

## **NHS Digital Academy Future Vision**

### **Executive Summary**

There is plenty to celebrate in the NHS Digital Academy journey so far and this future vision sets out an offering that builds on solid foundations in the context of current and future requirements. Stronger alignment to wider policy and initiatives should also help support system buy in and avoid the digital, data and technology workforce developing in a vacuum. We explore the needs of different groups from senior digital change leaders to specialist careers, from school leavers and graduates to board members, as well as the wider workforce.

There is an opportunity for the NHS Digital Academy to become the home of all digital learning and development for our workforce. This will include commissioning learning opportunities where gaps exist, but also building on existing successes and signposting where appropriate. This vision sets out an approach where individuals can earn an accredited badge aligned to continuous professional development, yet is personalised and flexible, combining a set of core areas with optional modules. A blended learning approach is encouraged which allows individuals to focus on personal needs as well as professional requirements. This means there will be face to face and online learning options.

In defining what the Digital Academy is and the vision for it, this document addresses four 'problem' areas: Build a strong, diverse and proactive talent pipeline; Ensure alignment with mainstream NHS leadership development; Co-ordinate opportunities linked to professionalism; Develop a long term delivery model. Diversity and increased opportunities for all is at the heart of this future vision, allowing individuals to make more informed choices.

We also crucially present six areas that will add to the success of the digital academy by embedding a culture of learning and personal development for the digital, data and technology workforce. These areas are regional and ICS support, board development, talent and pipeline, professionalisation, diversity and inclusion, and wider workforce support. Within these areas key aspects include mentoring and action learning. We also start to explore sustainability and branding.

The existing workforce must co-produce the implementation plan, which follows from this vision. This is to ensure content within the Digital Academy is receptive to grassroots needs alongside national policy and initiatives. With the need to move quickly, we lay out a series of immediate recommendations for the next 12-18 months and envisage medium and longer-term recommendations will be detailed in the subsequent implementation plan.

Please visit our engagement platform to comment on this vision or if you wish to get in touch:

<https://jointheconversation.scwcsu.nhs.uk/digital-academy-future-vision>

**Foreword: Andy Kinnear**

The last 4 years have seen a momentous step change in the creation of a true digital health & care profession. I honestly believe when historians write up the story of our profession the last few years will feature strongly as the period of seminal change.

During that period we have seen our digital clinical community gain formal support from the Royal Colleges and create the Faculty of Clinical Informatics, ensuring that clinicians from all backgrounds can contribute to the digital health & care story without fear of losing their professional registration. We have seen 5 professional bodies – BCS, CILIP, IHRIM, and SocITM & APHA – unite to form the Federation of Informatics Professionals, an organisation to set the professional standards of and hold the professional register for all of those working in digital health & care.

And, we have seen a rise in education programmes for those leading digital health & care. The jewel in this crown has undoubtedly been the initial offer from The NHS Digital Academy which set the bar on what world class digital health & care should look like, delivering a successful Post Graduate Diploma in Digital Health Leadership. This ground-breaking programme has rewritten the rulebook and is now revered around the world. It is a programme of which we should be very proud.

But like all great initiatives, they only stay great by constantly reviewing their approach, redefining their future and re-establishing their prominence. This report has actively sought to assess The NHS Digital Academy journey so far and to provide recommendations for an even brighter future.

I was there on day one of the NHS Digital Academy and I cannot wait to see how this programme continues to flourish in future.

A handwritten signature in black ink, appearing to read 'Andy Kinnear', with a stylized flourish at the end.

## **1. Background: the start of the NHS Digital Academy**

- 1.0 The NHS Digital Academy was originally set up to develop a new generation of excellent digital leaders to drive the information and technology transformation of the NHS.
- 1.1 The concept of the NHS Digital Academy emerged from *Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England* (Wachter, 2016) and recommendations outlining the need to develop and invest in digital leaders. A specification was developed for an initial learning programme, a Post Graduate Diploma in Digital Health Leadership.
- 1.2 This initial NHS Digital Academy learning programme was commissioned and funded by the Digital Readiness Programme (previously Building a Digital Workforce, one of the Digital Transformation Portfolio programmes, commissioned by NHSX and delivered by Health Education England (HEE)) and a contract was awarded for delivery to Imperial College London, who deliver this in partnership with the University of Edinburgh and Harvard Medical School. They provide a year-long, world class, fully accredited learning programme ([Post Graduate Diploma in Digital Health Leadership](#)) for digital change leaders. Participants have the option to continue onto a master's degree, subject to securing additional funding.
- 1.3 This was the NHS's first ever nationally funded programme of world-class senior health informatics training. On completion it will have provided training and development support to approximately 300 senior clinicians and health managers over three cohorts including some participants from social care as well as Scotland, Wales and Northern Ireland. This programme was specifically targeted at shaping a new generation of Chief Information Officers (CIO) and Chief Clinical Information Officers (CCIO), as recommended in the Wachter Review, to help drive through the digital transformation the NHS requires.
- 1.4 At the time of writing, Cohort 2 is completing the programme in mid-2020. Cohort 3 is due to commence in September 2020. These dates were impacted by the COVID19 pandemic which will result in an overall extension time of around 5 months.
- 1.5 The programme has been consistently over-subscribed and deemed a great success. An evaluation scoping report has been completed by the Institute for Employment Studies and the Leadership Academy with a link available in the references section of this report. Highlights include considerable learning, new professional networks and development of shared understanding. Participant feedback has been positive, and the programme has received international interest.

## **2. Operating within a broader future context**

- 2.0 From this point onwards for clarity within this vision, the Digital Academy will refer to its future form. The Post Graduate Diploma in Digital Health Leadership refers to the specific current educational offering.

- 2.1 There have been parallel significant developments for the digital workforce over the last 5 years.
- 2.1.1 The digital health **professional bodies** have matured and are developing a single health informatics register with the creation of The Federation for Informatics Professionals. The Faculty of Clinical Informatics has also strengthened its position as the home for clinical informaticians including development of an early careers frameworks.
  - 2.1.2 We have seen real progress on increasing awareness of the importance of **diversity**. OneHealthTech launched in 2015 and supports underrepresented groups to be future digital health leaders. The SHURI network launched in 2019 and is the first NHS network of Black Asian & Minority Ethnic (BAME) women in health tech and digital health.
  - 2.1.3 We have seen the creation or development of **high quality learning opportunities and networks** including but not limited to; the Minerva programme, CHIME Healthcare CIO boot-camps, the Florence Nightingale Foundation programme, the HEE-Yale Digital Futures programme and the North West and Yorkshire & Humber Informatics Skills Development Networks. The national CIO and CCIO networks also continue to grow with attendance at Digital Health Summer Schools increasing from approximately 40 to over 500 in 5 years.
  - 2.1.4 At **entry level**, the NHS Graduate Digital, Data and Technology Scheme (formally the Graduates into Health Fast Track Scheme) is expanding nationally following success in several regions and the national Graduate Management Training Scheme (GMTS) has increased its intake. An NHS School Leavers Digital, Data and Technology scheme is also under development. We are also seeing a higher number of academic providers teaching in this space.
  - 2.1.5 At general board and very senior levels (not just limited to those specifically working in a digital, data or technology role), HEE has also commissioned 'Digital in a Day' board development sessions alongside the Yale Global Health Leadership Initiative to support ICS development.
  - 2.1.6 We have also seen the emergence of Regional Talent Boards and there is future dialogue to be had about how digital will have a key role here.
  - 2.1.7 We are seeing the increasing needs of specific areas of the digital workforce (e.g. analysts) in having digital learning and development easily and readily available and linked to roles and career pathways.
  - 2.1.8 We are seeing the emergence of new digital roles in the health and care system, as highlighted by Topol (2019), which are driving the need for new, specialist digital skills and awareness for all (e.g. genomics).
- 2.2 It is clear that this presents a huge opportunity to the digital, data and technology workforce. There is plenty out there but this is the time to build on the key learning offers and to support individuals to navigate them successfully.

2.3 We have referred to *informatics* to describe previous or current initiatives. We will refer to digital, data and technology going forwards unless it refers to a specific initiative or organisation which uses the term informatics.

### 3. Scope & Methodology

3.0 The scope of this vision is to articulate what the NHS Digital Academy *should be* going forwards and is broader than the current learning programme on offer under the NHS Digital Academy brand. We outline how to build on current success to support and develop our wider workforce; for all roles, all levels of seniority and delivered in a variety of formats to support different personal needs, work needs and learning styles.

3.1 A mixed methods approach has been undertaken that included; literature review, stakeholder engagement inspired by the appreciative enquiry technique and landscape mapping.

3.2 In order to seize the opportunity, this vision addresses the following four widely documented problem areas. More information about these four problem areas and associated references can be found in Appendix 1. They are:

- Build a strong and diverse talent pipeline
- Ensure alignment with mainstream NHS leadership including board development
- Co-ordinate opportunities linked to professionalism
- Develop a long term delivery model

3.3 This vision has initially focused on supporting commissioning activities for the NHS in England with the principle it can be reused. As part of the engagement on this vision, conversations will progress in particular around how to ensure wider health **and** care can benefit by working together with the *Joining Up Care* programme (NHSx) to understand applicability and inclusivity to those working in social care. Potential collaboration across the four nations is another area to explore. The implications of this, exact content and funding flows, would need to be determined as part of the medium to long term implementation plan.

3.4 *Regions* refer to the seven NHS England/Improvement regions unless otherwise stated. It is useful to note that there are 10 Skills Development Networks as these currently align to the old Strategic Health Authority regions. However the majority do not yet have an Informatics arm.

### 4. Dependencies

4.0 There are two key dependencies that have a direct impact on this vision, which we therefore address upfront. These are **career frameworks** and **the roles and responsibilities of various organisations**. They are out of direct scope of this project yet we have aspired to keep the vision flexible enough for future alignment in order to future proof.

4.1 Firstly there is not currently a universally agreed set of career pathways for the digital, data and technology NHS workforce. For the purposes of this vision, we have used a taxonomy to

segment the workforce and their training requirements. It is important to note that these groups are not mutually exclusive and the NHS Digital Academy should also facilitate exposure and opportunities to different career areas.

- 4.2 **Digital Change Leadership:** This focuses on clinical and digital professionals working in roles where they are undertaking transformational change within their organisations or systems, drawing on a combination of digital, data and technology.
- 4.3 The blending of people from primary, secondary, community, social care and technology has been a key success for the current learning programme and therefore from a digital change leadership perspective this report focuses on commonalities rather than dividing people into specialisms or silos. There may be genuine reasons where it is necessary to split out the clinical workforce and provide additional development for clinicians and/or groups (e.g. nurses, paramedics) if necessary. There is currently early careers and competency work in development with FCI therefore we have not focused on this too heavily at present at risk of duplication.
- 4.4 **Specialist Digital, Data and Technology (DDAT) Roles:** This focuses on more specialised careers usually requiring in depth technical training and knowledge in one or more areas. There is ongoing work to develop an up to date career pathway and occupational framework but at a minimum we would anticipate this includes Library & Knowledge Services, PMO: Programme & Project Management, DDAT: Data job family, DDAT: IT operations job family, DDAT: Product & delivery job family, DDAT: Quality assurance testing (QAT), DDAT: Technical job family, DDAT: User-centred design job family, Healthcare Scientists (Bio Informatics & Clinical Informatics). It will also need to cater for new roles including experts in AI and genomics and digital translators.
- 4.5 When referring to the digital, data and technology workforce as a whole, this includes both those working in digital change leadership and specialist roles, many will likely straddle both.
- 4.6 **Board Level Wider Workforce:** This focuses on Chief Executives, Chairs, Executive Directors and Non- Executive Directors. The composition of which will vary slightly between organisations, as will whether they have a CIO and/or CCIO on their board.
- 4.7 **Entry Level Digital, Data and Technology Workforce:** This focuses on anyone who has started a career or is interested in starting a career in digital, data and technology. This may range from a school leaver to someone looking for a career change.
- 4.8 **Wider Workforce:** This focuses on the broader and wider workforce who will need to increase their knowledge as digital, data and technology continue to become more embedded within the NHS. They may simply need signposting to specific information and training.
- 4.9 The second dependency relates to the **roles and responsibilities of organisations**. Firstly this relates to the professional bodies who are still rapidly maturing. This is further exacerbated by overlapping remit between the professional bodies within the digital, data and technology space at present although we expect this to change. Secondly the NHS has undergone some

reorganisations in the last two years including regional structure changes, NHS England and NHS Improvement coming together and the formation of NHSx.

4.10 For this reason, we have not yet assigned roles although we may have aspirations for where they will sit in the future. This vision aims to outline the purpose and *what* is required and some indicative timescales, rather than exactly who and how it is delivered. Related to this is how much will need to be mandated in the future such as a standard minimum set of qualifications.

## 5. The impact of COVID: A new future?

5.0 The initial plan to undertake wider engagement from the outset was changed due to the COVID19 pandemic however this vision is produced on the basis that the next steps are to share with those who have expressed an interest and ensure implementation and development of content are co-produced with the community who will be using them. There is a group of individuals who have already expressed an interest in doing this and there are plans to present this on a webinar June 26<sup>th</sup> 2020 with Digital Health.

5.1 There are positives to be undertaking this visioning work at the moment. The NHS has transformed beyond expectations in a matter of weeks and there is an opportunity to learn from new ways of working and critically evaluate how accessible things are to the wider workforce, and the role that virtual learning may have in this. Digital is very much at the forefront at the moment.

5.2 The evaluation of the current offer (Post Graduate Diploma in Digital Health Leadership) highlighted some barriers which may look different post COVID19. For example "*Some trusts are so focused on financial deficits they can't invest digitally while some are doing more basic things and others can do more advanced work*". Indeed getting the basics right have been referenced in recent NHSx Tech Plan vision (engagement on this is currently paused).

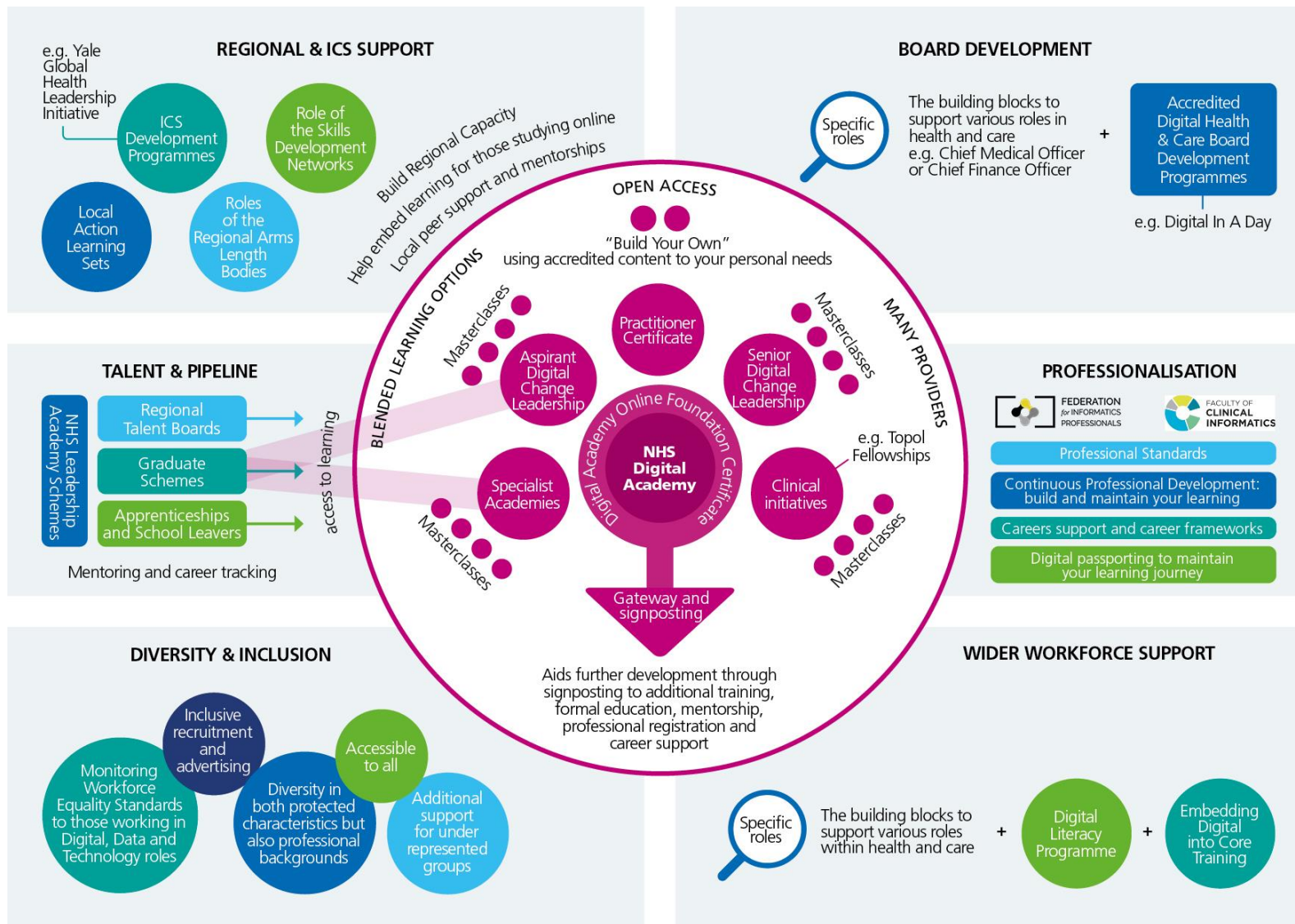
5.3 Cohort 3 of the current offer will now need to be delivered online, at least for the first two residentials. While this will be disappointing to some it is unavoidable given the current circumstances, and we should ensure the benefits and dis-benefits to this are understood.

5.4 There is a real opportunity to also reflect on how boards have handled and embraced the tidal wave of digital transformation which has swept the NHS in a matter of weeks. The *Interim People Plan*, the *Topol Review* and the *HEE Mandate 19/20* have all highlighted the need for a flexible workforce which needs to have 21<sup>st</sup> century skills.

## 6. Digital Academy Future Vision (Principles)

- 6.0 This section sets out principles and delivery mechanisms for learning materials. The subsequent section starts to explore specific learning content and audiences. We then present a range of enablers and wider infrastructure which is essential to make this a success, some areas of which are more mature than others. All of this combined should have a greater impact on an individual's lifelong learning and career. A vision on a page is presented after this section.
- 6.1 We envisage the Digital Academy as being the home for learning for those working in digital, data and technology in the NHS. We have aimed to place the Digital Academy firmly within the existing landscape by complementing existing gaps. While the Digital Academy future vision addresses some critical gaps, it should at the same time not seek to be all things to all people and commission or create new content where it is more appropriate to signpost to or further develop resources that already exist.
- 6.2 We want to ensure that the learning is linked and coherent. Individuals should be able to earn *badges or credentials* linked to continuous professional development. This may be a structured course similar to the current learning offer. However we seek to add some flexibility into module content so that individuals can personalise a course which suits both their professional requirements and personal interests. Later on we explore creating bespoke packages of modules to suit different professional groups, if this is desired.
- 6.3 We see multiple providers working together. This vision does not get into the specifics of how this will work and is something we will continue to explore. Of key importance is that individuals are able to select the best learning type and content to suit their needs.
- 6.4 Some individuals may wish to study particular modules only, due to a gap in their knowledge or due to a recommendation from a colleague. We therefore propose that opportunities to undertake masterclasses or solo modules exist to support this focused learning.
- 6.5 To further support flexibility, we champion blended learning as an approach. All learning materials, whether a structured set of modules (a programme) or individual masterclasses, should have an online equivalent with the same level of certification. Individuals should not be penalised for wanting to or even needing to complete the programme in an alternative format. Some individuals may not wish to undertake a residential based approach out of choice. In addition they may wish to spread the learning over a longer but reasonable period of time. This is for a number of reasons but may include caring responsibilities or disabilities but also simply trying to maintain a better work life balance. We should not discriminate against this.
- 6.6 Likewise, face to face should be an option. A key success of the current learning programme has been bringing people together from across the country and the development of a strong network. We do not want to stop this, but we will want to think about longer term sustainability and whether some of this can be done more locally. In addition where there is face to face delivery including residential, efforts should be made to inclusively recruit, to ensure individuals who want to participate do not feel there are additional barriers in their way.





NHS Digital Academy Future Vision: On A Page

## 7. Digital Academy Future Vision (Core Learning Materials)

7.0 The core learning materials as part of the future Digital Academy are within the central circle of the vision on a page. This section describes the audience and content. The next section will describe the interactions with key enabling infrastructure outlined above.

### Digital Academy Online Foundation Certificate

- 7.1 There is a significant gap and therefore opportunity to develop a **Digital Academy Online Foundation Certificate**. A good comparison is against the Edward Jenner Programme or the Kings Fund *the NHS Explained* online course but focused on digital, data and technology. It must be user friendly and slick, ideally operating within the HEE E-Learning Platform.
- 7.2 The Digital Academy Online Foundation Certificate should be open access and available to all. It should provide the same starting point for anyone working in digital data and technology including those with an interest in a career change.
- 7.3 Curating this content will require time, attention and co-production with the workforce. We believe at a minimum areas should include an introduction to digital, data and technology (including digital change), user centred design, an introduction to using data and analytics and implementation of digital solutions. The latter may include an overview on everything from cyber security and completing data protection impact assessments to stakeholder engagement and visioning. Again, we need to further explore and co-create this.
- 7.4 Storytelling is a great way to build knowledge and these stories should include both good and bad examples of the impact on patient care throughout all material; and indeed the impact on the workforce to highlight the burden bad digital, data and tech can have on frontline staff.
- 7.5 The informatics career pathways survey (HEE, 2019) highlighted individuals can often be specialised at an early stage in their career. When combined with the rapid pace of change in this area, including genomics, AI and machine learning, we may end up with senior leaders who do not understand some of the basics.
- 7.6 Through linking all this learning up and the concept of a gateway into further training, we can have more targeted and structured learning. This is also a great opportunity to reduce silos within digital, data and technology roles where individuals may not appreciate the fundamental basics of different aspects. While individuals may not have to lead, it provides them with enough knowledge and signposting to ask the right questions and find out further information on specific areas. This is why we present this opportunity first and at the heart of the offer.

7.7 There may be opportunities to expand on this over time and explore a practitioner level certificate.

#### Signposting & gateway to further opportunities

7.8 While it likely needs to stand alone too, embedding a signposting tool within the Online Foundation Certificate creates a gateway to wider opportunities. This could be further learning opportunities, described further this section, but also broader enabling support ranging from mentoring opportunities and industry placements to professional registration benefits.

7.9 The Digital Academy Online Certification should be high level yet sufficient enough to equip individuals with the information and tools they need to ask the right questions. It should naturally signpost to further learning content. Some of this may be part of the NHS Digital Academy, and these offerings are explored shortly. However it should also signpost to readily available wider content where it already exists. The NHS Digital Academy must resist the temptation to reinvent the wheel in these circumstances.

7.10 To build on the above, there is already a lot of brilliant online content out there, much of which is already freely available. This is a combination of MOOCs (Massive Open Online Courses), COOCs (Community Open Online Courses), VOOCs (Vocational Open Online Courses) and SPOCS (Small Private Online Courses) using a range of providers and platforms.

7.11 One success has been the elementsofai.com programme developed by Helsinki University which has had over 410,000 students in 170 countries and a 40% ratio of women. Many of the big industry players have online content including Microsoft and Google. There are an increasing number of short courses which specialise in the application of digital, data and technology to healthcare. Some of these come from specialist groups and bodies including Professional Bodies and international organisations such as CHIME.

7.12 As part of ongoing work we may need to implement an accreditation process to signpost to accredited material. However, the key factor is ensuring individuals access the best learning for them.

#### Digital Change Leadership: Specialist and Aspirant Academies

7.13 The current learning programme has been targeted predominately at those already leading digital change leadership within their organisations, predominately CIO and CCIO level roles.

7.14 The current learning offer is shown as the **Digital Academy Senior Leadership Programme** which has been well received. This should be re-commissioned for at least another 3 years while a full impact evaluation can take place in line with the evaluation

scoping report. Feedback collected as part of the visioning research to date indicated the programme should continue as long as there were wider opportunities available to avoid it becoming silo'd and elitist, and the demand exists at an appropriate level.

- 7.15 This should be partnered with a ***Digital Academy Aspirant Leaders Programme***. This should follow a similar structure but allow a focus on the different challenges this group may face and where necessary provide more in depth development in areas where participants may not have had so much exposure as those already operating at such a senior level.
- 7.16 While alignment may take some time, commissioning both programmes together should be explored so that certain events and training can happen concurrently. This would provide additional networking opportunities. It may also mean that some individuals could do different modules at different levels depending on their experience. While the Senior Leadership programme should continue to offer a Post Graduate Diploma, further work should ascertain whether the Aspirant Leaders programme is a Post Graduate Diploma or a Post Graduate Certification, and whether the latter could be built on at a later stage.
- 7.17 A current strength of the senior leadership programme has been working with high quality higher education institutions. This should continue but it may not need to be one provider operating within this space.
- 7.18 We do not believe there is currently a gap at entry level in this space that warrants commissioning of a new programme. Through further work, we need to better understand linkages with existing schemes. This is notably the national Graduate Management Training Scheme, the likely natural pipeline for digital change leadership, and the new NHS Graduate Digital, Data and Technology Scheme which is currently on national rollout. The latter is likely the natural pipeline for more specialist roles, with the scheme more linked to an organisations demand in a specific skill area from cyber security to project management.
- 7.19 The Online Foundation Certificate and subsequent materials should be available to those completing the national Graduate Management Training Scheme, the NHS Graduate Digital, Data and Technology Scheme and the NHS School Leaver Digital, Data and Technology Scheme. This should be optional although we would aspire that the programmes will be collaborative and seek to build strong links. It is likely that this is currently a gap that needs filling, as anecdotally individuals tend to be specialised early on without understanding what their options are.
- 7.20 Building on this, the Digital Academy should also work with job centres, libraries and other community settings where appropriate to provide a public community log in option. This is to ensure that a digital divide does not exist. Likewise, where possible content should

be developed as mobile friendly where individuals may not have access to a laptop or a computer.

- 7.21 If done well, this should provide a much needed supply injection into the workforce alongside giving individuals enough of a baseline knowledge to make informed choices about their next steps; whether this is a career change or to carry out activities in their job.

### Specialist Academies

- 7.22 There is an opportunity to explore the concept of specialist academies. Opportunities so far have focused on the digital change leadership workforce yet the above content should be sharable, accessible and reusable wherever possible. In the future this could range from specialist academies to analysts or library & knowledge professionals and also specific clinical and social care roles. Where required and appropriate this can therefore focus on a more specific and relevant set of modules to make up their academy.
- 7.23 This may particularly appeal to those working in more specialist data, digital or technology roles, and/or who belong to a particular clinical group, who need a programme that supports them to expand their learning and portfolios, or indeed their role already has elements of digital change leadership within it, which many will do.
- 7.24 Thousands of the digital, data and technology workforce operate in more specialist roles and the NHS Digital Academy could play a positive role by supporting the development of specialist academies where there is a need for them.
- 7.25 While they could benefit from the Online Certificate and Masterclasses (and indeed a full digital change leadership programme if desired), some materials need repurposing to ensure they are fully relevant and meaningful. Revisiting some of the principles previously outlined, the modular and build your own approach means individuals could either complete a specific structured course or build their own selection of modules or masterclasses to suit their needs. The NHS Digital Academy should **not** further encourage silos.
- 7.26 These specialist academies would still have a leadership element to them but would likewise ensure individuals had more focused time on appropriate application of their technical skills. There are some good emerging examples of this. The analyst community is exploring a specialist academy and HEE's Library and Knowledge Services team has begun working with CILIP to shape a specific learning academy.
- 7.27 The NHS Leadership Academy already offers a range of leadership courses. We should not deter our digital, data and technology workforce from completing these if that is the best thing for them. However we hope that the modular approach alongside key enabling infrastructure offers another pathway for individuals.

- 7.28 The development of specialist academies for analysts and library & knowledge services should be shared as blueprints for other disciplines to use. They will also make an interesting comparison with two professional bodies very different in terms of establishment. The original Library Association was founded in 1877 whereas the Association of Professional Healthcare Analysts (AphA) is in its first few years.
- 7.29 Where specialist academies do not exist, it should be understood whether a gap exists for a specialist academy. This work should be ideally undertaken jointly with the relevant professional body. It may also be that individuals should achieve certain qualifications before gaining professional registration within their specialist area. There may be different core content requirement as one progresses in their career.
- 7.30 Specialist academies should work with the NHS Graduate Digital, Data and Technology Scheme where possible around entry level roles. The specialist academies should also consider whether there is anything in addition they can offer school leavers.
- 7.31 A more in depth landscape review needs completing, but for some individuals it may be that those undertaking a Topol Fellowship or Florence Nightingale Digital Fellowship may wish to take the Senior Leadership programme as their next step. These individuals may also benefit instead from selecting core modules or masterclasses that they are interested in rather than completing a whole additional programme or completing a more generic leadership programme. This is why the build your own approach may be more appropriate for some.

#### Development of content

- 7.32 All learning content should meet at least one of the following criteria. Firstly, we need to validate it is what the workforce want and this should include understanding what existing participants have found the most useful to embed organisational change so far. Secondly, it should use powerful storytelling and case studies to truly get across the impact digital, data and technology can have on frontline health and care. Thirdly, learning should align to national policy where possible so the workforce is equipped with the relevant skills and knowledge for the current challenges. The learning content must be co-created with those that will use it.

### **8. The NHS Digital Academy: Enablers & Infrastructure**

- 8.0 We have previously outlined some assumptions and dependencies to this work. We also crucially present six areas that will add to the success of the digital academy by embedding a culture of learning and personal development for the digital, data and technology workforce.

These areas are regional and ICS support, board development, talent and pipeline, professionalisation, diversity and inclusion, and wider workforce support.

- 8.1 Many of these enablers are dependent on working closely with others including regions, networks and professional bodies. Therefore they will need to be further worked up as part of the implementation plan. **Their importance however should not be underestimated and they need sufficient attention.**

### Talent & Pipeline

- 8.2 This is a key enabler that currently largely exists outside the NHS Digital Academy and it is right that it aligns to wider NHS initiatives. The NHS Digital Academy should work with the NHS Graduate Management Training Scheme and the NHS Graduate Digital, Data and Technology scheme as outlined above. As part of this, the Digital Academy needs to work with GMTS to understand what the Leadership Academy feel the purpose of GMTS is going forwards and if a natural pipeline link could be strengthened.
- 8.3 The Digital Academy should also work with Regional Talent Boards. To our knowledge, none of the Regional Talent Boards have yet focused on roles within digital, data and technology; perhaps because it is too difficult with unclear career pathways. We would however position the senior digital change leadership cohort as being in a 'board ready' pool and those aspirants as a 'ready soon' pool. This may provide another link to those colleagues getting access to development opportunities to progress into board positions.
- 8.4 Finally, the Digital Academy must work with professional bodies to understand what the talent pipeline looks like for specialist careers. This is also an opportunity to highlight to individuals that a career pathway in digital change leadership is not only valid but is needed and through offering the Digital Academy Online Core Certification, they can better understand where they need to go to for further support both in their own organisations and externally if they wish to learn more.

### Diversity & Inclusion

- 8.5 Diversity and inclusion must be a golden thread running through the NHS Digital Academy. There are many under-represented groups in particular at a senior leadership level. As well as protected characteristics this should look at diversity of professional groups. Lack of diversity within senior NHS roles has been widely acknowledged as an issue, notably with the publication of *Snowy White Peaks*. In digital, data and technology more specifically, both OneHealthTech (established 2015) and more recently the Shuri Network (established 2019) have been set up to raise awareness and help tackle this.
- 8.6 As the NHS Digital Academy future vision moves into implementation it is crucial that steps are taken to reduce inequalities. This will ensure that as digital, data and technology

becomes more and more crucial to healthcare delivery, the people leading this agenda are both representative of their populations and can inspire others. The diversity focus needs to be throughout the pipeline and not just focused at those in very senior roles.

8.7 Case studies and advertising must include a diverse representation of workforce and it is key that these groups do not miss out on face to face opportunities.

8.8 We believe there is an opportunity to immediately commission and curate a module focused on the importance of equality, diversity and inclusion to those working in digital, data and technology. This would be a core module of any Digital Academy programme.

8.9 We propose a specific work stream focused on these areas, working with experts, and at a high level we think this needs to further explore the following:

- Development of core equality, diversity and inclusion module (as per 8.8)
- Inclusive recruitment and advertising including targeted campaigns at underrepresented groups
- Monitoring workforce equality standards to those working in digital, data and technology roles and measuring how many are accessing learning opportunities
- Additional support to those in underrepresented groups e.g. mentorships or bursaries
- Content is accessible to all, and individuals are not penalised for learning in different ways

### Professionalism

8.10 For too long, Continuous Professional Development (CPD) has often been an afterthought for those working in digital, data and technology. Through work with the professional bodies, there is an opportunity to make this process much more rigorous and standardised, bringing digital, data and technology in line with other professions such as medicine and finance. One of the challenges of working in health and care is that all organisations will have their own approach to CPD and there is lack of consistency within the digital, data and technology workforce. This will help to reinforce the NHS Digital Academy training offerings as consistent and important.

8.11 There is an opportunity here to set a minimum standard of training to achieve different levels of professional registration, and this can later align to the Digital Academy offering. The recent guidance on pay progression may also encourage individuals to take personal development plans and objectives more seriously in years to come.

8.12 The Digital Academy should seek to utilise the Digital Staff Passport. This is a national programme that has been, fast-tracked to support the COVID19 response. This



would enable individuals to passport their credentials between roles and organisations. These standards and credentials need to develop but completion of programmes or short courses within the Digital Academy umbrella should result in credits.

8.13 Unclear career pathways and inconsistency between organisations, and even between teams in the same organisations, has likely made this more challenging. For the NHS Digital Academy to become a success we need experts who can provide career support and advice. Part of the professionalism agenda should enable individuals to understand what their professional requirements are with regard to key learning. It should also help to make key distinctions, for example whether the NHS Graduate Management Scheme or the NHS Digital, Data & Technology scheme is the best fit. This lens can be applied from both a graduate and an organisational perspective.

8.14 It is currently difficult to regulate, accredit and endorse training within this area and we need to understand how to get there. Professional bodies should be confident to signpost people away from their area if there is a better opportunity elsewhere. There should be an opportunity for participants of learning to feedback (similar to a Tripadvisor style process) so peer review is transparent and accessible, so it does not solely fall to professional bodies and central organisations.

8.15 The NHS Digital Academy Online Foundation Certificate could serve a dual purpose as a way for individuals get a flavour of opportunities and to better understand the different areas that they may wish to specialise in or learn more about, signposting them to appropriate next steps. This should go a step further than the current tool at [healthcareers.nhs.uk](https://healthcareers.nhs.uk) to be more streamlined. At present the questionnaire appears to return a lack of information on digital, data and technology roles.

8.16 There is a need to have a repository of diverse case studies to support ongoing career and training development. These materials should also be used to help increase supply into the NHS using the Digital Academy branding and linked to learning materials.

#### Regional and ICS support

8.17 There is an opportunity for regions (ideally working with local Informatics Skills Development Networks) to supplement online learning with local face to face activities and/or work with a local University to help with application of the learning. This is something that needs to be further explored with NHSE/I Regions and local Skills Development Networks. There are aspirations to expand the Informatics arm into additional regions which would be timely.

8.18 This may include local action learning sets. Shared experience with peers has been highlighted as a strength of the current learning programme. This should be an option for

those completing online training. Regions (and this may be NHSE/I regions or as per the ISD networks) have the opportunity to co-ordinate local action learning sets. It is important that participants have the chance to formalise their online learning offer with some wraparound support.

8.19 Some individuals may not wish to do this, and that is OK, however the offering should be available. This element of structure could provide the critical balance between increased provisions of learning through digital means while ensuring that face to face interaction is not lost. This supports increasing equality without decreasing the potential embedding of learning. It is also worth considering bringing individuals together at the start of a learning journey to build those initial relationships.

8.20 Specific ICS initiatives should be considered in the future if there is a need for this and we will further explore the concept of learning as a team. The Yale Global Health Leadership Initiative is one example to be considered.

#### Board Development

8.21 Board members may not prioritise digital, data and technology. However as previously explored the recent response to COVID19 has increased the importance of digital to even the most sceptical of boards. As previously mentioned there are some programmes in existence including the Digital In A Day programme.

8.22 The Digital In A Day board development programme commenced piloting in March 2020. Unfortunately these have been delayed due to COVID19 but the intention is for national rollout. These sessions are a full day of learning for the entire board. As part of evaluation, there should be a gap analysis to understand whether these are meeting the current user needs and what else is out there in other sectors.

8.23 We believe there is an opportunity to build bespoke programmes of learning (reusing the core Digital Academy content) for specific roles, for example Chief Medical Officers or Chief Finance Officers, supplemented with a specific module for their responsibilities.

8.24 There is a gap around continuous learning and how to get individuals board ready. Further work is required here and should link to the national Regional Talent Board process, of which identifying and supporting individuals who are both board ready and nearly board ready are the core task.

## Wider Workforce

8.25 Mirroring the above, it should be considered what materials can be repurposed or used for the wider workforce and whether we can create bespoke programmes for particular staff groups.

8.26 In a similar vein, we need generic NHS leadership programmes to acknowledge digital data and technology in an appropriate way for their audience. As digital data and technology become more integral to NHS operations, the existing Leadership Academy offerings should be reviewed to determine whether content is sufficient and how we can support this.

8.27 It may be that the Digital Academy Online Foundation Certificate and signposting tool described are a short term solution and other programmes can borrow or repurpose these, but the medium term needs to integrate these more strongly and explicitly to continue to break down silos. There is already ongoing dialogue between HEE and The Leadership Academy exploring how this could work in practice.

## **9. Mentorship**

9.0 We have mentioned mentorship a few times and wanted to specifically give the topic the attention it deserves. The opportunity around mentorship is not always utilised yet is a crucial way for participants of development programmes to give back to others as well as benefitting from mentoring themselves. This is also an opportunity for those who have completed learning programmes to give back to others.

9.1 A number of formal and informal mentoring opportunities are already available, both internal and external. This includes mentoring within the same programme (e.g. alumni mentoring new cohorts), mentoring via some of the professional bodies and mentoring via TechUK. The Digital Academy should provide an overview and signpost to the opportunities that individuals can utilise. These opportunities need to be mapped in the first instance to determine if there is a gap to fill.

9.2 As part of this, it is important mentoring opportunities are accessible to all, whereas for example mentoring with industry is currently targeted at quite senior leaders. There could also be opportunities to expand this to shadowing and placements.

9.3 While individuals may also benefit from coaching, good mentor relationships can support an individual's progression in what can be a confusing space. We have therefore focused on that.

9.4 Mentorship does not have to be dictated by seniority. Reverse mentoring should be considered, as well as project based 'speed' mentoring to meet short term support needs.

## **10. Sustainability and Branding**

10.0 This section starts to explore how the NHS Digital Academy will be sustainable going forwards. The detail within this section will need to be worked up as part of the implementation plan.

### Sustainability

10.1 While the existing offering has been deemed a success, it is not sustainable from a financial perspective, nor does it address the wider requirement for talent pipeline development.

10.2 One of the overarching principles has been to not reinvent the wheel and instead commission or provide new offerings where there are gaps, and signpost in other circumstances. For some areas such as board development it is not yet clear what the gaps are.

10.3 This vision assumes creating a positive relationship with industry going forwards and there may be opportunities for industry sponsorship on programmes. The mentoring enabler can support this and there is a project currently being scoped to explore industry rotations. Going forwards, there could be options to have chargeable spaces on programmes or masterclasses. This will require culture change to ensure it is seen as a positive and collaborative.

10.4 There is an opportunity to base more activities at a regional level or online to reduce travel requirements alongside associated time and cost. It is likely some central or ring fenced funding will be necessary. Regions should have the option to top up and lead further work, ideally through working with their local Skills Development Networks.

10.5 The investment in the digital, data and technology workforce should be compared to more established professions such as finance and medicine.

10.6 The apprenticeship levy should be utilised where possible to offset NHS Digital Academy programme costs. This however has interdependency with career pathways and occupational maps and needs further understanding.

10.7 Finally this vision places the NHS Digital Academy at the centre of a broad context. If this can effectively become the home for digital, data and technology education and development this will benefit the wider system through reduced staff turnover with better

training and development opportunities while encouraging new entrants into the workforce at scale.

## Branding

10.8 The NHS Digital Academy is already a strong brand. As part of the implementation plan there will need to be agreement around how the brand is used. In addition there needs to be further work to understand *who* accredits or endorses training.

10.9 We hope that through using the HEE e-Learning Platform as the single access point and including NHS Digital Academy branding with all associated learning will help this to become a recognised brand in a similar way to the NHS Leadership Academy.

10.10 There is a big opportunity to develop the NHS Digital Academy Online Foundation Certificate and if done well, this will strengthen and build on the strong brand.

10.11 As part of the implementation plan, further thought needs to be given as to how the “NHS Digital Academy” badge or credential is given to individuals, and what they need to do in order to maintain it. In addition this needs to be considered in the context of how mature the system is with regard to professional registration.

## **11. Next Steps**

11.0 There is a lot to celebrate within this future vision and we have set out an offering that sits within the current landscape and is flexible enough to be future proof. This further aligns the NHS Digital Academy to wider NHS policy and initiatives to support system buy in and reduce digital, data and technology being seen as a silo.

11.1 This is a draft vision which we plan to share from Friday 26<sup>th</sup> June 2020. An engagement period of at least three months will follow. One reason is to sense check that this vision is what the digital, data and technology workforce want and to understand any missed opportunities. Secondly there are some key areas we need to better understand through further targeted stakeholder engagement.

11.2 Below we share the next steps to make this vision a reality. We start with those which are integral to refining the vision and will commence alongside our engagement period. Some of these are also culturally really important and action is needed sooner rather than later.

11.3 We then share draft emerging recommendations which we think will commence in the next 12-18 months. These will be further refined and finalised throughout Summer 2020

as part of the implementation plan, which we intend to co-develop with the workforce. The aim is to have the vision finalised and a draft implementation plan in place by October 2020.

Next steps (Immediate to support vision refinement)

1. Consultation with the digital, data and technology workforce to confirm that this vision is what they want, and subsequent refining of the vision.
2. Targeted stakeholder engagement to strengthen collaboration with social care, the four nations, academia and professional bodies. This should include starting to explore what accreditation and branding may look like.
3. Development of an implementation plan co-produced with key stakeholders including previous and future participants of key learning programmes. This implementation plan should provide medium and long term recommendations.
4. Work with the NHS Leadership Academy and NHSE/I to explore the roles of the NHS Graduate Management Training Scheme and the Regional Talent Boards to identify opportunities to work together and support pipeline development.
5. Reprourement of the current learning offer, adding in online options where enablers are in place to appropriately support distance learning.
6. Work with expertise including One Health Tech and the Shuri Network to set up a workstream focused on equality, diversity and inclusion as per section 8.9.
7. Commission and curate a module focused on the importance of equality, diversity and inclusion to those working in digital, data and technology which will form part of the future NHS Digital Academy.
8. Undertake a gap analysis on mentorship opportunities for those working in digital, data and technology to understand what requirements exist for a signposting and support toolkit. This project should consider commissioning a mentoring support programme to specific groups if gaps exist.
9. Develop a range of case studies which are diverse both with regard to protected characteristics but also professional groups. In the short term, use these to start promoting the range of opportunities available to individuals at all stages in their career.

Next Steps (Emerging next steps for the next 12-18 months)

1. Virtual workshops using a technique such as appreciative enquiry (virtual if necessary) to identify the key learning topics to focus on and how they can be combined to form an accredited badge. This should draw on a combination of national policy and existing initiatives alongside local requirements.
2. Commission development of the Digital Academy Online Certificate.
3. Undertake a gap analysis on board development to understand if there are further requirements in this area and, if necessary to develop further offerings based on the results.
4. Learn from the development of the analyst and the Library & Knowledge Services specialist academies to develop blueprints for other specialist academies.
5. Build on the landscape mapping work to fully understand how opportunities fit together, how this can be articulated to the workforce through visuals and guides while exploring whether any additional gaps exist.

These will be expanded on and refined as part of the Summer 2020 engagement period.

**Link to engagement platform**

Please visit our engagement platform to comment on this vision or if you wish to get in touch:

<https://jointheconversation.scwcsu.nhs.uk/digital-academy-future-vision>

This will be live from Friday 26<sup>th</sup> June 2020.

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### **Not available online:**

“What does a non-gendered job description look like that fully supports inclusion and diversity?” – HEE Knowledge Management Team, 2020.



## **Appendix 1: Background and drivers**

There is a need to build a diverse pipeline with opportunities for all regardless of role or seniority.

This firstly refers to diversity in a protected characteristics sense. We must ensure that training opportunities meet the needs of all and that barriers are reduced such as supporting those with caring responsibilities or disabilities who may otherwise struggle to access development. In parallel this must address evidence that those from BAME backgrounds find it harder to access development. We need to both positively encourage individuals from a range of backgrounds to apply while also ensuring application mechanisms and delivery of programmes are supportive.

It is also critical to improve this throughout the whole pipeline otherwise the diversity of candidates to pull into the most senior programmes will be low. Diversity at a senior level is critical to ensure other voices are at the table with regard to thought leadership.

Likewise where are anecdotal issues with representation of different workforce groups on programmes and whether these individuals want a sense of belonging or feel overpowered.

We also need to think about what happens to individuals after completion of learning programmes for several key reasons: a need to ensure participants remain connected, understanding the ROI on both individuals and organisations and ensuring they can give back. The current programme needs to be connected into the wider system.

Ensure alignment with mainstream NHS leadership including board development

It is critical that executive teams see the value in their digital, data and technology workforce. There is the risk otherwise it is not a golden thread running through their organisations and that the workforce do not get access to training, although the recent COVID19 pandemic has likely forced this issue significantly higher up on the agenda

There is a growing gap for the wider workforce to access training materials. This could be both for specific problems (e.g. how to conduct a remote consultation) or if they are interested in a career (either in full or portfolio) in digital, data and technology.

It is not clear if broader NHS leadership programmes have enough focus on digital, data and technology and likewise whether those working in digital, data and technology roles are aware of broader leadership opportunities. For some individuals the thing that they need may already exist.

We need co-ordinated opportunities linked to professionalism

The various components within digital, data and technology (often still referred to as informatics) remain very silo'd (more in section 1.17.2) and there is a gap of a basic building block to give individuals an all-round taster. We specialise very early on and lack of agreement as to who is within the informatics umbrella exacerbates this issue. This presents two key issues. Firstly it is difficult for

individuals to sometimes change career pathways without that exposure. Secondly it builds up artificial barriers between teams which are integral to one another.

The existing schemes and programme need to be better joined up. With the exception of where a good local network exists such as the North West ISD, they are seldom pulled together in one place. This is not about one programme being better than another but about ensuring individuals have choice and can make an informed decision about the best training for them.

This is a key issue at entry level too with future healthcare managers needing to decide between the national Graduate Management Training Scheme, the NHS Graduate Digital, Data and Technology Scheme or indeed any local graduate schemes or Apprenticeships. There needs to be transparency to reinforce again, that individuals have choice and can make an informed decision about the best training for them.

While there are more focused programmes at entry level (and even at school leaver level starting to take place), and the current programme provides an offer to those in senior clinical or healthcare manager roles, there is evidently a gap in the middle.

CPD and portfolios within digital, data and technology is immature compared to other disciplines. This is again why it is key that the professional body offering and career pathways are defined.

#### We need a long term sustainable delivery model with open access

The current learning programme serves a purpose but is not sustainable in the longer term, especially as we look to factor in feeder programmes.

Consistent methodologies, terminology and content helps health and care to develop a mutual understanding of what is required

The current offering is the start of developing that consistent offer for the Digital and Change Leadership group, alongside a translation for the broader workforce

There is a need to ensure individuals in a specialist role, have access to these materials and language so they can both lead within their specialist fields and to expose those who may want to undertake a broader role going forwards