

Health sector global challenges - Digitisation requires successful leaders to adapt



THE CHALLENGE FOR HEALTH SYSTEMS IN 2021[^]



Digital transformation and interoperability

Exponential advances and interoperability in digital technologies are helping clinicians deliver health care services in ways consumers prefer to receive them



Care model innovation

New strategies, capabilities and technologies are shifting health systems' focus from providing episodic, acute care to keeping people healthy



Future of work

An ageing population and shortage of skilled clinicians are changing the future of work in health care and increasing the importance of sourcing, hiring, training and retaining skilled workers



Financial operations and performance improvement

Health systems are working to achieve financial sustainability by reducing cost to deliver and finance high quality and effective care for patients

WHAT WE NEED TO ACHIEVE?



Digitally ready Boards



Digitally ready Leadership



New careers and Professions



Workforce digital Literacy



Governance for the digital age

ENABLERS

- Digital Medical and Nursing Schools
- Digital Enterprise
- Digital Leaders and Professions

[^] Deloitte: 2020 Global Healthcare Outlook (available at: https://www2.deloitte.com/content/dam/Deloitte/cz/Documents/life-sciences-health-care/2020-global-health-care-outlook.pdf

Game changers that will fundamentally shift how we deliver care in the future that need to be addressed now



Several analytical and digital technology approaches will be critical for you to quickly plug the gaps, and build momentum, confidence and excitement about its digital future, Organisation's will need to quickly be able to embrace these solutions.

ARTIFICIAL INTELLIGENCE

AI simulates human learning processes by computer systems to develop predictions. AI can be applied via machine learning, natural language processing & RPA bots

AUGMENTED INTERFACES

Virtual Reality, Augmented Reality and Holograms replicate reality and minimise risks in actual procedures, and is an effective training method leveraging simulated environments for healthcare practitioners

INTERNET OF THINGS

IoT has been driving the evolution of wearables devices in the healthcare industry, where medical devices and applications share data with IT systems



Artificial Intelligence (AI)

Solutions that allow for more efficient and effective analysis of data, improving stakeholder decisionmaking



Machine Learning (ML)

An application of intelligence that is used to predict system need



Intelligent Automation

Driving process efficacy with higher accuracy and pace via Robotic Process Automation & Analytics



Natural Language Processing (NLP)

Technology focused on extracting relevant medical information efficiently



VR / AR

Reality solutions are helping clinicians, nurses and other healthcare stakeholders gain greater visualisation in training and delivery of healthcare



Haptics

Haptical feedback uses a sense of touch from either applied forces, vibrations or motions to interact with users



Mid / back office and infrastructure



Post Modern EHR and PAS



Real time Resource management



Asset and equipment optimisation



Infrastructure and Cyber Maturity



Digital control towers for supply chain resilience, risk & optimisation



Connected Devices

Aggregates and provides data-driven treatment feedback loops that inform patients, clinicians and pathways



Telemedicine / Tele health

Telehealth is the distribution of health-related services and information via electronic information and telecommunication technologies



Ambient Sensors

Continues and passive monitoring of vital signs and movements



Wearables

Wearables provide patients, Clinicians and HCPs with real-time insights into patient data and help provide personalised care through continuous monitoring



The need for transformation of the health sector is limited by the workforce

In 2019 the TOPOL review highlighted that globally within 20 years 90% of health and care staff would require significant digital skills. Health and care organisations will be radically changed, with safety, quality and efficiency enabled by technological innovation. This transformation will require leaders who understand how to leverage data and technology as well as leading others towards future models of care.

Skill emergency – Leadership emergency: With a globally ageing population in the west and increasing demands on services, the skill gap across the health sector looks set to widen in the coming years, meaning the threat posed by the skills gaps constitutes a significant long-term socio-economic issue in many regions.

Gap in workforce and capacity and capability: Across THE NHS, which is the worlds largest health system there is currently a shortage of more than 100,000 staff. Based on current trends, we project that the gap between staff needed and the number available is projected to reach in excess of 250,000 by 2030. Digital skills and enablement will be needed to bridge this gap and allow the existing workforce to be augmented by technology and data in order to deliver.

Limiting factor is people: As healthcare evolves the limiting factor will be the people. The workforce is not aligned to leverage new technologies with key shortage in area's such as: Board leadership, Direct care re-design, wider Workforce, The people who can change your target operating model to a digital one

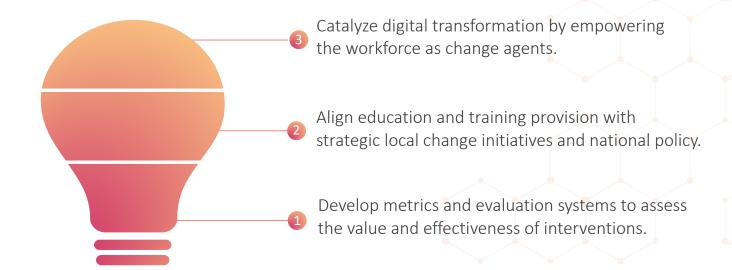




Tektology looks to identify workforce learning needs; we work as a partner to embed digital, leadership and innovation into organisational strategy. We understand the role of health technology innovation in delivering better care and we help develop holistic system-wide strategy at organisational and national levels.

Our aim is to develop learning health systems that are citizen centered leveraging innovations in digital mobile-first and open data to develop organizational resilience.

Extensive awareness of the challenges faced by health and care providers, Tektology's strategy provides a unique fusion of global healthcare and executive education expertise, combined with a track record of successful digital transformation.



Drawing on learning science experts from Tek-ed and delivered by Tektology to tailor our approach



We bring key strengths in identifying workforce learning needs. We work as a partner to embed digital, leadership and innovation into organisational strategy and operations.

Our team of international experts bring a wealth of experience in developing and delivering programs of catalytic learning in healthcare. Catalytic Learning is based on facilitating and enabling learning so that the learning journey continues long after people complete a programme, thus making a sustainable impact. This approach will enable the workforce with the capability and capacity to deliver on future visions.

Credentials: TEK-ed's directors have led and designed The NHS Digital Academy which draws together expert perspectives from industry, academia and the public sector

Tektology's experienced team



DAVID ROBERTS

ABOUT

An international business leader, having lived, worked and practised in over 30 countries, leading and implementing solutions across health, wellness and social care, across health, insurance, life sciences and retail sectors.



JOHN HODDINOTT

ABOUT

John has over twenty years' experience helping public sector organisations deliver operational improvements, better outcomes for citizens and lower costs to the taxpayer. A former Equity Partner at EY before joining Tektology.



Phil Leonard

ABOUT

Phil has 25+ years working in healthcare across a range of its sub-sectors and in a variety of disciplines. He has worked extensively internationally in 50 countries

Supported by our Tek-ed team



PROF. RACHEL DUNSCOMBE

ABOUT

Rachel has 25 years' experience of deploying industry leading transformational technology in the health, care. She has worked globally on health and care digitisation research and acts as an advisor to both governments and international standards bodies. CEO of the NHS digital academy.



DR. ALISDAIR SMITHIES

ABOUT

An experienced lecturer, technology leader and innovator in health professions education. Alongside operational management of online learning, teaching and assessment teams at world-leading Russell Group medical schools, Alisdair has developed strategic international academic and commercial relationships.



Digitally Ready Workforce Requirements

WHAT IS REQUIRED FOR A DIGITALLY READY WORKFORE

PHASE 0

DIGITAL WORKFORCE STRATEGY

A digital workforce strategy that is fully endorsed by the board is required determine the aspirations of the organisation, including the scale and pace the organisation wants to adopt digital

PHASE 1

WORKFORCE READINESS ASSESSMENT

With a clear understanding of the organisation's aspirations and vision we can begin to assess your workforce and ascertain the base line for which we will build on to meet the future needs

Expectation that a digital workforce strategy is in place

PHASE 2

DESIGN OF YOUR DIGITALLY READY WORKFORCE PROGRAMME

With an understanding of the organisation's vision for the future and an in-depth pool of insights on where the workforce currently stands we can begin to create a workforce Programme that addresses the gaps in learning and sustainable enables the fit for the future workforce

Our 3 phase approach required to correctly prepare your workforce for the future

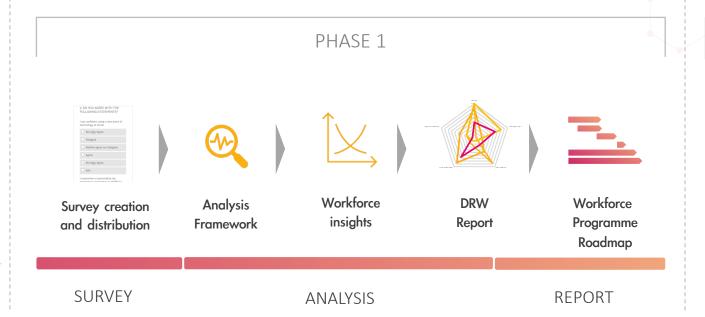


DIGITAL WORKFORCE STRATEGY

PHASE 0

STRATEGY DELIVERY

OUR DATA DRIVEN APPROACH TO THE DIGITALLY READY WORKFORCE ASSESSMENT PROVIDES A CLEAR BASELINE FOR PROGRAMME DESIGN



WORKFORCE PROGRAMME

PHASE 2

PROGRAMME DELIVERY

Example: Phase 1 breakdown of our approach to assess your workforce digital readiness



	Preparation, Align and Launch		Survey Running		Analysis & Recommendations		
	3 weeks	*	3 weeks		3 weeks		
bjectives	▶ Understand the <i>'The organisation'</i> through a series of interaction to specifically fit the organisation. Through a series of iterations n required to the Survey and area's that need to be customised. A in order to correctly prepare for the launch of the Survey (Commodistribution platform, etc.).	nake adjustments where re gree on a series of tasks int	Monitor the incoming results of the Survey and use update sessio esults or other issues that need to be resolved in order to collect of ormation for the final report.	t the right amount of repor	rse the results collected and form the "organisation". The Define the roadmap of programs through workships the results of the Survey and build a plan of programs.	nops with key stakeholders to	
ey ctivities	Engage: with key 'organisation' team to Validate our Survey questi thinking of the organisation. Work through several logistical and ted wholly prepare for the launch of the Survey.	nnical activities to	Results analysis and Monitoring Weekly update meetings in order to re-cap the weeks results and pres the analysis that should be managed and other area's that need to be	sent back gaps in report	sis: Analyse the information gathered and develop a t map: Build a roadmap Digital programmes to prepa		
	► Iterations: Through interaction with "The Organisation" iterate on t		order to collected a meaningful cross section of <i>The organisation</i>	future		To the organization for the	
	correctly tailor it to the requirements stated. • Survey: Launch the Survey			capab	shops with key stakeholders across the organisation oility to support the delivery of the DRW roadmap. Te oility and prioritise programmes	i.	
pproach	 Mobilisation (1 week before kick-off to make contact and arrange in Kick-off session 2-3 Planning & iteration sessions 	, We	esults analysis and monitoring over the course of 3 weeks Lusing the Interim Workforce Readiness report we will build a roadmap of programmes to meet the goals of the future organisation ■ Conduct workshop/s to test thinking, prioritise programmes and better		'		
	► Launch iterated survey				rstand appetite and capability of the organisation. ('se report with workshop findings	1 week)	
verables	▶ Digitally Ready workforce Survey			▶ Digita	ally Ready workforce Report		
lestones							
	PROJECT PLANNING & PLANNING & KICK-OFF ITERATION ITERATION	LAUNCH SURVEY	MONITORING MONITORING MEETING MEETING	MONITORING ANALYSIS	S INTERIM DRW REPORT	WORKSHOPS DRW	

^{*}Timings may vary depending on size of organisations and specific requirements

A digital readiness assessment gives you the tools to prepare your organisation and workforce for the future



OUTPUTS

WORKFORCE STRATEGY

► A workforce strategy to align to your digital vision/aspiration

DIGITAL READINESS ASSESSMENT REPORT

- ► Workforce insights report detailing segmented workforce Digital literacy and readiness
- Roadmap of tailor built Tek-ed courses to close capability gap and build digital experience across the workforce
- Ready to proceed with the design of the digitally ready workforce

DESIGN OF YOUR DIGITALLY READY WORKFORCE PROGRAMME

► A Detailed list of programmes specifically designed to address your workforce needs

OUTCOMES

INTELLIGENT CLIENT

- ► Have a clear understanding of what's required in order to hold your transformation partner to clear outcomes.
- ► Effective commission of digital transformation projects in the future Alignment workforce plan to technology plan
- De-Risk of future delivery

FUTURE PROOF

- Workforce will be Fit for the future of health care
- Strategically digital build Digital into the DNA of the organisation
- Digital assets can be utilised effectively throughout the organisation
- Workforce will not become the rate limiting factor to digital transformation



Example: Phase 0 breakdown of our approach to create a workforce strategy and ready the organisation for phase 1



Workforce Strategy

- 5 - 12 weeks

Objectives

- ▶ Understand the existing thinking that's already been done in 'The organisation' surrounding the workforce
- ▶ Understand '*The organisations'* digital appetite and maturity
- ▶ Align the future of the workforce at '*The organisation*' with the organisations goals and digital appetite

Key Activities

Strategy Document

- ▶ Evaluate the projects that 'The organisation' has conducted so far and the organisations strategy to understand all the thinking already been done and the goals of the organisation regarding their workforce education and digital appetite
- ▶ Interview 15 20 senior stakeholders from across 'The organisation' In order to collect a rich data set we would require access to Senior leadership and clinical leadership to test the maturity of the thinking and the goals from across each aspect of the organisation.
- ▶ Workshop with 20-30 stakeholders to test our findings, probe discussion and new idea's and unite 'The organisation' and it's understanding of their workforce strategy so far

Approach

▶ Development Using the information gathered we develop the workforce strategy document for 'The organisation'

- ► Mobilisation (1 week to make contact and arrange interviews)
- ► Evaluate organisation strategy documents, digital strategy etc. (1 week)
- Confirm findings with industry experts and key stakeholders (2 weeks)
- ► Develop thinking and produce report (1 week)

Deliverables

➤ Workforce strategy

Milestones











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