differs from delegated access in that the person whose record or digital health services are being shared is unable to make that decision for themselves. This could be for example, someone with parental responsibility who needs access on behalf of a child, where a family member needs access on behalf of an elderly relative

In both cases the person, whose record has been shared, may retain access to the digital health and care services themselves and may also determine which digital health and care service(s) each nominated person has access to (depending on circumstances and capability).

For digital health and care services that provide shared access, all people involved must go through the identity verification process in this standard (e.g. vouching the identity of a child).

There must also be a mechanism in place to enable appropriate withdrawal of shared access, either with or without the consent of the person who has the access.

A mechanism for recording that shared access should be implemented. This should record at a minimum:

- What access has been granted
- The person granting it, when it was granted
- The person to whom it was granted.

The duration and/or the point at which the grant should be revalidated there may also be a need to record other pertinent information such as consent, justification (for example: Power of Attorney for Health and Care), or response to coercion questions.

Any specified time periods should be in line with the policy of the service, which digital health or care service(s) it applies to and the granularity of that access should be implemented.

7 Issues and escalation

There must be a defined process for raising issues, such as potential or actual exposure of credentials (username or password for example), such that users know how to have credentials suspended quickly.

This process must ensure that it balances the needs of protecting a person's information against the possibility of a third party maliciously denying the user access to their own records (meaning false reporting of exposed credentials).

8 Appendices

Appendix A – General principles for identity verification and authentication

The view of how the Privacy Principles established by the Privacy Consumer Advisory Group (PCAG) are met by this standard can be found in Appendix B – PCAG Privacy Principles.

The following principles have been identified for this standard:

1. NHS and non-NHS health and care settings

- Principle
  - NHS identity verification is carried out in conjunction with an NHS patient record
  - NHS identity may or may not relate to current legal identity.
- Rationale
  - The online identity created does not exist in isolation to the medical record, it is an online account bound to an existing medical record
  - Individuals may have changed their legal name (via deed poll or marriage) without updating the name on their medical record.
- Implications
  - More robust documentary evidence, counter identity fraud checks and valid electronic history (such as bank records) would be required to extend an NHS identity into an identity which could be used outside the NHS context.

2. Interoperability of identity between national and local solutions across health and social care

- Principle
  - Digital identities should be portable across health and social care environments
  - Agreed open standards should be used to minimise development costs.
- Rationale
  - Re-use of identity reduces the burden on citizens using the services
  - Open standards promote technical interoperability, reduces the cost of development and systems maintenance and reduces the barrier to entry for new identity services.
- Implications
  - Requires a common understanding and agreement on what strength of evidence and process is required to enable online accounts - however the approach does allow flexibility and services may choose to meet the standard in different ways
  - The framework and approval process under which new and / or different identity mechanisms are approved must also take into account the open standards in use and adoption of revised versions or new standards.

3. Clinical authorisation MUST occur within the remit of each clinical data controller

- Principle
  - The data controller of the clinical record needs to identify whether there is a risk of harm to the patient or whether third parties are referred to in the record.
- Rationale
  - Each clinical data controller has a duty of care (beyond the data protection act) to ensure the safety of the patient - therefore it's not appropriate for authorisation to access clinical information to be made by an outside party or centrally.
- Implications
  - Authorisation to one digital health and care service does not imply authorisation for another, therefore each service will need its own authorisation process and registry. A particular digital health or care service may decide that authorisation is not required
  - Audit of the clinical authorisation must be possible in the local setting where authorisation has been approved.

4. Plan and build for identity service evolution

- Principle
  - Through appropriate open standards it will be possible to integrate new identity services and phase out old ones
  - It should be possible to revalidate identity where it becomes appropriate.
- Rationale
  - Identity verification services and authentication services will change over time, older systems will become less secure
  - New secure mechanisms for verification and authentication should be approved and adopted.
- Implications
  - We must define a framework and approval process, under which new and / or different identity mechanisms can be assessed and subsequently integrated into the existing system
  - New identity services will be added to those available.
  - Older identity services will be phased out over time and mechanisms to migrate or revalidate users should be planned for.

Appendix B – PCAG Privacy Principles

	Principle	Met / Comments
1	USER CONTROL "I can exercise control over identity assurance activities affecting me and these can only take place if I consent or approve them."	Met. Identity registration and use will only be initiated by the user.
2	TRANSPARENCY "Identity assurance can only take place in ways I understand and when I am fully informed."	Met. A full audit trail to be provided to the user.
3	MULTIPLICITY "I can use and choose as many different identifiers or identity providers as I want to."	Research required to confirm whether multiplicity is valid and required in a health context balanced against potential clinical risk of multiple identities.
4	DATA MINIMISATION "My interactions only use the minimum data necessary to meet my needs."	Met. Identity information only held where necessary.
5	DATA QUALITY "I choose when to update my records."	Only within the context of the identity element of the record – rather than the health record itself.
6	SERVICE USER ACCESS AND PORTABILITY "I have to be provided with copies of all of my data on request; I can move / remove my data whenever I want."	Met. Data will be removed unless required for legal purposes.
7	CERTIFICATION "I can have confidence in the Identity Assurance Service because all the participants have to be certified against common governance requirements."	Will be met - Needs further investigation dependent on the solutions being developed – the standard will not proscribe the solution.
8	DISPUTE RESOLUTION "If I have a dispute, I can go to an independent Third Party for a resolution."	Existing NHS dispute resolution mechanisms are already in place and will be used.
9	EXCEPTIONAL CIRCUMSTANCES "Any exception has to be approved by Parliament and is subject to independent scrutiny."	Existing healthcare and data protection laws are deemed sufficient and further parliamentary scrutiny is deemed unnecessary for access to health records.

Appendix C – GPG45 scoring

The objective of the authentication service is to **manage specific** risks within the context of health and care services, not to attain a specific level of assurance in GPG45[1]. However, NHS Digital has established a common terminology to discuss risk management at a generic level by working with GDS and Cabinet Office, and has achieved a consensus on how the requirements for identity verification and authentication can be mapped to the levels of assurance identified in GPG45[1].

The following table identifies the agreed standard of evidence needed for each element of identity verification as per GPG45[1].

The purpose of this section	Required score	Justification
To obtain evidence of the claimed identity ('strength') (was element A)	Documentary evidence should* include photo identification (3) *see section 3.	Identity Evidence is required to support a link to the existing medical record, rather than to create a new identity.
To check the evidence is genuine or valid ('validity') (was element B)	1	Identity Evidence is required to support the existing medical record, rather than to create a new identity.
Check that the identity belongs to the person who's claiming it ('verification') (was element C)	3	A physical comparison is required. Biometric comparison would have been possible but there is no biometric database to enable comparison.
Check if the claimed identity is at high risk of identity fraud ('identity fraud') (was element D).	n/a	The risks that this control is intended to prevent are not relevant to health. Our requirement is to ensure the NHS medical record exists and that the individual is not deceased.
Check the claimed identity has existed over time ('activity') (was element E)	n/a	The medical record existing over a period of time provides evidence of activity history. There is no further requirement to validate digital activity history.

Appendix D – Authentication and verification transactions

Work carried out in conjunction with clinical colleagues, the Royal College of GPs, the Joint GP IT Committee, and NHS England and NHS Improvement subject matter experts has identified a range of transaction archetypes (i.e. typical examples). These archetypes encompass a range of conceptual transactions with some examples being given in the table below.

For the purposes of the archetype table, identity verification and authentication are explained as follows (elements referred to as previously defined):

Purpose	Level	Explanation
Identity verification	High	Identity verification requiring physical comparison in conjunction with sufficient evidence to validate it (refer to appendix C). This is elaborated in Section 3 of this standards document.
Identity verification	Medium	Identity verification which uses Knowledge Based Verification (Element C score 2) in conjunction with sufficient evidence to validate it (elements A, B, D, and E score 1).
Identity verification	Low	Identity verification which consists of self-asserted identity and which may not relate to any legal or NHS identity. Note – Medical information captured under Low identity verification cannot be put directly into a patients NHS record. If necessary, the relevant medical information should be sent to an NHS clinician for review and that clinician could then add appropriate information to the NHS record following appropriate assessment / verification.
Identity authentication	High	Two-factor authentication as described in Section 4 of this standards document.
Identity authentication	Low	User-selected identity and password as described in basic authentication in Section 4 of this standards document.

All organisations should meet the same standards of verification and authentication to ensure portability (Principle 6 in Appendix B– PCAG Privacy Principles), though the mechanisms for achieving this may vary between organisations or over time reflecting the evolution of the mechanisms (general principle 7).

Arche-type	Category	Archetype Transaction	Verif-ication	Authent-ication	Transaction examples
A1	Enquiry	Enquiry against official record	High	High	• Read medical record, Prescription repeat, • View SCR or detailed record, • Manage / view appointments, • Tailored online NHS services and online content.
A2	Add	Record non-medical data outside the patient record	None	Low	• Book appointment (not able to view or manage appointments – which may give out information)
A3	Add	Record (no read capability) non-medical data into record	Medium	High	• Record data-sharing opt-out preference, • Record preferred pharmacy (further controls will be needed around collection of controlled medications).
A4	Add	Record medical data into record	High	High	• Private healthcare consultation record.
A5	Add	Record authorised delegates	High	High	• Enable delegated access for another validated individual
A6	Add	High level patient registration	High	High	• Register for online account where treatment requires high level identity assurance or access to / adding to existing medical record[2], • Record new phone number online, • Record new patient address online
A7	Add	Change GP Practice	High	High	• Register patient to a new GP through a purely online mechanism
A8	Add	Low Level patient Registration	Low	Low	• Register a patient in an online setting, where treatment does not require high level identity assurance or access to / adding to existing medical record[2].

					• Information shared with GPs must go through additional identity assurance (refer to A6)
A9	Enquiry	Enquiry of non-medical data outside the patient record	None	Low	• Access non-tailored online NHS services and content.
A10	Add / Enquiry	Add / Enquiry of medical data which is to be held in a separate patient record	Low	High	• Recording and enquiry of STI / sexual health information, treatment and prescribing outside the main NHS patient record.
A11	Add / Enquiry	Add / Enquiry of non-prescription medication to be held in a separate patient record	Low	Low	• Recording of non-prescription drugs or advice / guidance.