A Digital Framework for Allied Health Professionals

#AHPsintoAction
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Foreword by Suzanne Rastrick, Chief Allied Health Professions Officer

The use of information and technology has the power to improve health, care and wellbeing. It can give patients, service users and citizens more control over their health, and is key to the NHS meeting the quality, safety and efficiency challenges it faces.

As individuals, in our personal and social lives we increasingly expect to use digital services to manage our finances, communication and shopping. Digital capabilities and data have transformed other industries in a way many would not have imagined a decade ago. There have been benefits and challenges with this transformation, and as allied health professions (AHPs) we have an individual and collective responsibility to develop our use of these digital capabilities and data, anticipate the challenges and realise the benefits.

Enabling AHPs to use information and technology is therefore one of 4 priorities in AHPs into Action. This Digital Framework for Allied Health Professionals supports local services and AHPs to make that happen and works towards services that are both paper-free at the point of care and connected to other services and systems.

Across England local organisations are working together within Sustainability and Transformation Partnerships (STPs) to assess digital maturity. From these assessments local health communities are planning, prioritising and investing in digital capabilities that support their broader ambitions for improving local services. As AHP leaders at a national and local level we need to engage with and influence this work to ensure it delivers for service users, the AHP workforce, and the broader health and wellbeing of citizens.

AHPs will need to work with their Chief Clinical Information Officer’s (CCIO’s), Chief Information Officer’s (CIO’s), technology, information and finance leads to understand how they can use digital capabilities and health technologies available to achieve the ambitions of the NHS Long Term Plan. AHPs will need to clearly articulate what technologies and capabilities are required and what impact this will have on patient care and service delivery. This Digital Framework for Allied Health Professionals supports local services to help them to do this.

Together we can ensure we deliver digital and data enabled AHP services both individually as citizens and as AHPs, for the benefit of our service users and the wider health and care system.

Suzanne Rastrick, Chief Allied Health Professions Officer
Technology will play a central role in realising the Long Term Plan, helping clinicians use the full range of their skills, reducing bureaucracy, stimulating research and enabling service transformation.

This digital framework is a practical guide for commissioners, managers on achieving the commitment made in Personalised Health and Care 2020 to use information and technology to make sure patient records are digital and interoperable.

It supports the approaches the wider health and care system is using to support the development of Local Digital Roadmaps, the use of the Digital Maturity Assessment and The future of healthcare: our vision for digital, data and technology in health and care (2018).

From our work with national and local partners we know that there are several components to becoming a digitally mature AHP service. These are presented as 3 ambitions for digitally mature AHP services:

1. Digitally ready AHP services
2. Digitally mature AHP services
3. Data enabled AHP services

This framework has been produced using national policy and strategy, advice from the National Digital AHPs steering group, and a series of regional events with AHPs.

It is aimed at AHPs, managers of AHP services and leaders of the wider health and social care system at a national, regional and local level, supporting them to:

- Contextualise strategic digital developments for AHPs.
- Engage AHPs in wider digital strategy at a local, regional and national level.
- Use a framework that can be tailored according to local, regional, professional need and clinical focus.
- Identify operational examples and case studies to engage the wider AHP workforce in digital developments.
- Enable AHPs to contribute to the overall system pressures, support new and innovative ways of working.

This framework provides a structured approach that AHPs, AHP leaders and systems leaders can use to start assessing and acting on their current levels of digitisation and achieving the aims above.

**Allied Health Professions are:**
art therapists, dramatherapists, music therapists, chiropodists/podiatrists, dietitians, occupational therapists, operating department practitioners, orthoptists, osteopaths, prosthetists and orthotists, paramedics, physiotherapists, diagnostic radiographers, therapeutic radiographers, speech and language therapists.
A call for collective action

All AHPs
All AHPs should:
1. Ensure that their continuous professional development (CPD) includes the development of digital literacies to support their current and future practice.
2. Use digital and data capabilities to support local quality improvement.
3. Work in partnership with local teams to develop the necessary digital and data capabilities to support local digital priorities.

AHP leaders and managers
AHP leaders and managers should:
1. Use this resource to review local progress and prioritise actions to develop digitally mature AHP services.
2. Ensure you are familiar with priorities for digital transformation from your local sustainability and transformation partnerships.
3. Identify local education and training requirements for staff to support a digitally literate and empowered workforce.
4. Engage with your Chief Clinical Information Officer, Chief Information Officer and Director of Finance to identify how you can address local priorities for the digitisation of AHP services.
5. Evaluate and demonstrate the impact of your digitisation activities, and work collaboratively with other AHP services to share knowledge and insights.

System leaders
System leaders at a national, regional and local level should:
1. Involve strategic and clinical AHP leads in your digital programmes, incorporating AHP service requirements in planning, procurement, delivery and optimisation of digital capabilities.
2. Ensure that local digital systems are developed to support the collection of meaningful structured and structured data on AHPs services and outcomes.
3. Ensure the impact of AHP services on system priorities and performance are included in digital data sets to support wider clinical performance, outcomes and efficiency.
4. Ensure that AHP digital systems are integrated and interoperable with wider healthcare systems.
5. Support and enable the development of digital careers for AHPs.
Our 3 ambitions

This framework outlines 3 core ambitions and associated actions for AHP services that support the development and implementation of Local Digital Roadmaps and the use of the Digital Maturity Assessment:

1. Digitally ready AHP services
2. Digitally mature AHP services
3. Data enabled AHP services

A digital framework for allied health professionals

AHP services can demonstrate:
- Strategic alignment
- Digital leadership
- Digitally ready AHPs
- Digital careers

AHP services can demonstrate:
- Effective use of core digital capabilities
- Effective integration and interoperability
- Evidence of digitally enabled transformation

AHP services can demonstrate that digitisation leads to improvements in:
- Safety and Quality
- Clinical Outcomes
- Staff and Patient Experience
- Resource Sustainability

These ambitions are dependent on the right people, technologies and processes. Focusing on these 3 ambitions, therefore, provides a structure to develop a local plan of delivery.

AHP leaders, service managers, and Chief Clinical Information Officers should review their local strategies and plans against the framework. For each area, actions and next steps are offered to guide thinking when developing a local plan. This will help to identify any gaps requiring action to support delivery.
AHP leaders and staff need to be able to plan for and deploy digital services, ensuring that they demonstrate improvement against one or more of the impacts outlined in Ambition 3 of this framework.

Achieving the potential of digital technologies to improve and transform health, care and wellbeing is also dependent on effective organisational processes, culture and leadership, including:

- Strategic alignment with national and local priorities as outlined in the introduction.
- Organisational AHP leadership.
- Effective business planning.
- Effective governance.

**Digital leadership**

Achieving the potential of digital technologies to transform health, care and wellbeing is dependent on inspiring and enabling health and care staff to make the most of the opportunities digital capabilities can offer.

Therefore, at a local level supporting the wider AHP workforce to influence and achieve the ambitions in this framework is key to delivering digitally mature services. This also supports priority 2 of AHPs into Action: AHPs skills can be further developed, and is dependent on effective organisational and professional leadership.

**Digitally ready AHPs**

Health Education England (HEE) defines digital literacy(-ies) as: the capabilities that fit someone for living, learning, working, participating and thriving in a digital society.

Nationally much of the work to deliver a digitally ready health and care workforce is being led by Health Education England’s work on building a digital ready workforce programme. The Topol review will help guide the future of this work.
Health Education England have published a Digital Literacy Capability Framework that outlines generic capabilities that support individual motivation and development. Crucially, the framework promotes positive attitudes towards change, technology and innovation. AHPs can use the framework:

- For self-assessment
- To help identify learning and developmental needs
- To inform personal and professional development plans
- To guide formal, informal, directed and self-directed learning
- For reflection and goal-setting
- For evaluation of progress and performance

AHP service leads and senior managers should use the Digital Literacy Capability Framework to support the planning and delivery of local training and education and staff development.

**AHPs in clinical informatics**

Alongside clinical practice, management, education and research, pioneering AHPs are moving into roles in clinical informatics, both in new roles and by leading the implementation of digital health and care systems as part of their existing roles.

Clinical informatics is an area of relative infancy but clinicians from a variety of professional backgrounds are increasingly developing these roles, supporting the deployment of digital capabilities described in Ambition 2.

The [Faculty of Clinical Informatics](https://www.facultyofclinicalinformatics.org.uk) was established in 2017 to develop professional standards, revalidation and accreditation processes for clinical informaticians across the UK. There are also a number of professional development opportunities, such as the NHS Digital Academy and collaborative work with NHS Improvement on Developing a clinically focused digital workforce.

Career opportunities in this area for AHPs will evolve as the health and care system progresses in its journey towards a digital future. AHPs already working in, or interested in working in, clinical informatics should engage with this work. They should explore the career opportunities available to them to ultimately support the development of the clinical informatics community where improving patient and service user outcomes is at the core of its values and objectives.
Ambition 2: Digitally mature AHP services

This ambition is dependent on the technology, business and process changes needed in order to digitise services effectively.

At a high level there are 3 key components to becoming a digitally mature AHP service and these are:

1. Effective use of core digital capabilities
2. Effective integration and interoperability
3. Digitally enabled AHP service transformation

Effective digital capabilities for AHP services:

- **Records, assessments and plans**
  Capture information electronically for use by me and share it with other professionals through the Integrated Digital Care Record

- **Orders and results management**
  Use technology to support the ordering of diagnostics and sharing of test results

- **Assets and resource optimisation**
  Increase efficiency to significantly improve the quality and safety of care

- **Decision support**
  Receive automatic alerts and notifications to help me make the right decisions

- **Medicines management and optimisation**
  Ensure people receive the right combination of medicines every time

- **Remote care**
  Use remote, mobile and assistive technologies to help me provide care

- **Transfer of care**
  Use technology to seamlessly transfer patient information at discharge, admission or referral
Effective use of core digital capabilities

What are digital capabilities and what do we mean by effective use?

Records, assessments and plans

Capture information electronically for use by me and share it with other professionals through the Integrated Digital Care Record.

The description of records, assessments and plans as a digital capability reflects the variety of digital tools that support the capture of structured and unstructured data related to patient records. This includes assessments, care plans, clinical notes, continuation sheets and other patient records.

These are a core component of the electronic patient record. For health and care professionals they are the point of data and information capture for the majority of health and care encounters.

Different Electronic Patient Record Systems (EPRs) and IT suppliers give these digital capabilities a variety of names, some clearly related to what they support but others more abstract. However, AHPs should consider their generic description as being related to the clinical and care processes they support.

Next step:

AHP services as a minimum should be aiming to capture their records, assessments and care plans digitally in a format that supports their service, partner services and patient/service user needs. This is a core foundation for developing digitally mature AHP services.

Top Tip

Consider carefully what data within your records, assessments and plans to capture as structured and unstructured data. The key data items for structured data will vary but commonly include reason for referral, diagnosis, interventions and outcome. These are important data items linked to information sharing for direct care and purposes beyond.
Transfer of care
Use technology to seamlessly transfer patient information at discharge, admission or referral

The description of transfers of care as a digital capability reflects the variety of digital tools that support the transfer of patient information between health and care professionals. This can be at the point of referral, admission, handover and/or discharge.

Common documents that support this effective continuity of care include referrals, handover notes, discharge letters and clinic letters.

It is important to note that the format of any transfer of care document when converted into a digital format does not necessarily need to reflect the format and style of the non-digital version.

It is also important that AHP services understand and engage in the work on developing professional standards that support the standardised structure and content of transfer of care information.

Next step:
AHP services as a minimum should ensure all their transfers of care are supported digitally and where standards exist, use them. Where standards do not exist, AHP services must work with key stakeholders to ensure the content meets the requirements of those receiving the information and hence supports effective continuity of care.

Top Tip
Many EPR systems can utilise existing data to ‘pre-populate’ correspondence and letters with existing data captured in the EPR. As an example, many organisation’s discharge summaries from non AHP services are completely automated because clinicians are capturing structured data as part of their records. This reduces burden on staff and releases time for delivery of care.
The description of medicines management and optimisation as a digital capability reflects a variety of digital tools that support the visibility, prescription, dispensing and administration of patient medicines across care settings.

Historically these capabilities have been known as e-Prescribing. However, prescribing itself is just one component of a complex process that supports medicines management.

AHPs commonly require visibility of a patients or service user’s current medication to inform their assessment and decision making. In the ‘paper world’ AHPs have relied on current medications being included with the patient referral and paper records, or described by the patient or carer. As more services deploy medicines management and optimisation capabilities this information will primarily be available digitally.

Next steps:

it is important that AHPs understand these capabilities and ensure their requirements to view this information is understood and supported locally to avoid unnecessary workarounds.

It is also important that AHPs who have independent or supplementary prescribing responsibilities as part of their professional practice work closely with their local information and system teams to ensure they have the relevant access rights and prescribing details associated with their user profile, and again avoid unnecessary workarounds.

Top Tip

Ensure you work with your IT support teams and system suppliers to make sure your requirements as an independent or supplementary prescriber are supported. Also work with IT support teams to configure favourite folders to support search and selection of commonly used medicines for your area of specialism.
Orders and results management

Use technology to support the ordering of diagnostics and sharing of test results

The description of orders and results management as a digital capability reflects the variety of digital tools that support the visibility, requesting and resulting of pathology and radiography tests, and may also include additional diagnostic tests. A number of organisations also use orders and results management to support ‘service order’ requests. This has often been used to support referrals to and from AHP services.

Some AHPs, particularly diagnostic and therapeutic radiographers, have had significant engagement in the development, deployment and optimisation of these digital capabilities. Compared to other AHPs, radiographers will increasingly be exposed to some of the more advanced developments in digital diagnostic capabilities through the evolution of artificial intelligence and machine learning innovation in clinical decision support.

Next steps:

AHPs need to understand their requirements for pathology and radiology requests and results, ensuring these requirements are reflected in their user role profiles and access rights for systems used in their organisations.

Additionally, many AHPs working in advanced and first contact practitioner roles will have responsibilities for requesting pathology and radiology investigations and therefore they must ensure that subject to local governance they have the requisite permission within their role profile to enable them to request, view, and chart pathology and radiology diagnostic results.

Top Tip

Work with your IT support team to ensure your role profile has the requisite permissions to enable you to request, view and perform pathology and radiology requests as per scope of your professional practice.
The description of asset and resource optimisation as a digital capability reflects the variety of digital tools that support the optimal use of assets and resources within and across organisations.

Common examples that many AHPs will use now as part of their everyday work are the role of patient administration systems (PAS) and Bed Management Systems in supporting patient flow via clinic management, inpatient modules, A&E modules, beds, trolley and theatre slots.

Another set of examples include the Electronic Staff Record (ESR) and E-Rostering systems. These capabilities support the analysis of productivity, efficiency and variation related to AHP productivity and job planning.

AHPs have a key contribution to patient flow through the health and care system, as set out in NHS Improvement’s quick guide on Allied Health Professions (AHPs) supporting patient flow.

**Next step:**

AHPs should consider how PAS and related capabilities facilitate patient flow and the planning of resources (AHP and other) to support this.
The description of decision support as a digital capability reflects evolving capabilities that use existing data to support informed decision making by health and care professionals, including AHPs.

The capabilities are commonly software based and presented on a variety of platforms including apps, web-based solutions and embedded within other capabilities such as E-Prescribing solutions and Electronic Patient Records. They vary in levels of complexity from relatively simple based on existing clinical triage tools that utilise algorithms to alert health and care professionals on acuity or risk, for example National Early Warning Scores, to more advanced capabilities that use artificial intelligence and/or machine learning.

Some AHP professional groups will already be involved in the use of decision support capabilities but it is likely more and more AHP professional groups will begin to see the rollout of these capabilities in the coming years.

Next step:

AHPs need to understand the governance and regulatory framework within which these capabilities are assessed, deployed and rolled out. At a local level AHP services should review how clinical governance of digital capabilities are aligned to specific governance and regulatory requirements such as medical device regulation and clinical risk management.
Remote care
Use remote, mobile and assistive technologies to help me provide care

The description of remote care as a digital capability reflects a wide variety of capabilities that support shifts in the provision of care to the point of need, more effective patient activation, and the longer-term sustainability of health care services.

Many services (including AHP services) are already using one or more of these capabilities, including:

- Online appointment bookings.
- Clinically assured online health and care content and advice through NHS.UK which has over 40 million visits a month.
- The NHS Apps library which provides people with access to trusted digital health apps, which have been assessed by the NHS as secure, safe and effective.
- The NHS App which will be fully enabled across all GP practices by England by 1 July 2019. It provides a simple, secure way for people to access core suite of NHS online services on their smartphone or tablet, and it will act as a ‘gateway’ to access other online services.
- Digital psychological therapies.
- Viewing and capturing information at the point of care, for example by using hand held devices.
- Virtual clinics, using secure communication platforms to provide consultations historically delivered face to face in physical clinics.
- Multi-professional telemedicine services providing clinical and social assessment, diagnosis, advice and support, such as Airedale Digital Hub.

Next step:
It is important that AHP services keep up to date on the remote care capabilities available for their service and their service users. Consider the evidence base to support these and consider how they can be utilised to deliver improvements in patient safety, clinical outcomes, staff experience, patient experience and resource sustainability (see also ambition 3).
Effective integration and interoperability

What do we mean by effective integration and interoperability with shared services and partner organisations?

The health and care system within England is a complex picture of multiple provider organisations using multiple digital systems to support the types of capabilities described in this framework.

It has long been recognised and identified, through serious case reviews and serious untoward incidents, that ineffective information sharing between services and provider organisation can have significant impact on the quality and safety of care delivery.

There are several underlying themes and related standards that are important for AHP services to understand.

- Local data sharing
- Open application programming interfaces (Open APIs)
- SNOMED CT
- Data quality
- Cyber security

Further guidance on each of these areas is provided later in this document.

Next step:

AHP service managers should ensure the areas above are incorporated into plans to be a digitally mature AHP service.
Digitally enabled AHP service transformation

Digitisation of AHP services offers the opportunity for AHPs to be innovative in the way care is delivered. It should not mean AHPs services just digitise the way paper-based services are delivered now. Digitally mature AHP services should strive to use the digital capabilities and impacts outlined in ambition 3 to transform their services, demonstrating value and impact in the context of wider system priorities. Some examples of how AHP services have used these core capabilities to transform the way they deliver health, care and well being are included in useful case studies.

They include, but are not limited to, using digital services to support:

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<th>Integrated care pathways</th>
<th>Advanced data analytics and population health management</th>
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<td>• Using digital systems to support the seamless flow of information across organisational boundaries and deliver coordinated, patient-centered care across a whole population geography</td>
<td>• Advanced data analysis at scale to deliver targeted care for high-risk and high-use groups of patients (e.g. frailty pathways, diabetes, across a population or area)</td>
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<td>• Supports end-to-end redesign and improvement of patient pathways</td>
<td>• Shifts activity from reactive to proactive care and reduces overall demand on the system</td>
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<th>Patient activation and self-management</th>
<th>Reducing unwarranted variation</th>
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<td>• Digital technologies to help people manage their own care and conditions more effectively</td>
<td>• Digital systems guide AHP clinicians along defined clinical pathways, standardised practice and reducing unwarranted variation</td>
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<td>• Mobile technologies support delivery of care outside traditional settings and closer to home</td>
<td>• Delivered at scale across a single organisation, health economy or provider chain to improve quality of care and reduce unnecessary activity</td>
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Ambition 3: Data enabled AHP services

Data entered into these digital capabilities is a key component of quality improvement within health and social care. This includes looking at data over time to understand variation in care, outcomes and the impact of interventions. It is important for all AHPs to recognise how the digital capabilities described in this framework can support quality improvement across regions, localities, professions and specialties.

Looking at quality and service improvement using data at a local and regional level, can also be a useful approach for engaging staff across services who may view data as something for ‘others to do’. It is also a useful approach for identifying unwarranted variation, benchmarking your services against comparable services, and informing future service development and improvement.

AHP services should ensure that the adoption of new technologies and processes, and resulting data of services, leads to improvements in one or more of the following:

- safety and quality
- clinical outcomes
- staff and patient experience
- resource sustainability.

These categories also align with the principles being adopted within the Best Possible Value (BPV) Decision Framework for financial value-based decision making. Investment in and the prioritisation of digitisation efforts will be focussed on technologies and digital capabilities that deliver against these 4 categories. Therefore, it is important that AHP services understand these and ensure their plans to deliver a digitally mature service are aligned with those impacts.

Top Tip

AHPs should work closely with informatics leads such as their Chief Clinical Information Officers (CCIO) and Chief Information Officers (CIO) to ensure their digital capabilities provide the right data to support their quality improvement priorities.
Data enabled AHP services: framework for local action

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<th>Action and next steps</th>
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<td>Quality Improvement</td>
<td>AHP services should work closely with informatics leads such as their Chief Clinical Information Officers (CCIO) and Chief Information Officers (CIO) to ensure digital capabilities provide the necessary data to identify, prioritise and support quality improvement priorities.</td>
<td>• Work with your CCIO, CIO and Information leads to ensure the digital capabilities you use support your quality improvement activities. • Review and share some of supporting guidance around quality improvement i.e. NHS Improvement, Health Foundation. • Encourage membership of the Q community.</td>
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<td>Safety</td>
<td>Digital capabilities, and data derived from, is a key component in supporting improved patient safety. Access to the right information at the right time is widely recognised as an important factor in enabling informed clinical decision making and reducing the potential for unintended or unexpected harm to patients.</td>
<td>• Encourage AHP staff involved in the deployment of digital capabilities to review clinical safety standards. • Consider encouraging AHP staff to undertake e-learning linked to those standards. • Identify what metrics can be used to identify improvements in safety for your patients and service users. • Work with patient safety collaboratives and align with broader quality improvement work.</td>
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<td>Clinical outcomes</td>
<td>Increasing focus on outcome measures that capture health status, quality of life and experience of care will enable more effective benchmarking of services and support decision making regarding service configuration, commissioning and strategy. In the context of digital capabilities there is significant potential to introduce standardised measurement of clinical outcomes within pathways of care. Initiatives including everyday interactions, community services dataset and getting it right first time are providing the strategic context and data models to drive the capture of outcomes in line with national and local guidance.</td>
<td>• Review how outcomes measures are currently recorded, used, shared and acted on in your service. • Consider the standardisation of outcomes measures that could best support your patients and service, and demonstrate the value of your service to commissioners. • Review and input into examples of international, national and specialty collaborations on the development and utilisation of outcome measures. • Review everyday interactions and consider how to incorporate measures of public health impact into your data capture and quality improvement work.</td>
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<td>Area</td>
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| Staff and patient experience | In the context of digital capabilities, several capabilities have evidenced improvement in both staff and patient experience. Many of these revolve around capabilities such as remote and assistive care which empower the person, for example: booking appointments online and personal health records. | • Consider how your service enables access and information online.  
• Consider the role of Patient Related Experience Measures (PREMs) and the capability that digital data capture tools can play in supporting staff and/or patients to capture measures in relation patient experience.  
• Understand who your key stakeholders are, including their Chief Clinical Information Officer, to be part of the growing network of clinicians driving local adoption of digital capabilities. |
| Resource sustainability     | A number of digital and information capabilities offer the opportunity to improve service efficiency and sustainability whilst maintaining or improving patient outcomes.  
More effective use of asset and resource management capabilities can support AHP services to better utilise resources.  
Effective use of evidence-based remote and assistive care capabilities, such as virtual consultations and apps to support patient self-management, can also play a part in supporting efficient use of resources and sustainability of services. | • Review NHS Improvement’s AHP job planning: best practice guide  
• Review NHS Improvement guide for AHPs supporting patient flow  
• Ensure that good quality data flows into and out of asset and resource optimisation capabilities, including ESR, EPR, and E-Rostering systems.  
• Explore opportunities to use remote and assistive capabilities in your services. |
### Additional information on effective integration and interoperability

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<th>Key considerations for AHP services</th>
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| Local data sharing | In most cases AHP services themselves will be covered by their parent organisation’s Data Sharing Agreements (DSA’s) with other local health and care provider organisations. | • Understand your responsibilities as data controllers and the associated legislation (*Data Protection Act* and *General Data Protection Regulations*)  
• Ensure your AHP service either has explicit DSA’s with key health and care partners or that you are covered by you parent organisation’s existing DSA’s.  
• Put in place necessary data sharing agreements to support the sharing of information that supports direct care and for further additional purposes (i.e. strategy, research, commissioning). |
| Open Application Programming Interfaces (APIs) | A key component of supporting an integrated health and care system with digital records is an ecosystem of applications, data and processes working seamlessly to make the right information available to the right user at the right time. The systems underpinning this must also be affordable and sustainable.  
**Open Application Programming Interfaces (APIs)** have an important part to play in achieving this by:  
• making application functionality easily available  
• allowing the best system for the job to be chosen  
• promoting and accelerating innovation | • AHP services should make themselves aware of the relevance of Open APIs to some of their ambitions as regards integrated care being supported by integrated systems.  
• Engage with the **INTEROpen** action group, a collaboration to accelerate the development of open standards for interoperability in the health and social care sector.  
• Engage with your local **AHSN network** to learn more about innovative products and services |
### Data Quality

As services (including AHP services) and organisations increasingly shift to fully digital records, data quality is increasingly seen as a vital component for delivering better patient care and patient safety. It also plays a key part in improving services through informed decision making and can be used to identify trends and patterns, draw comparisons, predict future events and outcomes, and evaluate services.

<table>
<thead>
<tr>
<th>Area and standards</th>
<th>Key considerations for AHP services</th>
<th>Action and next steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SNOMED CT</strong></td>
<td><strong>SNOMED CT</strong> is a structured clinical vocabulary for use in an electronic health record. It is the most comprehensive and precise clinical health terminology product in the world. It forms an integral part of the electronic care record and represents care information in a clear, consistent, and comprehensive manner. The move to SNOMED CT, for the direct management of care of an individual, across all care settings in England, is recommended by the National Information Board in Personalised Health and Care 2020: A Framework for Action.</td>
<td>- Consider using SNOMED CT and the impact this can have in ensuring clear access to important information such as diagnoses, allergies, procedures and adverse drug reactions. - Focus using SNOMED CT on key data items, including reason for referral, diagnosis, interventions and outcomes.</td>
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<td><strong>Data Quality</strong></td>
<td>As services (including AHP services) and organisations increasingly shift to fully digital records, data quality is increasingly seen as a vital component for delivering better patient care and patient safety. It also plays a key part in improving services through informed decision making and can be used to identify trends and patterns, draw comparisons, predict future events and outcomes, and evaluate services.</td>
<td>- Using standards of good record keeping AHP services should consider how they can work with their information services to drive the: - completeness of digital records - validity of data entry - timeliness of data entry - Review and update local guidance, processes and procedures for record keeping and audit considering digital capability deployment. - Regularly audit of the completeness, validity and timeliness of data entry.</td>
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<tr>
<td><strong>Cyber Security</strong></td>
<td>The cyber security incident on the 12th May 2017 highlighted the implications of cyber security for operational continuity and our reliance on technology in today’s health and care system. The Cyber Security Programme is working to ensure that measures are actively in place to protect NHS assets and services, including those commissioned by NHS England.</td>
<td>- Work with local information governance and security functions to ensure staff are kept up to date as regards their role in ensuring the health and care system is demonstrating good cyber and data security practice.</td>
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Useful resources

National policy drivers and resources

**NHS Long Term Plan:**
As medicine advances, health needs change and society develops, the NHS has to continually move forward so that in 10 years time we have a service fit for the future.

**The future of healthcare:**
this vision for digital, data and technology in health and care (2018) outlines what is needed to enable the health and care system to make the best use of technology to support preventative, predictive and personalised care.

**AHPs into Action:**
is the national framework for the 14 allied health professions in England. It is a product for leaders and decision makers, to inform and inspire the system about how AHPs can be best support future health, care and wellbeing service delivery; supporting the properties of the Five Year Forward View.

**Personalised Health and Care 2020:**
describes the commitment by the health and care system and the Government to use information and technology and make sure patient records are digital and interoperable.

**The NHS IT Placemat:**
captures and outlines the themes and deliverables across the personalised health and care programmes.

Empowering the person

**The empower the person roadmap:**
provides an outline of the national programmes delivering digital capabilities to support patient activation and self-care.

Quality improvement

The Health Foundation offers a broad range of free quality improvement tools and resources.

**NHS Improvement’s - Quality Improvement Hub:**
provides advice and support on how to use quality improvement approaches and methodologies.

**Professional Records Standards Body:**
provides context and guidance linked to the development of clinical and professional standards within digital records.
Building a digital ready workforce

Building a digital ready workforce programme: outlines some of the activities and projects running to support the health and care workforce with developing the necessary skills and capabilities for the future digital health and care system.

The digital literacy project: is about improving the digital capabilities of everyone working in health and social care. The best care of all individuals is only possible if these capabilities are fully developed and exploited.

Driving digital maturity

The driving digital maturity and the local health and care record exemplar programmes: are about providing the infrastructure, digital and data capabilities to support the NHS and Social Care to deliver joined up and safer care on a day to day basis.

Managing digital change in health and care

The Kings Fund report: provides an overview of key lessons learned and recommendations around managing digital change based on different types of change and large scale change in health care.

Effective deployment of clinical systems: provides a toolkit for what organisations need to consider clinically when implementing digital capabilities and provides a set of tools for clinical staff to support the implementation of a clinical governance framework linked to digital capability implementation and optimisation.
Useful case studies

1. Brighton and Sussex University Hospitals NHS Trust’s innovative virtual fracture clinic cut the number of times patients had to come into hospital for an appointment, saving more than half a million pounds in two years. Since launching in 2013, the clinic has managed over 8,500 patients, with specialist physiotherapists assessing X-rays online to decide on the next steps of care. The clinic has meant patients who were treated in A&E with a broken bone no longer have to come to hospital for face-to-face assessment. As well as the benefits to patient care, the clinic has also saved the Trust £558,000.

2. Dietitians at Somerset Partnerships NHS Foundation Trust using webinars to support patient activation and self-empowerment for citizens with irritable bowel syndrome.

3. Across a number of organisations dietitians have led and supported the adoption of integrated sensor-augmented pump therapy systems for managing blood glucose levels in type 1 diabetes in line with NICE guidance.

4. Chelsea and Westminster NHS Foundation Trust utilise digital capabilities to support patient activation and self-care through the provision of clear and tailored exercise prescription through mobile and desktop applications.

5. Across a number of organisations radiographers have led and supported the adoption of Virtual Touch Quantification to diagnose and monitor liver fibrosis in patients with chronic hepatitis B and C in line with NICE guidance.

6. Dietitians in Bradford Teaching Hospital NHS Foundation Trust working with Pharmacy and GP colleagues developed an assessment template to identify the signs of malnutrition early to make sure people get the right nutritional care and treatment they need more quickly.

7. Physiotherapists working within West Suffolk NHS Foundation Trust ensure their Electronic Patient Records (EPR) system meets the requirements of AHPs within the trust.

8. Dietitians within County Durham and Darlington NHS Foundation Trust use telehealth to improve the quality of dietetic care for care home residents.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Digital maturity</td>
<td>Digital maturity is a continuous and ongoing process of adaptation to a changing digital landscape. In the context of AHP services and the delivery of health and care this means aligning your strategy, workforce, culture, technology and structure to meet the digital expectation of staff, service users and health and care partners.</td>
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<tr>
<td>Digital capabilities</td>
<td>In the context of digital maturity digital capabilities describe the digital tools an organisation uses to support the delivery and evaluation of their services.</td>
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<tr>
<td>Integration</td>
<td>Integration in the context of digital capabilities involves connecting two or more capabilities so that data from one capability can be accessed from another capability. Typically, in the context of AHP services this means staff using one digital capability, for example their organisation’s Electronic Patient Record – EPR, can access link to and review data in another system i.e. the GP record. Commonly this means read only access.</td>
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<tr>
<td>Interoperability</td>
<td>Interoperability in the context of digital capabilities is an extension of integration in that above and beyond integrating two or more capabilities it enables information to be exchanged and managed in the each of those capabilities. Typically, in the context of AHP services this means staff can ‘import’ data from say the GP record without the need for re-keying information.</td>
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<tr>
<td>Digitally ready</td>
<td>Digitally ready in the context of digital capabilities mean AHP services are operationally ready to utilise and exploit their digital capabilities.</td>
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<tr>
<td>Data enabled</td>
<td>Data enabled in the context of digital capabilities and digital readiness means AHP services are equipped and empowered to use information and data to drive quality improvement.</td>
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<tr>
<td>Structured and unstructured data</td>
<td>At a very basic level structured data is data types whose composition (i.e. selecting pre-defined fields in a drop-down list, browser, yes/no question) makes it easier to re-use and share that data than it is for unstructured data, which is essentially data captured outside a structured format (i.e. narrative typed into electronic notes).</td>
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<tr>
<td>Open API</td>
<td>The acronym API mean application programme interface. In the context of Digitally mature AHP services the key operational point of Open API’s is that they enable integration and interoperability. If the suppliers of your digital capabilities do not offer Open API’s it is likely your ambitions for digital transformation through effective health and care integration will be limited.</td>
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<td>SNOMED CT</td>
<td>Systemised Nomenclature of Human Medicine (SNOMED) is a standardised, multilingual vocabulary of terms relating to the care of the individual and the most comprehensive and precise clinical health terminology product in the world. It includes diagnosis and procedures, symptoms, family history, allergies, assessment tools, observations, devices and other content to support care delivery to individuals.</td>
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<td>Data Quality</td>
<td>In the context of AHP services data quality is essentially the assessment of the fitness of data for use in decision making, and planning. This applies both to data use for primary purposes (direct care) and secondary uses (research, and planning).</td>
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<tr>
<td>Cyber Security</td>
<td>Cyber security is the protection of networks, devices, programs and data from attack, damage or unauthorised access.</td>
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