HealthManagement
Promoting Management and Leadership

Digital Healthcare Focus: Digital Health Professionals

Prof Henrique Martins, MD, MPhil, PhD
Editorial Board member - IT
******@***henriquemartins.eu

Associate Professor - ISCTE – University Institute of Lisbon, Portugal

Why all health organisations need them, how can you become one, and why now?

In this space I explore monthly topics, from concepts to technologies, related to the necessary steps to build Digital Healthcare Systems. For the month of March 2021, I choose to discuss education for Digital Health in a brief article 'Why all healthcare organizations need digital health leaders. How can you become one and why should who do it now?' because it's a month many people choose to look at study opportunities both at Executive Level as well as Master's level.

If there is something healthcare organisations in Europe, and indeed the world, have learnt from COVID-19 pandemic, it is how ill-prepared they were to use health data more effectively, serve through telehealth in all its forms and shapes, integrate and interoperate with each other via electronic healthcare records exchange, task shift and rearrange teams assuming all members of staff could access, understand and explore semantically compatible electronic patient records. In sum, most organisations in health and care have painfully found out that often there was no one to call for a conversation on such topics. How to boost telehealth services by 400%? What are the clinical implications and opportunities of starting to use AI-powered imaging software? Or simply who to call in to make sure technicians, managers and clinicians can 'understand each other', speak a similar language and lead the much-needed, urgently required digital health solutions implementation in complex healthcare settings?

These boundary-spanning (Goodrich et al. 2020) profiles are in high demand in mature markets such as Israel, the UK, but increasingly in all countries in Europe. Those are doctors that '*know about IT*', nurses that can ' *interact with Electronic Health Record and its technicians*' , often from vendors, or digital health-savvy pharmacists knowledgeable of ePrescription, eDispensation, robotic pharmacy management, to name but a few. Last week alone two posts for an 'EPIC nurse' were announced for a London hospital, with a starting salary of 100,000 GBP. This is perhaps 5 to 6 times more than what an average nurse will be paid in many EU countries. At national level, data science-trained clinicians are a scarce and invaluable commodity, particularly in countries that follow an idea that I share since March 2020, that ***the COVID-19 pandemic is the first pandemic of the digital world, and its victory resides on how we use data for health and health data more effectively than ever before***. Silent and discrete, many women and men who have worked intensively in the intersection between medicine/health and data/digital, to build up knowledge from information, alongside some IT technicians made a difference in many organisations. ***Some of these digital health professionals would also deserve to be called 'heroes' and praised publicly for their contributions to fighting COVID-19***.

> Staff with an ICT background who can ' *speak and interact smoothly with doctors, nurses and even patients'* are considered invaluable assets, disputed often at higher salaries than a staff nurse or a junior doctor

New functions and competencies associated with digital health and the general use of digital tools in health and care, by hybrid professionals, are highly appreciated by well-informed and well-educated top health leaders, at ministries, national and regional health authorities or working in health organisation management. Staff with an ICT (information and communication technologies) background who can ' *speak and interact smoothly with doctors, nurses and even patients'* are considered invaluable assets, disputed often at higher salaries than a staff nurse or a junior doctor. This is because experienced leadership, particularly in health and care organisations, have learnt they are often the cement and the critical success factor for eHealth, digital health, or just IT-intensive healthcare transformation projects and initiatives.

The COVID-19 pandemic highlighted that organisations, which had bet on formalising roles associated with digital health and dedicated protected time, were more capable of healthcare transformation using AI, telehealth, digital tools in general, or just finishing up many of the pending EHR-associated projects which had been lingering for such a long time. For example, by appointing a CMIO (Chief Medical Information Officer), a CNIO (Chief Nurse Information Officer) or a CPIO (Chief Pharmacist Information Officer) in their structures. Then by allowing three staff members (often in collectives of 2,000, 3,000, or even 7,000 staff – for an average-sized hospital in Europe) to fully dedicate themselves to exploring the potential of digital health tools and processes of change, not to be confused with those that just allowed them to take one or two hours away from their normal working week in a non-professionalised manner, as is still the case in many organisations.

> These actors of digital health transformation must be authentic organisational insiders working at the fissures of traditionally established health and care provision processes

Additionally, one person 24/7 dedicated to telehealth, with hybrid knowledge and skill set, coming from medical, nursing, or other health or ICT professional backgrounds is a minimum if organisations are to provide 20% or more of their care services via telehealth, specially as this trend is not temporary but is likely to stick in the future. When head of SPMS, in Portugal, having created the National Telehealth Center, we formally requested all Portuguese public healthcare organisations to appoint such a person (we called it a *PIT – 'promotor interno de telesaúde*', or Internal Promoter for Telehealth). All organisations had to appoint one. He or she is there not to 'do' teleconsultations, but to ensure and promote that they happen, they increase, and that technical and clinical guidelines are followed. These actors of digital health transformation must be authentic organisational insiders working at the fissures of traditionally established health and care provision processes, bring in the innovation and digitalisation citizens so desperately need and are starting to demand from healthcare. Not surprisingly, all private sector large hospitals/healthcare providers in Portugal, either had already followed this lead, or did so in March or April 2020, recognising the need for such specialised organisational function. I am sure similar network arrangements can be found or started in all countries.

A word for hybrids. As the first CMIO of a public hospital in Portugal, with a parallel contract, back in 2009, I know it is not easy to 'play in both teams', to be relevant in both the IT league and the clinical league. Both look at you as an outsider, both ask from you to connect to 'the other side'. Education to help create broad landscape understanding of both technical and clinical aspects is difficult to find, as Master's and other programmes seem to be designed to cater for furthering technical skills of ICT people, or clinical skills of clinical people. New programmes are arising, like in Copenhagen or the one I have set up recently in Lisbon at ISCTE Executive Education, but more are clearly needed. I propose a three-level educational ladder is required for this new generation of hybrid digital health organisational professionals:

1. Dedicated specialised training in cybersecurity, data science, human-computer interaction, communication skills, and digital and health literacy, in the form of a Master's or post-graduation, ideally as an after-work offering.
2. Introductory post-graduation or short courses to allow ICT people to start appreciating the complexities, nuances and particularities of the 'clinicians' worlds'; and on the other hand, educating clinical staff about 5G, IoT, EHRs, health informatics, and the potentials of ICT technologies in general.
3. Higher, executive-level education to prepare these hybrid professionals for intermediate management roles, while giving them a broader perspective of the world and the future of digital health, exploring a wide range of topical contents and particularly transformational leadership and human resource management.

This educational spiral can obviously be started from different entry points depending on each person's capacity, ambition and individual bet. One thing is certain. Sooner or later, but I see it 'as of yesterday', health and care organisations of all levels will need people with these skillsets. Whether or not health management and leadership see this could have been valid until 2020. ***As we step into 2021, and want to step out of this dreadful pandemic and move to more resilient, necessarily digital healthcare systems, having such hybrid professionals joining the organisations' driving seats has become obvious***. The first willing to invest in such specialisation are the ones most likely to gain from these new jobs and functions in modern healthcare settings. The second will always be latecomers to this game. Without these boundary-spanners, organisational leaders will struggle to bring about the health and care transformation onto their products and services which citizens are ready to embrace and, especially in competitive private healthcare, will be fast to demand.

Published on : Mon, 1 Mar 2021