## 30 AI ENABLED AUTOMATION AND THE FUTURE OF THE HEALTHCARE WORKFORCE: FORGING THE PATH FOR SUSTAINABLE, HIGH QUALITY CARE DELIVERY

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**Introduction** Advances in artificial intelligence (AI) have sparked renewed debates on automation's impact on the future workforce, which is particularly pertinent in healthcare. The impending transformation of healthcare roles is inevitable due to current unsustainable recruitment rates, projecting a global deficit of 15 million healthcare workers by 2030. Despite expectations of relatively lower job displacement in healthcare from AI compared to other sectors, integrating AI technologies presents challenges, particularly in reshaping work practices through automation. It remains paramount to ensure this does not become a passive or top-down process and that staff remain at the centre of the changes to their roles, as this will impact their ability to deliver high quality patient care. This study explores staff experiences pre- and post-implementation of care pathway automation using Dora (Ufonia Ltd), an autonomous clinical voice assistant that is able to automate routine clinical conversations.

**Aims and objectives of the research project or activity** This study aims to explore how AI-enabled automation affects different healthcare professionals (e.g., doctors, nurses, allied health professionals, administrators) engaged in high-volume, low-complexity care pathways. In the process of transforming care pathways through automation of routine tasks, it is important to understand the impact on work practices, potentially necessitating new skills or requiring staff to work at the top of their licence. The impact of this change on professional identity, well-being and workflows is poorly understood at present. Anticipating and addressing these issues is crucial for effectively integrating new technologies that will lead to a workforce who can deliver the best possible care to patients and improve health outcomes.

**Method or approach** Dora, an AI-enabled clinical voice assistant, is introduced across NHS sites in England. Dora is able to telephone an unlimited number of patients and have a clinical-grade consultation with them just as a nurse or doctor would. By replacing human calls, Dora frees up clinicians for more critical tasks and higher value activity. A mixed methods, multicentre study will be conducted over 2 distinct phases: (a) pre-implementation and, (b) post-implementation. Data will be collected qualitatively via semi structured interviews as well as quantitatively via a validated questionnaire. Longitudinal data collection will assist in forming a richer understanding of the context, drawing further insights into how the change (i.e., the intervention) impacts the workforce over time.

**Findings** Interim results suggest that different members of the healthcare workforce team are impacted differently. Those in senior or managerial roles are more likely to have a positive outlook on the changes that it will bring and view this as a 'change management' challenge rather than attributing it to the technology itself. So far, this is somewhat contrasted with the views of those who are on the frontline of delivering care, as they are more likely to perceive the implementation of AI enabled technologies as challenging on an individual level. There was agreement across the range of healthcare staff that this technology will ultimately benefit patients.

Full results will be available by March 2024 and are expected to reveal the inter-relationship between Dora, the AI-enabled clinical voice assistant, and healthcare workers. We will seek to investigate changes in work practices and well-being, whilst measuring this against the overall impact Dora has on quality of care delivered to patients.

Understanding the concerns, changes and success factors of early adoption of AI enabled automation technology is essential to securing the sustainability of a skilled workforce to meet the increasing demands of the patient population.

**Key messages**

1. The transformation of roles secondary to the implementation of AI-enabled automation technologies, such as Dora, demands an active and strategic approach.
2. Collaborative leadership between the healthcare workforce, industry and academia remains at the core to ensuring effective adoption that embraces these changes whilst understanding and mitigating risks.
3. This multidisciplinary approach facilitates the deployment and optimisation of AI-enabled automation solutions tailored to the specific needs of healthcare settings.
4. Maintaining flexibility in AI implementation strategies is crucial to success and continuous evaluation ensures that organisational requirements and patient needs are addressed effectively and efficiently.
5. This will lead to a workforce best equipped to sustainably provide the best possible patient care.

# Leading together

## 31 NORTH WEST LEADERSHIP SCHOOLS: INSPIRING AND DEVELOPING THE HEALTHCARE LEADERS OF THE FUTURE

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**Introduction** The North West Leadership Schools (NWLS) are an initiative of NHS England North West (NHS England NW). Each year we run a series of free, virtual evening events to inspire and develop leadership skills in medical and dental trainees of all specialties and grades across the North West region. Current medical and dental trainees are the healthcare leaders of now and the future- playing a vitally important role in improving patient care. Three regional sub-committees comprise the NWLS: Cheshire and Merseyside, Cumbria and Lancashire, and Greater Manchester. Each sub-committee is responsible for organising two virtual evening events throughout the year, in addition to all three collaborating on the annual NWLS conference. The work of the NWLS is facilitated by NHS England NW Faculty Development and is supported by an Associate Dean.

**Aims and objectives of the research project or activity** The NWLS deliver a programme of leadership-themed events throughout the year which aims to develop skills and inspire interest in leadership amongst medical and dental trainees of