

Digital technologies and its impact on healthcare architects' wellbeing in the UK's National Health Service (NHS)

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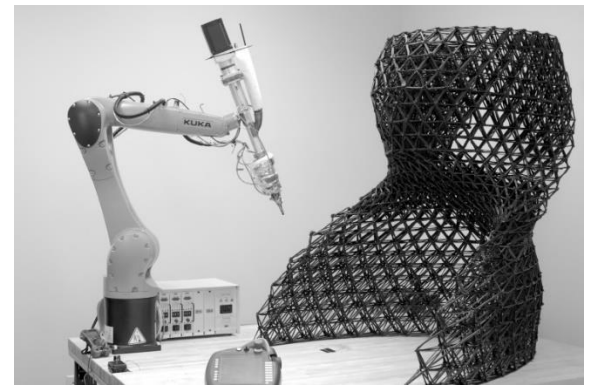
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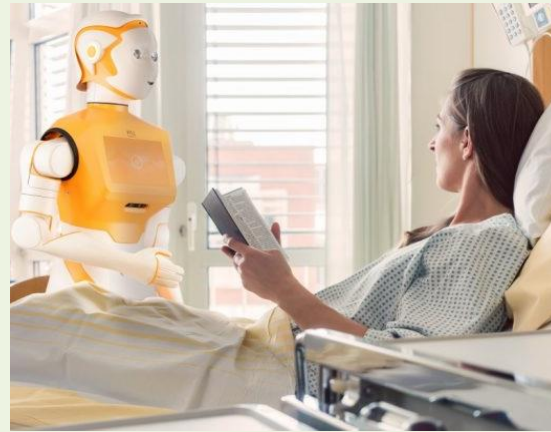
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Telemedicine



Robots in hospitals



DTs in hospital design



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Department of Health & Social Care

40 New hospitals across England



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Estates and Facilities Workforce Action Plan

Building, developing and engaging our
people

15 June 2022



**Facilities & Estates workforce
designing healthcare buildings**

Architects

Traditionally low job satisfaction & high prevalence of stressors that negatively impact wellbeing

Long hours, increase of working weekends and evenings, experienced a negative impact on their mental health since the start of the pandemic

Understand how DTs transform work and job satisfaction and how this is translated to architects working for or supporting the NHS



Literature search

Grey literature, UCL Library Services
SFX@UCL, PubMed, Academia.edu,
ResearchGate, Emerald Insight, SAGE
Journals, Google Scholar.

Indicative keywords: architects & job
satisfaction, architects' wellbeing, NHS admin
staff & job satisfaction during Covid-19,
digital technologies & architecture, digital
technologies & medical architects, industry
4.0 & architecture

Semi-structured interviews

with designers/medical architects collecting
data on their work during the pandemic.

12 out 20 accepted to participate in the
study.

Methodology

- **83,3% (10 out of 12)** working remotely during first lockdown. Later, few days a week in office
- **16,6% (2 out of 12)** hybrid whole pandemic, mentioning site visits, meetings with clinical groups, processes requiring physical presence like signing papers as well as resolving IT issues and distributing equipment to staff
- Wellbeing, job satisfaction & how they were impacted by DTs: advantages and disadvantages of the use of DTs due to the pandemic but **41,7 % (5 out of 12)** job satisfaction increased and **41,7% (5 out of 12)** wellbeing decreased
- **50% (6 out of 12)** said that DTs **could be useful in other parts of their work and gave ideas about new tools:** augmented reality, entirely virtualized workstations, a new platform for whiteboard- drawing at the same time
- **66,6% (8 out of 12)** agreed their work has an **indirect impact on patients' satisfaction**

Many highlighted that impact could be increased by the use of DTs allowing them to work faster, more efficiently and understand the space better.

Findings

'do not exaggerate and say scared but cautious, feeling awkward'

'Initially it was chaotic and quite stressful to be around the activity'

'Simulation tools could help to test different design options and improve the design of healthcare facilities'

'technologies will change the way we think of health systems'

'an online portal to create a link between user requests and the Team, a database that captures requests and task completion'

'Primary and community care is being changed by massively increased remote consultation'

Findings

- Working in the architectural industry could have a direct impact on a person's physical & mental well-being
- Digital advancements and DTs on architectural design could help in altering the low job satisfaction
- COVID-19 affected significantly the architecture industry by changing the work model of architects overnight
- This shift affected their job satisfaction
- DTs were extremely useful for architects
- Architects keen to explore new DTs in the design process, making it easier not only for them but also for the users to understand better space
- Demanding period for healthcare architects due to high need for healthcare building adaptations

Regarding NHS digital transformation: *'Can see great potential but that currently there no strategic vision in here (NHS). For the DTs, no idea, no clue if anybody is doing anything, no communication of any digital element or strategy'*

Conclusions

Thank you!

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