Development of a digital competency framework for UK Allied Health Professionals

| 2020 Topol Digital Health Fellowship

Table of Contents

About this framework

This digital competency framework has been developed over the last year (2019-20) as the primary project within one of the inaugural Topol Digital Health Fellowships. The Topol Review, "Preparing the healthcare workforce to deliver the digital future", provides recommendations to guide the implementation of innovative technology in practice and facilitate the development of the healthcare workforce. This project was undertaken to support the educational recommendations to support a digitally enabled health system (E1-14), and particularly the enhancement of digital literacy within the NHS workforce.

The Health Education England Technology Enhanced Learning Programme, and the Building a Digital Ready Workforce programme of the National Information Board, previously developed the Health and Care Digital Capabilities Framework, upon which this framework is based. Whilst digital literacy is defined as "The capabilities that fit someone for living, learning, working, participating and thriving in a digital society", work by Newman, Church and Beetham (2019) delineated these capabilities into measurement of digital "willingness" (confidence and motivation) and "experience"(specific competence in professional environment and role). Whilst the former was considered measurement of the former was easy to achieve, they found measurement of competence should be undertaken in the context of professional roles and environment to have meaning.

Who is this framework for?

This framework has been developed to support the enhancement of digital competence (knowledge and skills associated with digital technology in practice) for all allied health professions from band 3 to band 9. It is intended to be a developmental and supportive tool that can enable all staff to meet their digital potential.

Allied Health Professionals (AHPs) make up the third largest clinical work force group in health and social care, with 223,991 individuals registered with the Health and Care Professions Council (or national bodies) in the UK in 2020. The 14 AHPs are listed below:

Art Therapists
Dietitians
Drama Therapists
Occupational Therapists
Operating Department Practitioners
Orthoptists
Orthotists/ Prosthetists
Osteopaths

Music Therapists
Paramedics
Physiotherapists
Podiatrists/ Chiropodists
Radiographers (Diagnostic & Therapeutic)
Speech and Language Therapists

Developing the digital competency framework

A panel of 40 allied health professions was assembled, encompassing all of the AHP roles. The panel underwent a three round Delphi study to develop, ratify and specify the competencies associated with their professional roles.

Round one consisted of reviewing a preliminary list of competencies divided into 93 competencies across 10 domains. The preliminary list was taken from an analysis of the HEE digital capabilities framework and the NHS England AHP Digital Framework. Panellists were asked to review the competencies, and make changes and additions to the list to encompass their use of digital technology in practice (specific to their professional role, or to the wider roles of AHPs).

Round two consisted of reviewing the new list of 124 competencies across 11 domains and rating the applicability and relevance of each competency for all roles between band 3 and band 9 (Agenda for Change pay model) specific to their profession.

Round three consisted of ratifying the choices made in round 2, in light of the coronavirus pandemic, and the digital transformation changes which occurred in NHS services in response.

On the basis of these consecutive rounds of analysis, the AHP digital competency framework was developed, consisting of 124 competencies within 10 domains. This document outlines the entirety of the framework. However, for each banding between 3 and 9, the framework has also been modified to identify to which profession and banding each competency is compulsory, voluntary or unrequired. This will allow the implementation of the framework into the Health Education England self-assessment tool for digital literacy, and for each profession/ band to be measured at the appropriate level. The HEE tool can then direct individuals to specific learning dependent upon the summary of their self-assessment across the framework domains.

For professions/ bandings categorised as having a "compulsory" requirement, a suggested level of competence will be > 80/100.

For professions/ bandings categorised as having a "voluntary" requirement, a suggested level of competence will be > 60/100.
For professions/ bandings categorised as being "unrequired", the competency will not be listed.

Allied Health Professions (AHP) Digital competency framework (Graphic)

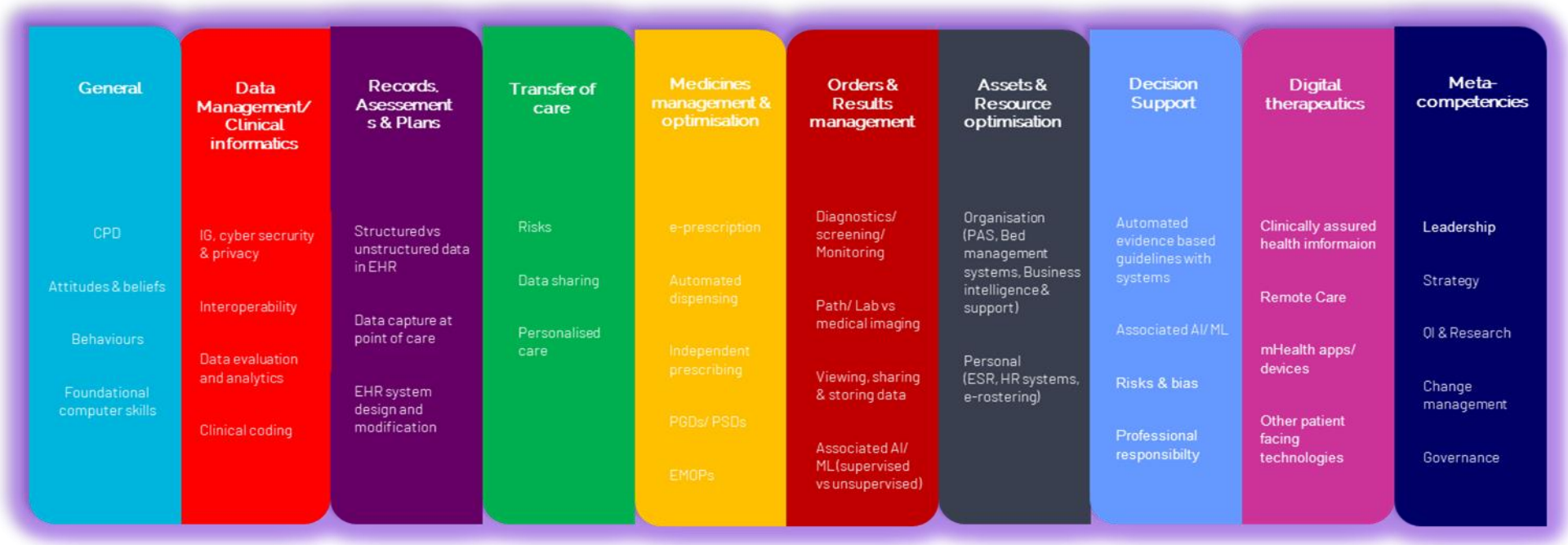| General	Data Management/ Clinical informatics	Records, Asessements & Plans	Transfer of care	Medicines management & optimisation	Orders & Results management	Assets & Resource optimisation	Decision Support	Digital therapeutics	Meta-competencies
CPD	IG, cyber secrurity & privacy	Structured vs unstructured data in EHR	Risks	e-prescription	Diagnostics/ screening/ Monitoring	Organisation (PAS, Bed management systems, Business intelligence & support)	Automated evidence based guidelines with systems	Clinically assured health imformaion	Leadership
Attitudes & beliefs	Interoperability	Data capture at point of care	Data sharing	Automated dispensing	Path/ Lab vs medical imaging		Associated AI/ ML	Remote Care	Strategy
Behaviours	Data evaluation and analytics	EHR system design and modification	Personalised care	Independent prescribing	Viewing, sharing & storing data	Personal (ESR, HR systems, e-rostering)	Risks & bias	mHealth apps/ devices	QI & Research
Foundational computer skills	Clinical coding			PGDs/ PSDs			Professional responsibilty	Other patient facing technologies	Change management
				EMOPs	Associated AI/ ML(supervised vs unsupervised)				Governance

Figure 1 | The Allied Health Professionals digital competency framework for UK [2020]

DOMAIN 1| General

This domain covers knowledge associated with foundational computer science, and the implications of digital transformation within the healthcare landscape for allied health professions. Skills included within this domain cover the use of digital systems for continued professional development, as well as the self-evaluation of one's own digital competence. It also covers the ability to demonstrate positive attitudes and beliefs of those who understand the benefits of digital transformation towards continued innovation. There is gross consensus across roles that most qualified (B5-9) staff have a compulsory requirement to meet this domain, although most professions also find the majority of the competencies compulsory for all staff (irrespective of band). A baseline understanding of computer programmes and digital devices commonly used is required by all. Similarly, converting understanding of the benefits of technology into a behaviour to facilitate knowledge in others is essential.

G1. Ability to use digital platforms to record, direct and implement learning in line with own continued professional development plan and learning preferences.

G2. Ability to facilitate the learning of digital skills in self and others (patients, peers, colleagues and student practitioners); either through direct teaching or encouragement of self-directed practice. Digital skills include: basic digital skills for the normal running of services, how to use digital platforms to record, direct and implement learning for continued professional development

G3. Knowledge and understanding of the benefits and wider implications of digital transformation for own profession and across the wider healthcare environment, and ability to demonstrate such implications within own professional group.

G4. Ability to demonstrate a positive attitude towards digital transformation.

G5. Ability to undertake a self-evaluation of digital literacy to direct continued professional development

G6. Ability to apply appropriate documentation standards when using clinical templates/ ePR

G7. Knowledge of and ability to demonstrate foundational computer skills. For example: Familiarity with basic computer based functions (e.g. email, web-based services, video communication software, Microsoft Office or equivalent programmes); Practical use of appropriate digital devices (e.g. tablets, smartphones, laptop/ desktop computers)

G8. Ability to use variable forms of digital resources to contribute to continued professional development plans (e.g. social media, podcasts, on-line research).

G9. Ability to demonstrate values and behaviours which embrace digital and technological innovation focused on advancing quality of care and development of the healthcare workforce

G10. Ability to evaluate and understand how digital platforms can facilitate and support individuals to undertake their distinct roles as AHP leaders and practitioners

G11. Ability to facilitate engagement in, and reflective values and behaviours toward, digital and technological innovation in the current and future healthcare workforce.

G12. Knowledge and understanding of local support and training resources available to enhance digital health literacy for both professionals (personal development) and for the public (to facilitate patient digital literacy).

G13. Ability to demonstrate completion of a skills and abilities checklist to show competency with appropriate digital tools (e.g. electronic health record systems, foundational level programmes, CPD platforms)

Domain 1
General
1. I have the ability to use digital platforms to record my own learning and direct others to, in line with my continued professional development plan and learning preferences.
2. I have the ability to facilitate the learning of digital skills in myself and in others (patients, peers and students), either through direct teaching or encouragement of self-directed practice. *Digital skills include: basic digital skills for the normal running of services, how to use technology to record, direct and implement learning for continued professional development.*
3. I have knowledge and understanding of the benefits and wider implications of digital transformation for my own profession and across the wider healthcare environment.
4. I have the ability to demonstrate the implications of digital transformation within my own profession
5. I have the ability to undertake a self-evaluation of my own digital literacy to direct my continued professional development
6. I have the ability to apply appropriate documentation standards within my organisation's electronic health record system.
7. I have knowledge of and the ability to demonstrate foundational computer skills. *For example, familiarity with basic computer functions (email, web-based systems, video communication software, Microsoft Office); practical use of appropriate digital devices (e.g. tablets, smartphones, laptop/desktop computers)*
8. I have the ability to use variable forms of digital resources to contribute to my continued professional development plan. *(e.g. social media, podcasts, online research, e-CPD platforms)*
9. I have the ability to demonstrate values and behaviours which embrace digital and technological innovation, focused on advancing quality of care and development of the healthcare workforce.
10. I have the ability to evaluate and understand how digital platforms can facilitate and support individuals to undertake their distinct roles as AHP practitioners and leaders.
11. I have the ability to facilitate engagement in, and reflective values and behaviours toward, digital and technological innovation in the current and future healthcare workforce.
12. I have knowledge and understanding of the local support and training resources available to enhance digital health literacy for both professionals and for the public (to facilitate patient digital literacy).
13. I have the ability to demonstrate the completion of a skills and abilities checklist to show competency with appropriate digital tools (e.g. electronic health record systems, foundational level programmes, CPD platforms)

DOMAIN 2 | Data Management & Clinical Informatics

Data management and the understanding of informatics is an area where AHPs self-rate low levels of confidence and competence. This domain covers all aspects of data, including types, uses, structures, regulation and policies for its use. Most parts of this domain hold high relevance across the professions and bands. Areas of common importance include the knowledge and understanding of data type as well as the ability to visualise and evaluate data in practice. Control of patient data through information governance, cyber security and privacy controls are also commonly identified as key areas for all. Other areas, such as clinical coding and evaluation of your own departmental environment against the best practice of data management are identified as of greater importance from B6 upwards.

I1. Knowledge and understanding of data management, information governance, and the risks associated with data privacy.

I2. Knowledge and understanding of local and national data sharing policies and procedures (including local and national information governance frameworks, the data protection act and General Data Protection Regulation [GDPR])

I3. Knowledge and understanding of the benefits and implications of data sharing and system interoperability (e.g. the transfer of data between different computer programmes)

I4. Ability to locate, access, visualise and evaluate data type and quality towards effective searching and data analytics to (for example): Inform quality improvement and clinical audit; Assist research; Demonstrate impact of services on patient outcomes; To evaluate service productivity and performance against KPIs; To evaluate service, team and individual performance to aid development; To evaluate trends and changes in population-level health metrics

I5. Ability to recognise risks to data privacy and cyber security of the organisational systems, including: Phishing emails; Email spoofing; Data theft; Improper disposal/ storage of data; Unauthorised access; Systems hacking; IT systems failure due to incident (e.g. denial-of-service attacks); Password management

I6. Ability to recognise and use systems incorporating multi-factor authentication (commonly 2-factor authentication) for transfer of patient data (e.g. referral, test or medical imaging results).

I7. Ability to demonstrate continued compliance with local information governance or data protection/ management training

I8. Knowledge and understanding of clinical informatics and how data can assist planning and modelling of clinical services and pathways of practice, and ability to connect patient and healthcare system needs to the available data held in digital platforms

I9. Knowledge of professional risks associated with curation and management of one's digital identity associated with both internal work-related systems and external platforms (e.g. social media)

I10. Knowledge and understanding of different types of healthcare data, how they are collected and how they are transferred within and in-between systems: Structured versus unstructured; Patient identifiable information; Other personal data which can risk anonymity; Confidentiality associated with data

I11. Knowledge and understanding of data collection requirements to support clinical coding and data management processes

I12. Ability to evaluate one's own local departmental/ service level environment for best practice of clinical informatics towards optimum patient care (namely for data collection, sharing, interoperability and risk management).

Domain 2 **Data Management & Clinical Informatics**
1. I have knowledge and understanding of data management, information governance, and the risks associated with data privacy.
2. I have knowledge and understanding of local and national data sharing policies and procedures (including local and national information governance frameworks, the data protection act and General Data Protection Regulation [GDPR])
3. I have knowledge and understanding of the benefits and implications of data sharing and system interoperability (e.g. the transfer of data between different computer programmes)
4. I have the ability to locate, access, visualise and evaluate data type and quality towards effective searching and data analytics to: *(for example): Inform quality improvement and clinical audit; Assist research; Demonstrate impact of services on patient outcomes; To evaluate service productivity and performance against KPIs; To evaluate service, team and individual performance to aid development; To evaluate trends and changes in population-level health metrics*
5. I have the ability to recognise risks to data privacy and cyber security of the organisational systems, including: *Phishing emails; Email spoofing; Data theft; Improper disposal/ storage of data; Unauthorised access; Systems hacking; IT systems failure due to incident (e.g. denial-of-service attacks); Password management*
6. I have the ability to recognise and use systems incorporating multi-factor authentication (commonly 2-factor authentication) for transfer of patient data (e.g. referral, test or medical imaging results).
7. I have the ability to demonstrate continued compliance with local information governance or data protection/ management training
8. I have knowledge and understanding of clinical informatics and how data can assist planning and modelling of clinical services and pathways of practice, and the ability to connect patient and healthcare system needs to the available data held in digital platforms
9. I have knowledge of professional risks associated with curation and management of one's digital identity associated with both internal work-related systems and external platforms (e.g. social media)
10. I have knowledge and understanding of different types of healthcare data, how they are collected and how they are transferred within and in-between systems: *e.g. Structured versus unstructured; Patient identifiable information; Other personal data which can risk anonymity; Confidentiality associated with data*
11. I have knowledge and understanding of data collection requirements to support clinical coding and data management processes
12. I have the ability to evaluate my own local departmental/ service level environment for best practice of clinical informatics towards optimum patient care (namely for data collection, sharing, interoperability and risk management).

DOMAIN 3 | Records, assessments & plans

The records, assessments and plans domain largely encompasses competencies associated with the use of an electronic health record system. As such it includes abilities associated with capturing data appropriately, as either structured or unstructured data, as well as the methods by which data is obtained (e.g. voice recognition vs medical devices). Further it includes knowledge regarding how EHR systems can be designed or modified in practice to aid the provision of optimal patient care, and how they can be used to facilitate quality improvement. For most professions, competencies related to the practical use of EHR systems and the capture of data are deemed relevant to all bands. However, the design and optimisation of EHR systems are considered increasingly appropriate with greater experience (B7+).

R1. Knowledge and understanding to differentiate between structured and unstructured patient data within electronic health records (EHR), the ability to distinguish between different types of data, and awareness of the impact of data type on clinical practice

R2. Ability to capture structured and unstructured patient data in EHR systems as part of assessments, care plans, clinical notes and other patient records.

R3. Knowledge and understanding of clinical coding terminologies (particularly SNOMED CT) and the use of coding in EHRs to record key patient information (e.g. diagnosis, allergies, procedures, adverse drug reactions).

R4. Ability to use digital tools (such as voice recognition dictation, touch screen interfaces or wireless medical devices) to record EHR data (e.g. clinical notation, letter correspondence)

R5. Knowledge and understanding of principles of design which enhance clinical utility and reduce cognitive burden in the construction of electronic health record and other digital systems

R6. Knowledge and understanding of data quality, how recording of data influences system utility, and how to following correct procedures to ensure high quality of data

R7. Knowledge and understanding of how to identify appropriate data metrices to measure healthcare system performance

R8. Ability to evaluate EHR system structure and performance, and provide feedback to enhance its continued development

R9. Ability to communicate within own organization to configure the rights and access to patient data held in the EHR relative to the needs of self and others

R10. Ability to support and/or teach others (including patients) in the understanding and navigation of digital health systems (e.g. EHR patient platforms)

R11. Ability to use digital platforms as a flexible tool to record therapeutic episodes with patients without inhibiting person-centred care, open and transparent communication and shared decision making

Domain 3
Records, assessments & plans
1. I have the knowledge and understanding to differentiate between structured and unstructured patient data within electronic health records (EHR), the ability to distinguish between different types of data, and awareness of the impact of data type on clinical practice
2. I have the ability to capture structured and unstructured patient data in EHR systems as part of assessments, care plans, clinical notes and other patient records.
3. I have knowledge and understanding of clinical coding terminologies (particularly SNOMED CT) and the use of coding in EHRs to record key patient information (e.g. diagnosis, allergies, procedures, adverse drug reactions).
4. I have the ability to use digital tools (such as voice recognition dictation, touch screen interfaces or wireless medical devices) to record EHR data (e.g. clinical notation, letter correspondence)
5. I have knowledge and understanding of principles of design which enhance clinical utility and reduce cognitive burden in the construction of electronic health record and other digital systems
6. I have knowledge and understanding of data quality, how recording of data influences system utility, and how to following correct procedures to ensure high quality of data
7. I have knowledge and understanding of how to identify appropriate data metrices to measure healthcare system performance
8. I have the ability to evaluate EHR system structure and performance, and provide feedback to enhance its continued development
9. I have the ability to communicate within own organization to configure the rights and access to patient data held in the EHR relative to the needs of self and others
10. I have the ability to support and/ or teach others (including patients) in the understanding and navigation of digital health systems (e.g. EHR patient platforms)
11. I have the ability to use digital platforms as a flexible tool to record therapeutic episodes with patients without inhibiting person-centred care, open and transparent communication and shared decision making

DOMAIN 4 | Transfer of Care

Transfer of care competencies in this domain consider the knowledge and skills required to effectively transfer or share patient data across systems. As such they are concerned with the methods, practices and standards of patient information transfer. This includes the risks, as well as the means by which well-designed transfer of care systems can aid personalised care. Similar to domain 3, most professions consider the recording of data in such systems is a universally relevant skills, however there is greater variability in regard to the other competencies (e.g. the understanding of third party data agreements and national policies around data sharing). Most professions consider such competencies of increasing relevance as you progress through the AfC bands.

T1. Knowledge and understanding of digital tools (e.g. EHR to EHR; secure email; image sharing platforms; Message Exchange, for Social Care and Health [MESH]) that support the transfer of patient information between health and care professionals at point of referral, admission, handover or discharge

T2. Ability to record data into digital systems (e.g. the EHR) to assist the construction of electronic transfer of care documents

T3. Knowledge and understanding of professional standards supporting standardisation of structure and content of transfer of care information

T4. Knowledge and understanding of shared care platforms (e.g. Local Health and Care Record Exemplars)

T5. Knowledge and understanding of risks associated with transfer of care documentation. To include: Ability to review and maintain referral rejection lists, Awareness of common errors in document transfer and procedures on how to resolve issues

T6. Knowledge and understanding of third party data sharing agreements. To include: Awareness of the NHS England Information Sharing Policy and Data Sharing Templates, Awareness of NHS Digital Remote Digital Signature Service, digital signature blocks and other methods to enhance cryptographic data transfer

T7. Knowledge and understanding of how EHR documentation templates/systems can transfer data directly into transfer documentation via guided auto-population

T8. Knowledge and understanding of how digital systems and tools can assist the ambitions of personalised care. To include awareness of: Data sharing through personalised care and support plans, Local Health and Care Records (LHCR), NHS Empower the Person roadmap, NHS England Digital Vision for Personalised Care

T9. Ability to communicate to facilitate the configuration of user rights for data sharing for self and others to aid the safe and timely transfer of care

Domain 4 **Transfer of Care**
1. I have knowledge and understanding of digital tools (e.g. EHR to EHR; secure email; image sharing platforms; Message Exchange, for Social Care and Health [MESH]) that support the transfer of patient information between health and care professionals at point of referral, admission, handover or discharge
2. I have the ability to record data into digital systems (e.g. the EHR) to assist the construction of electronic transfer of care documents
3. I have the knowledge and understanding of professional standards supporting standardisation of structure and content of transfer of care information
4. I have knowledge and understanding of shared care platforms (e.g. Local Health and Care Record Exemplars)
5. I have knowledge and understanding of risks associated with transfer of care documentation. *To include: Ability to review and maintain referral rejection lists, Awareness of common errors in document transfer and procedures on how to resolve issues*
6. I have knowledge and understanding of third party data sharing agreements. *To include: Awareness of the NHS England Information Sharing Policy and Data Sharing Templates, Awareness of NHS Digital Remote Digital Signature Service, digital signature blocks and other methods to enhance cryptographic data transfer*
7. I have knowledge and understanding of how EHR documentation templates/ systems can transfer data directly into transfer documentation via guided auto-population
8. I have knowledge and understanding of how digital systems and tools can assist the ambitions of personalised care. *To include awareness of: Data sharing through personalised care and support plans, Local Health and Care Records (LHCR), NHS Empower the Person roadmap, NHS England Digital Vision for Personalised Care*
9. I have the ability to communicate to facilitate the configuration of user rights for data sharing for self and others to aid the safe and timely transfer of care

DOMAIN 5 | Medicines management and optimisation

This domain considers the use of effective medicines management systems (e.g. electronic prescription services, electronic or automated dispensing); as well as the benefits of using such systems to the patient and healthcare systems. This includes the reviewing of patient data associated with the recording of medicine within EHR systems, and the ability to record patient group directions/ patient specific directions within the EHR. There is variability across professions relative to the degree of prescribing associated with the profession. There seems to be high degrees of relevance in those professions who commonly prescribe medications independently, particularly in band levels above B7.

M1. Knowledge and understanding of electronic systems for efficient medicines management and as required the ability to use within scope of practice: Electronic prescription service, Electronic repeat dispensing, Automated dispensing systems

M2. Ability to view and record patient data associated with medicines management within the electronic health record systems. Including (according to scope of practice): Medication status and history, Medications prescribed vs administered, Contraindications to medication, Indications for medicines prescribed/ required, Adverse events, Side effects, Medication dosage and frequency

M3. Knowledge and understanding of own and other professional's needs to gain appropriate access to view and record patient medicines, and to work within scope of practice despite system access and security

M4. Ability to communicate internally within own organisation to configure the rights and access to medicines information held within digital systems relative to the specific needs of self and others

M5. Knowledge of and ability to identify appropriate rights and access required for independent prescribing

M6. The ability to record Patient Group Directions (PGDs) / Patient Specific Directions (PSDs) within EHRs to document written instruction of the sale, supply and administration of medicines to: a) groups of patients who may not be individually identified before presentation for treatment (PGD)b) named patients after the prescriber has assessed the patient on an individual basis (PSD)

M7. Knowledge and understanding of the patient benefits of electronic medicine management and electronic medicine optimisation pathways (EMOPs) to: Ensure a person-centred approach to safe and effective medicine use, Improve patient safety, Reduce medication errors, Minimise variation in care, Enhance time and work flow efficiency

M8. Ability to organise and complete appropriate training to access systems relevant to medicines management and optimisation

M9. Knowledge and understanding of how local practices for medicines management within electronic health systems relate to concurrent non-digital practices (e.g. paper prescription forms)

Domain 5
Medicines management and optimisation
1. I have knowledge and understanding of electronic systems for efficient medicines management and as required the ability to use within scope of practice: *Electronic prescription service, Electronic repeat dispensing, Automated dispensing systems*
2. I have the ability to view and record patient data associated with medicines management within the electronic health record systems. Including (according to scope of practice): *Medication status and history, Medications prescribed vs administered, Contraindications to medication, Indications for medicines prescribed/ required, Adverse events, Side effects, Medication dosage and frequency*
3. I have knowledge and understanding of own and other professional's needs to gain appropriate access to view and record patient medicines, and to work within scope of practice despite system access and security
4. I have the ability to communicate internally within own organisation to configure the rights and access to medicines information held within digital systems relative to the specific needs of self and others
5. I have knowledge of and ability to identify appropriate rights and access required for independent prescribing
6. I have the ability to record Patient Group Directions (PGDs) / Patient Specific Directions (PSDs) within EHRs to document written instruction of the sale, supply and administration of medicines to: *a) groups of patients who may not be individually identified before presentation for treatment (PGD)* *b) named patients after the prescriber has assessed the patient on an individual basis (PSD)*
7. I have knowledge and understanding of the patient benefits of electronic medicine management and electronic medicine optimisation pathways (EMOPs) to: *Ensure a person-centred approach to safe and effective medicine use, Improve patient safety, Reduce medication errors, Minimise variation in care, Enhance time and work flow efficiency*
8. I have the ability to organise and complete appropriate training to access systems relevant to medicines management and optimisation
9. I have knowledge and understanding of how local practices for medicines management within electronic health systems relate to concurrent non-digital practices (e.g. paper prescription forms)

DOMAIN 6 | Orders and results management

Orders and results management covers digital tools which enable the requesting, reporting or reviewing the results of medical testing. This domain covers diagnostic testing and screening through variable methods (e.g. laboratory testing, medical imaging testing). Skills in this domain include storing, sharing, resulting and viewing patient data associated with medical testing. More advanced skills include the review and reporting of real time clinical test results (e.g. through wireless device technologies). The knowledge requirements to fulfil this domain include the understanding of machine learning (ML) and artificial intelligence innovations within medical testing diagnostic systems (such as clinical decision support systems, image recognition algorithms). This knowledge would also include awareness of the difference between supervised and unsupervised ML methods and differences between ML methodologies. Across professions there is some variability as to whether these competencies are compulsory or voluntary requirements. However, there is consistent agreement across most professions that this domain is not relevant to B3-4 staff, and grows with relevance as you advance through the AfC bands.

O1. Knowledge and understanding of digital tools which support visibility, requesting and resulting of medical testing associated with: Diagnostic testing, Screening Monitoring, And via diverse methods. E.g. Pathology and laboratory testing, Medical imaging technologies (e.g. radiology, radiotherapy imaging).

O2. Ability to record, store, share and result patient data associated medical testing (in line with scope of practice)

O3. Ability to view patient data associated with medical testing

O4. Knowledge and understanding to engage with the development, deployment and optimisation of digital capabilities within medical testing

O5. Knowledge and understanding of machine learning (ML) and artificial intelligence (AI) innovations within medical testing digital systems (e.g. clinical decision support and image recognition algorithms in radiology). Including (in simplest terms) awareness of: The names of common types of AI/ ML algorithm techniques (e.g. deep learning/ neural networks vs traditional ML); The difference between supervised and unsupervised machine learning methods; The objectives of ML use in healthcare (e.g. image recognition, natural language processing, big data pattern recognition, decision support); Which ML methods are commonly used for which specific objective; Where AI/ ML systems commonly have problems

O6. Knowledge and understanding of own and other professional's needs to gain appropriate access to request and record results of diagnostic tests (whilst maintaining individual scope of practice)

O7. Ability to communicate internally within own environment to configure the rights and access to request and record results of diagnostic tests (including escalation as required)

O8. Ability to use the digital system to ensure adequate governance of all actions related to medical test orders (including in the absence of the requesting practitioner). For example: receipt and action of result requests (including to escalate treatment; for example in radiotherapy); management of test request/ rejection workflows; differentiation of historical results vs new results (action pending)

O9. Ability to perform and understand the results of real-time clinical tests (as per individual scope of practice) and record patient results in electronic health record systems (either automatic data transfer or manually). E.g. Thromboelastography (TEG); Arterial blood gases (ABGs); Electrocardiogram (ECG); Blood sugar measurement

O10. Knowledge and understanding of the clinical, risk and patient safety benefits associated with digitally-enabled ordering and results management (including the ability to review and action results remotely)

Domain 6
Orders and results management
1. I have knowledge and understanding of digital tools which support visibility, requesting and resulting of medical testing associated with: *Diagnostic testing, Screening Monitoring, And via diverse methods. E.g. Pathology and laboratory testing, Medical imaging technologies (e.g. radiology, radiotherapy imaging).*
2. I have the ability to record, store, share and result patient data associated medical testing (in line with scope of practice)
3. I have the ability to view patient data associated with medical testing
4. I have the knowledge and understanding to engage with the development, deployment and optimisation of digital capabilities within medical testing
5. I have knowledge and understanding of machine learning (ML) and artificial intelligence (AI) innovations within medical testing digital systems (e.g. clinical decision support and image recognition algorithms in radiology). Including (in simplest terms) awareness of: *The names of common types of AI/ ML algorithm techniques (e.g. deep learning/ neural networks vs traditional ML); The difference between supervised and unsupervised machine learning methods; The objectives of ML use in healthcare (e.g. image recognition, natural language processing, big data pattern recognition, decision support); Which ML methods are commonly used for which specific objective; Where AI/ ML systems commonly have problems*
6. I have knowledge and understanding of own and other professional's needs to gain appropriate access to request and record results of diagnostic tests (whilst maintaining individual scope of practice)
7. I have the ability to communicate internally within own environment to configure the rights and access to request and record results of diagnostic tests (including escalation as required)
8. I have the ability to use the digital system to ensure adequate governance of all actions related to medical test orders (including in the absence of the requesting practitioner). *For example: receipt and action of result requests (including to escalate treatment; for example in radiotherapy); management of test request/ rejection workflows; differentiation of historical results vs new results (action pending)*
9. I have the ability to perform and understand the results of real-time clinical tests (as per individual scope of practice) and record patient results in electronic health record systems (either automatic data transfer or manually). *E.g. Thromboelastography (TEG); Arterial blood gases (ABGs); Electrocardiogram (ECG); Blood sugar measurement*
10. I have knowledge and understanding of the clinical, risk and patient safety benefits associated with digitally-enabled ordering and results management (including the ability to review and action results remotely)

DOMAIN 7a | Assets and resource optimisation: Business related

The assets and resource optimisation domain is split into business-related and personal competencies. The business related component of this domain covers knowledge and skills associated the use of non-clinical software systems which are adjacent or connected to the EHR. These include patient administration systems, bed management systems, business intelligence and support systems (e.g. procurement, accounting), performance measurement dashboards, and appraisal and performance management systems. It is widely considered relevant to all staff to have understanding of PAS systems, and performance systems for the appraisal of peers. The use and understanding of business related and organisation administrative systems are considered relevant to staff beyond band 6, and increasingly with high bands.

A1. Knowledge and understanding of patient administration systems (PAS) used within own organisation

A2. Ability to search and modify patient details in local patient administration system

A3. Knowledge and understanding of bed management systems used within own organisation

A4. Knowledge and understanding of local organisational business intelligence systems

A5. Ability to use a business intelligence data analytics dashboard functionality to collect, integrate, analyse or present appropriate productivity and efficiency data of the local healthcare system

A6. Knowledge and understanding of local organisational performance measurement systems

A7. Ability to use a performance measurement system dashboard to collect, analyse and/ or report performance data for self, an individual, a group, a department or an organisation

A8. Knowledge and understanding of digital tools used locally for procurement and supply chain management of goods and services

A9. Ability to use digital systems of business planning to produce standard reports for capacity and demand planning and service resource use

A10. Knowledge and understanding of and ability to use local digital business support systems. E.g. Clinic Management software, On-line accountancy platforms, Online tax assessment platforms

A11. Ability to use local digital systems for the recording of personal development reviews, performance reviews and performance management meetings

Domain 7a
Assets and resource optimisation: Business related
1. I have knowledge and understanding of patient administration systems (PAS) used within own organisation
2. I have the ability to search and modify patient details in local patient administration system
3. I have knowledge and understanding of bed management systems used within own organisation
4. I have knowledge and understanding of local organisational business intelligence systems
5. I have the ability to use a business intelligence data analytics dashboard functionality to collect, integrate, analyse or present appropriate productivity and efficiency data of the local healthcare system
6. I have knowledge and understanding of local organisational performance measurement systems
7. I have the ability to use a performance measurement system dashboard to collect, analyse and/or report performance data for self, an individual, a group, a department or an organisation
8. I have knowledge and understanding of digital tools used locally for procurement and supply chain management of goods and services
9. I have the ability to use digital systems of business planning to produce standard reports for capacity and demand planning and service resource use
10. I have knowledge and understanding of and ability to use local digital business support systems. *E.g. Clinic Management software, On-line accountancy platforms, Online tax assessment platforms*
11. I have the ability to use local digital systems for the recording of personal development reviews, performance reviews and performance management meetings

DOMAIN 7b | Assets and resource optimisation: Personal

The second component of the assets and resource optimisation domain is related to personal systems of administration used by healthcare staff. These include knowledge of and ability to use the NHS electronic staff record, for example to review an online payslip, personal human resource systems, and the use of e-rostering platforms. There is gross consensus that skills required to use personal administrative systems are relevant for all AHP staff, irrespective of band. However, there is variability related to e-rostering systems, potentially secondary to some professionals not using them widely.

P1. Knowledge and understanding of the electronic staff record (ESR) for appropriate functions (e.g.): Employee self-service, Manager self-service, HR, Payroll, Learning administration

P2. Ability to access and manage own personal information via the ESR system. E.g.: View on-line payslip, Update personal details (e.g. name, marital status, emergency contact details), Enrol on training, Complete a learning evaluation

P3. Knowledge and understanding of local human resource optimisation systems

P4. Knowledge and understanding of local organisational/ departmental e-rostering systems

P5. Ability to use an e-rostering platform construct a departmental/ speciality level roster

P6. Ability to view and change own status on an e-rostering schedule

P7. Ability to navigate digital systems to identify and self-refer/apply for the provision of staff occupational health and wellbeing services

Domain 7b **Assets and resource optimisation: Personal**
1. I have knowledge and understanding of the electronic staff record (ESR) for appropriate functions *(e.g.): Employee self-service, Manager self-service, HR, Payroll, Learning administration*
2. I have the ability to access and manage own personal information via the ESR system. *E.g.: View on-line payslip, Update personal details (e.g. name, marital status, emergency contact details), Enrol on training, Complete a learning evaluation*
3. I have knowledge and understanding of local human resource optimisation systems
4. I have knowledge and understanding of local organisational/ departmental e-rostering systems
5. I have the ability to use an e-rostering platform construct a departmental/ speciality level roster
6. I have the ability to view and change own status on an e-rostering schedule
7. I have the ability to navigate digital systems to identify and self-refer/apply for the provision of staff occupational health and wellbeing services

DOMAIN 8 | Decision support

This domain incorporates the use of systems which advise clinical reasoning and decision making in practice through the incorporation of evidence based guidelines and recommendations. Such systems are increasingly placed within EHR systems or mobile health applications used by healthcare workers and patients. The domain also covers knowledge and understanding of the basis of machine learning and AI within such systems, and the risks of bias associated with the development of such algorithms and the data used. It is evident that some allied health professions have an increased requirement for this domain, whilst some have minimal or no requirement for decision support systems. In general, the relevance of this domain is higher in management level positions (band 8-9) and not considered relevant to bands 3-5.

D1. Knowledge and understanding of digital tools built within current systems or as adjuncts from 3rd party suppliers, to direct a patient pathway and advise practice through evidence based guidelines

D2. Knowledge and understanding of algorithms to alert staff regarding: Patient acuity, Risk, Clinical need, Resource allocation (capacity and demand)

D3. Knowledge and understanding of machine learning and AI algorithms underpinning clinical decision support system tools within healthcare digital systems (e.g. EHRs, mHealth apps)

D4. Knowledge and understanding of the development and/or evaluation of clinical decision support systems which utilise machine learning and AI

D5. Knowledge and understanding of the underpinning governance and regulatory frameworks associated with clinical decision support systems

D6. Knowledge and understanding of the place of decision support technology as an adjunct to assist, although not supersede, the decision making of self as an autonomous professional

D7. Knowledge and understanding of the risks and biases associated with decision support technology, particularly the dependence upon accurate data, fair and judicious programming, and appropriate implementation of results

D8. Knowledge and understanding of the professional clinical responsibility associated with the use of decision support technology in practice

Domain 8
Decision support
1. I have knowledge and understanding of digital tools built within current systems or as adjuncts from 3rd party suppliers, to direct a patient pathway and advise practice through evidence based guidelines
2. I have knowledge and understanding of algorithms to alert staff regarding: *Patient acuity, Risk, Clinical need, Resource allocation (capacity and demand)*
3. I have knowledge and understanding of machine learning and AI algorithms underpinning clinical decision support system tools within healthcare digital systems (e.g. EHRs, mHealth apps)
4. I have knowledge and understanding of the development and/ or evaluation of clinical decision support systems which utilise machine learning and AI
5. I have knowledge and understanding of the underpinning governance and regulatory frameworks associated with clinical decision support systems
6. I have knowledge and understanding of the place of decision support technology as an adjunct to assist, although not supersede, the decision making of self as an autonomous professional
7. I have knowledge and understanding of the risks and biases associated with decision support technology, particularly the dependence upon accurate data, fair and judicious programming, and appropriate implementation of results
8. I have knowledge and understanding of the professional clinical responsibility associated with the use of decision support technology in practice

DOMAIN 9 | Digital therapeutics

As the largest domain, Digital Therapeutics covers a broad spectrum of digital tools integrated into clinical practice sin support of normal therapy and care. It includes tools and systems used by clinicians within the provision of their interventions with patients, and varies from the use of online booking systems for scheduling, the identification and sharing of clinically-assured online health and care information, and specific tools relevant to the care provided. This domain also covers the provision of remote care pathways (i.e. telehealth, telemedicine, virtual care). Tools such as digital methods of data collection via mHealth apps or wearable technologies fall into this domain, as does the development, implementation and evaluation of remote care appointments via telephone or video. Competencies include the user led development and suitability of such services, as well as the evaluation of digital tools through the NICE Evidence standards framework for digital health technologies. Despite the wide spectrum of this domain, there is consensus across professions that this domain holds relevance across professions, irrespective of band.

V1. Knowledge and understanding of on-line patient appointment booking system

V2. Ability for self (or in the teaching of others) to use an on-line patient appointment booking systems to reschedule, book or cancel an appointment

V3. Knowledge and understanding of how to recognise clinically assured on-line health and care information content

V4. Ability to direct patients to clinically assured on-line health and care information

V5. Ability to identify non-clinically assured/ inaccurate on-line health and care information

V6. Ability to recommend or prescribe approved mobile health applications (mHealth app) (from NHS App store or other digital app distribution platform- e.g. Apple App store, Google Play store

V7. Ability to recommend or prescribe the NHS app

V8. Knowledge and understanding of digitally-enabled psychological therapies (online or via mHealth app)

V9. Ability to view and/ or capture patient data at the point of care (for example, via: Hand held devices for patient-reported outcome measures and/ or patient experience data, mHealth wearable technologies for personal health and exercise data tracking, Connected medical devices (internet of medical things) to measure patient physical parameters, Digital camera technology to facilitate medical image capture and recording in EHRs, Remote monitoring of patient EHR data (clinical notes, test results)Use of image exchange portals

V10. Knowledge and understanding of the role and benefits of virtual clinics (e.g. telemedicine) using secure platforms to provide consultations, historically delivered face to face in physical clinics: By telephone, By text-only messaging (email, instant messaging)By on-line video platform (e.g. Skype, Zoom), By interactive media platform (e.g. Physitrack), By virtual reality/ augmented reality platform

V11. Ability to develop, employ and evaluate the impact of virtual clinics for direct patient care by forms of digital media as an alternative to face to face consultation. To consider: Acceptability to and preferences of the patient population, Benefits related to cost and clinical

effectiveness of services, Costs associated with virtual clinics to the workforce, local environment and wider organisational environment (as appropriate)

V12. Knowledge and understanding of multi-professional telemedicine services (providing clinical and/or social assessment, diagnostics, advice and support)

V13. Knowledge of the Organisation of the Review and Care of Health-related Applications (ORCHA) and their role in reviewing the safety of patient-facing applications

V14. Knowledge and understanding of the limitations and common problems associated with remote care. Including: Suitability of patients, Control of the environment to prevent reduction in data quality, Hardware capabilities, Maintenance of professionalism via remote communication

V15. Ability to use mHealth app curation and recommendation platforms to provide guidance as to how to practically prescribe healthcare apps (e.g. RxUniverse, Happtique)

V16. Ability to evaluate current and past systems of health and care and develop new models of practice which use remote care judiciously for the benefit of the service, workforce and patients

V17. Ability to evaluate digital interventions (such as mobile health applications) independently against the NICE Evidence standards framework for digital health technologies

V18. Ability to use online communication platforms (e.g. video conferencing, e-learning webinars) to provide clinical teaching to professionals working in the community

V19. Ability to employ integrated patient facing technologies in support of normal therapy and care (e.g. information sharing via digital devices, digital therapy interventions such as virtual or augmented reality, mHealth apps). To include: How to incorporate digital technology into individual and group interventions, Co-design of patient facing technologies, Evaluation of such technologies

Domain 9 **Digital Therapeutics**
1. I have knowledge and understanding of on-line patient appointment booking system
2. I have the ability for self (or in the teaching of others) to use an on-line patient appointment booking systems to reschedule, book or cancel an appointment
3. I have knowledge and understanding of how to recognise clinically assured on-line health and care information content
4. I have the ability to direct patients to clinically assured on-line health and care information
5. I have the ability to identify non-clinically assured/ inaccurate on-line health and care information
6. I have the ability to recommend or prescribe approved mobile health applications (mHealth app) (from NHS App store or other digital app distribution platform *e.g. Apple App store, Google Play store*
7. I have the ability to recommend or prescribe the NHS app
8. I have knowledge and understanding of digitally-enabled psychological therapies (online or via mHealth app)

9. I have the ability to view and/ or capture patient data at the point of care
For example, via:
    · *Hand held devices for patient-reported outcome measures and/ or patient experience data*
    · *mHealth wearable technologies for personal health and exercise data tracking*
    · *Connected medical devices (internet of medical things) to measure patient physical parameters*
    · *Digital camera technology to facilitate medical image capture and recording in EHRs*
    · *Remote monitoring of patient EHR data (clinical notes, test results)*
    · *Use of image exchange portals*

10. I have knowledge and understanding of the role and benefits of virtual clinics (e.g. telemedicine) using secure platforms to provide consultations, historically delivered face to face in physical clinics: *By telephone, By text-only messaging (email, instant messaging)By on-line video platform (e.g. Skype, Zoom), By interactive media platform (e.g. Physitrack), By virtual reality/ augmented reality platform*
11. I have the ability to develop, employ and evaluate the impact of virtual clinics for direct patient care by forms of digital media as an alternative to face to face consultation. *To consider: Acceptability to and preferences of the patient population, Benefits related to cost and clinical effectiveness of services, Costs associated with virtual clinics to the workforce, local environment and wider organisational environment (as appropriate)*
12. I have knowledge and understanding of multi-professional telemedicine services (providing clinical and/ or social assessment, diagnostics, advice and support)
13. I have knowledge of the Organisation of the Review and Care of Health-related Applications (ORCHA) and their role in reviewing the safety of patient-facing applications
14. I have knowledge and understanding of the limitations and common problems associated with remote care. *Including: Suitability of patients, Control of the environment to prevent reduction in data quality, Hardware capabilities, Maintenance of professionalism via remote communication*

15.	I have the ability to use mHealth app curation and recommendation platforms to provide guidance as to how to practically prescribe healthcare apps (e.g. RxUniverse, Happtique)
16.	I have the ability to evaluate current and past systems of health and care and develop new models of practice which use remote care judiciously for the benefit of the service, workforce and patients
17.	I have the ability to evaluate digital interventions (such as mobile health applications) independently against the NICE Evidence standards framework for digital health technologies
18.	I have the ability to use online communication platforms (e.g. video conferencing, e-learning webinars) to provide clinical teaching to professionals working in the community
19.	I have the ability to employ integrated patient facing technologies in support of normal therapy and care (e.g. information sharing via digital devices, digital therapy interventions such as virtual or augmented reality, mHealth apps). *To include: How to incorporate digital technology into individual and group interventions, Co-design of patient facing technologies, Evaluation of such technologies*

DOMAIN 10 | Meta-competencies

The final domain covers knowledge and skills which cover the leadership and behavioural characteristics which are required to facilitate organisational or departmental digital transformation. These skills include the ability to network both internally and externally to one's host organisation and to collaborate on transformation programmes. It also covers the integration of digital knowledge and skills, alongside other arms of practice (e.g. quality improvement, education and development, and research). Leadership skills include the evaluation of the digital maturity of healthcare systems and the development of strategy to guide digital transformation, measurement of staff and patient needs to enable digital inclusion, and cultural change management strategies. Where there is agreement between professions, it is evident that these skills are of increasing importance as one proceeds beyond band 7 level. There is some variability as to whether such skills are compulsory or voluntary. Additionally some professions consider network building and the integration of digital with other arms of practice important for all bands. Of course, the involvement in these other activities will be specific to the requirement per band.

C1. Capacity to build relationships with key stakeholders for digital transformation within the local organisation or surround digital health ecosystem

C2. Capacity to use digital technologies as required within quality improvement and/or research and development programmes within own local organisation or specific to professional role

C3. Capacity to identify the needs and requirements of the healthcare institution to guide a strategic programme of digital transformation, according to: the specific patient population (demographics, clinical need, preferences) the local working environment (systems, staffing structure, leadership direction, etc.), the specific department staff needs and preferences (including gaps in workforce competency)

C4. Capacity to adapt and improve digital transformation plans according to unexpected incidents or external influences

C5. Capacity to contribute to the research agenda for own department towards topics of digital therapeutics, mobile health and digital transformation

C6. Capacity to continuously evaluate knowledge and understanding of digital technology as systems develop over time

C7. Capacity to develop local standards of use for digital technology tools

C8. Knowledge and understanding of change management processes required to support digital transformation locally and at scale within organisations (as appropriate). Including: Understanding of underpinning drivers for change and role of technology, Awareness of procedural barriers/enablers to change (e.g. finance, legacy systems, culture, vision), Awareness of methodologies suited to large-scale digital transformation (e.g. design thinking, Agile project planning, user-centred design)

C9. Knowledge and understanding of the benefits and impact of digital transformation within healthcare. Including: Awareness of external drivers for technological transformation (e.g. NHS Long Term Plan, Topol Review, The future of healthcare: our vision for digital, data and technology in health and care)

C10. Capacity to advocate for and lead digital transformation strategy and facilitate the embedding in healthcare institute short, medium and long term planning

C11. Knowledge and understanding of regional collaborative programmes to assist wider engagement in digital transformation; and ability to contextualise plans relative to needs of the local population. E.g. Local digital roadmaps, Local sustainability and transformation partnerships (STPs), Local Integrated Care Record Exemplar (LICRE) programmes

C12. Capacity to evaluate digital tools relative to the requirements of the service and needs of the target population

C13. Capacity to contribute to and/ or lead digital transformation programmes in line with judicious frameworks of governance. Including: Ethical responsibility, Quality improvement and evaluation (e.g. frameworks for evaluation from Public Health England/ Health Education England), Evidence and guideline adherence (e.g. NICE Evidence Standards for Digital Health Technologies), Transparency, Accountability

C14. Capacity to evaluate current or contribute to the design of new digital systems and tools which support the efficient working of single professions and the wider allied health professional (AHP) groups; including awareness of the normal running of systems has failed

Domain 10 **Meta-competencies**
1. I have the capacity to build relationships with key stakeholders for digital transformation within the local organisation or surround digital health ecosystem
2. I have the capacity to use digital technologies as required within quality improvement and/ or research and development programmes within own local organisation or specific to professional role
3. I have the capacity to identify the needs and requirements of the healthcare institution to guide a strategic programme of digital transformation, according to: *The specific patient population (demographics, clinical need, preferences) the local working environment (systems, staffing structure, leadership direction, etc.), the specific department staff needs and preferences (including gaps in workforce competency)*
4. I have the capacity to adapt and improve digital transformation plans according to unexpected incidents or external influences
5. I have the capacity to contribute to the research agenda for own department towards topics of digital therapeutics, mobile health and digital transformation
6. I have the capacity to continuously evaluate knowledge and understanding of digital technology as systems develop over time
7. I have the capacity to develop local standards of use for digital technology tools
8. I have knowledge and understanding of change management processes required to support digital transformation locally and at scale within organisations (as appropriate). *Including: Understanding of underpinning drivers for change and role of technology, Awareness of procedural barriers/ enablers to change (e.g. finance, legacy systems, culture, vision), Awareness of methodologies suited to large-scale digital transformation (e.g. design thinking, Agile project planning, user-centred design)*
9. I have knowledge and understanding of the benefits and impact of digital transformation within healthcare. *Including: Awareness of external drivers for technological transformation (e.g. NHS Long Term Plan, Topol Review, The future of healthcare: our vision for digital, data and technology in health and care)*
10. I have the capacity to advocate for and lead digital transformation strategy and facilitate the embedding in healthcare institute short, medium and long term planning
11. I have knowledge and understanding of regional collaborative programmes to assist wider engagement in digital transformation; and ability to contextualise plans relative to needs of the local population. *E.g. Local digital roadmaps, Local sustainability and transformation partnerships (STPs), Local Integrated Care Record Exemplar (LICRE) programmes*
12. I have the capacity to evaluate digital tools relative to the requirements of the service and needs of the target population
13. I have capacity to contribute to and/ or lead digital transformation programmes in line with judicious frameworks of governance. Including: *Ethical responsibility, Quality improvement and evaluation (e.g. frameworks for evaluation from Public Health England/ Health Education England), Evidence and guideline adherence (e.g. NICE Evidence Standards for Digital Health Technologies), Transparency, Accountability*

14. I have the capacity to evaluate current or contribute to the design of new digital systems and tools which support the efficient working of single professions and the wider allied health professional (AHP) groups; including awareness of the normal running of systems has failed

Domain delineation by profession/ band

The documents linked below will present the profession/ band specific requirements for each competency in the selected domain. This is presented to allow comparison of competency requirements across the different allied health professions.

Domain 1 | General
Domain 2 | Data Management and Clinical Informatics
Domain 3 | Records, Assessments and Plans
Domain 4 | Transfer of Care
Domain 5 | Medicines Management and Optimisation
Domain 6 | Orders and Results Management
Domain 7a | Assets and resource optimisation: Business related
Domain 7b | Assets and resource optimisation: Personal
Domain 8 | Decision Support
Domain 9 | Digital Therapeutics
Domain 10 | Meta-competencies

Profession Specific Frameworks

The documents linked below provide a profession specific delineation of the framework to illustrate the competency requirements for that individual profession(s).

Art Therapies (Art therapy, music therapy, dramatherapy)
Diagnostic Radiography
Dietetics
Occupational Therapy
Operating Department Practice
Orthoptics
Orthotics/ Prosthetics
Osteopathy
Paramedic Science
Physiotherapy
Podiatry/ Chiropody
Speech and language therapy
Therapeutic Radiography

Author

This framework was written by Christopher Tack, clinical specialist physiotherapist and digital lead for Allied Health Professionals at Guy's and St Thomas' NHS Foundation Trust.

The project was undertaken as part of the Topol Digital Health Fellowship, and completed on behalf of Health Education England and NHS England.

Acknowledgements

I would like to thank the clinical leadership team within the physiotherapy department at Guy's and St Thomas' NHS Foundation Trust for supporting my application to the Fellowship.

I would like to highlight the exceptional content and organisation of the Topol Fellowship programme, and in particular the work of Stuart Sutherland and Dr Owen Driskell.

I would like to thank Henrietta Mbeah-Bankas, Head of Blended Learning at Health Education England; and Steve Tolan, AHP Lead at NHS England for their advice and guidance during the project.

I would like to thank the 40 expert panellists for undertaking the Delphi study with such enthusiasm and rigour.

Stakeholders

Sandra Noonan- Chief Therapist, Guy's and St Thomas' NHS Foundation Trust

Dr Jacky Jones- Deputy Chief Therapist, Guy's and St Thomas' NHS Foundation Trust

Rashida Pickford, Kathy Payne, Jennifer Heal- Clinical Leadership team for Integrated MSK at Guy's and St Thomas' NHS Foundation Trust

Steve Tolan- AHP Lead at NHS England

Henrietta Mbeah-Bankas- Head of Blended Learning at Health Education England