

# **CONFERENCE ABSTRACT**

# Spotlight on careers within Digital Health and Care: addressing future workforce development issues.

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# Introduction

The 4th Industrial Revolution is transforming the world of work also in the Health and Care sector. It will become a key driver in supporting the better integration of health and care activities. The workforce is required to be more agile to keep up with the accelerating pace of technological advancement combined with an increasing ageing population and their health and care needs. One of the fastest growing economic sectors globally is Digital Health and Care. A recognised factor restricting the growth of that sector is the lack of suitably skilled workforce.

Based on earlier research carried out by the Digital Health & Care Institute, the occupational categories (OCs) in most urgent need of staff in Scotland's Digital Health and Care sector are:

- 1. Software Developers
- 2. Product Owners
- 3. Implementation Facilitators
- 4. Knowledge Engineers
- 5. Health Data Analysts, and
- 6. Cyber Security Specialists.

# Method

The main purpose of the study was to highlight issues underlying the lack of clear career pathways leading into positions in the digital health and care sector and offer advice for organisations involved in planning the education and training provision for these in Scotland. The study comprises extensive desk research, qualitative semi-structured interviews and visual career mapping exercises with 27 people currently employed in the selected categories. The study probed into the nature of the occupations, the currently available educational pathways into them, the skills and capabilities required of people employed in them and the education and career pathways taken by the interviewees.

#### Results

The occupational categories in the study ranged from well-established to emerging ones, reflecting in the availability of educational pathways into the sector. Many of the OCs are

positioned at the interface of humans and technologies, entailing translating data, knowledge and information between them. This new type of job role has emerged through the expanding digitisation of services. The study also found that distinctly human soft skills – ones not replicable by technology – are increasingly important across in the sector, and that the vast majority of the skills and capabilities required in these roles are shared between the OCs.

#### Conclusions and lessons learned

- 1. General lack of awareness of the existing career opportunities and emerging job roles in the Digital Health and Care sector translates into a lack of well-defined education and career pathways.
- 2. Recognising the new job roles at the interface of humans and technologies translating data, knowledge and information between them will be crucial in the development and implementation of the digital transformation of the Health and Care sector.
- 3. Recognising the importance of distinctly human soft skills across the six OCs in designing educational pathways for future workforce is vital.
- 4. A vast, shared skills and capabilities base across the six OCs offers valuable opportunities for exploring common approaches to education, skills development and career planning, offering a key for enabling staff to move more flexibly between jobs across the sector.

# Limitations

Limited interviewee sample. Which was mitigated by extensive desk-research.

# Further research

National employer survey.