



Assistant Professor Charlotte Gordon at the Diabetes Nursing Awards with certificate of achievement

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Use of AI in diabetes education achieves national recognition

The development of a new artificial intelligence-based tool that supports health professionals caring for people with diabetes has led to national recognition for a Northumbria University researcher and her team.

Assistant Professor Charlotte Gordon and Ralph Holland, an Academic Technology Services' (ATS) Analyst at Northumbria University, were finalists in the Diabetes Nursing Awards following the launch of a new e-learning package which focuses on diabetes care and patient case management. Ms Gordon and her team produced <u>the specialist module</u> which uses artificial intelligence (AI) to support training on how to carry out patient consultations, covering topics including medications, glucose monitoring and patient education.

The diabetes module forms part of Northumbria University's <u>Health and</u> <u>Social Practice Framework</u> which is designed to support those already working in health and social care with their continued professional development throughout their careers.

It was created to help non-specialist practitioners to enhance their abilities to care for patients with diabetes. Students are taught by diabetes specialists and benefit from simulated sessions that focus on behavioural changes and medication escalation scenarios.

The in-depth AI consultation was produced to better reflect the situations that can occur in real clinical practice as patient care requirements change over time.

Using a specially developed script, it gives students the chance to safely observe and interact with patients in a simulated setting, allowing them to reflect on how they would best manage a consultation and how different factors can impact on the care plans patients require.

The success of the module and the introduction of the AI consultation led to Ms Gordon and Mr Holland being shortlisted for the title of Diabetes Educator of the Year in the Diabetes Nursing Awards, which honour those making a profound impact to the lives of individuals living with diabetes across the UK.

Ms Gordon said: "There are a significant number of people who are risk of, or who are already living with, diabetes. This means that understanding the disease and the best treatment plans is essential not only across primary care but also district nursing practice and in acute care environments.

"The new AI consultation was developed to allow us to employ a more engaging approach to support professionals in their ongoing training that was reflective of what could happen in clinical practice." She added: "We developed the script, which is underpinned by behavioural change theory and the use of Language Matters and NICE guidelines, to enable the student to safely observe, interact and reflect on how they would manage a consultation depending on the patients' needs at different stages. We are confident that it will result in high levels of knowledge and insight in relation to diabetes care and patient case management and we are delighted to have achieved recognition from our peers at the Diabetes Nursing Awards."

Professor Alison Machin, Head of Nursing, Midwifery and Health at Northumbria University, said: "The e-learning package developed by Charlotte Gordon and her team really reflects Northumbria's dedication to continuing to innovate how we teach and how we can make training more accessible to the highly skilled professionals working in the sector.

"The addition of the AI patient consultation will help to further learning and ensure our nursing and our other healthcare colleagues leave our diabetes module with the ability to deliver the highest quality research informed care for people living with or who are at risk of diabetes."

The <u>Health and Social Practice Framework</u> was developed alongside stakeholders in the NHS Trusts, primary care provisions and students. It offers flexibility and aims to meet learners' professional and personal needs.

Northumbria University was recently awarded £9 million by UK Research and Innovation to establish a Centre for Doctoral Training in the field of <u>Citizen-Centred AI</u>. The centre, which will be known as CCAI, will focus on the inclusion of citizens in the design and evaluation of AI – helping to make the rapidly advancing technology work for ordinary people, including how AI can be applied to<u>the health and wellbeing</u> of our populations.

The University is dedicated to reducing health and social inequalities, contributing to the regional and national workforce and improving social, economic and health outcomes for the most marginalised in society. Through its new Centre for Health and Social Equity, Northumbria researchers will be delivering world-leading health and social equity research and creating innovative, evidence-based policies and data-driven solutions to bring impactful change across the region, the UK and globally.

UNIVERSITY OF THE YEAR 2022 (Times Higher Education Awards)

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