ALUMNI SERIES:

The Digital Health Revolution: A Pharmacist's Guide to Embracing Emerging Technology

Since 2014, the healthcare industry has witnessed a remarkable transformation with the emergence of digital health technologies. These technologies, ranging from telemedicine and wearable devices to artificial intelligence and blockchain, have revolutionised the way healthcare services are delivered and experienced. As a pharmacist, embracing these emerging technologies is essential to staying ahead in a rapidly evolving landscape. This guide aims to provide pharmacists with a comprehensive overview of the digital health revolution and equip them with the knowledge and skills needed to leverage these technologies effectively.

What is Digital Health & the Impact of Digital Health on Pharmacy Practice?

Digital health refers to the use of technology and digital tools to enhance healthcare services, improve patient care, and promote overall wellness. It encompasses a broad range of applications and technologies that leverage digital platforms, devices, software, and data to deliver healthcare services, monitor health conditions, facilitate communication between patients and healthcare providers, and support the management of health-related information.

Digital health solutions can include various elements such as mobile health (mHealth) applications, wearable devices, telemedicine, electronic health records (EHRs), health information exchange (HIE) systems, remote monitoring systems, artificial intelligence (AI) applications, and virtual reality (VR) tools, among others. The goal of digital health is to enhance healthcare delivery by making it more efficient, accessible, and personalised. It can empower individuals to actively participate in their own healthcare management and provide healthcare professionals with valuable insights and tools to improve diagnosis, treatment, and patient outcomes. Additionally, digital health can help bridge gaps in healthcare access, especially in remote or underserved areas.

What skills are needed by pharmacists in digital health era?

In the digital health era, pharmacists require a combination of traditional pharmacy practice expertise and digital competencies to effectively navigate and contribute to this evolving field. Here are some essential skills needed by pharmacists in the digital health era:

- Technological Proficiency: Pharmacists should possess a solid foundation for utilising digital tools and technologies relevant to their practice. This includes proficiency in electronic health record (EHR) systems, medication management software, telepharmacy platforms, data analytics tools, and other digital health solutions. They should stay updated with advancements in technology and actively engage in learning about new digital platforms and applications.
- 2. Data Management and Analysis: With the increasing availability of health data, pharmacists need to have skills in data management, analysis, and interpretation. This involves understanding how to collect, organise, and analyse data from various sources to identify patterns, trends, and insights related to medication use, patient outcomes, and population health. Pharmacists should be comfortable working with health informatics and data analysis tools to extract meaningful information from large data sets.

- 3. **Information Security and Privacy:** Given the sensitive nature of health information, pharmacists must have a strong understanding of data security and privacy principles. They need to be well-versed in relevant regulations and other local privacy laws. Pharmacists should implement appropriate safeguards to protect patient data and ensure compliance with data protection guidelines.
- 4. **Digital Communication and Patient Engagement:** Effective communication is crucial in the digital health era. Pharmacists should be skilled in leveraging digital platforms and tools to communicate with patients, healthcare providers, and other stakeholders. They should be able to convey complex medical information in a clear and accessible manner through various channels, including teleconferencing, email, instant messaging, or patient portals. Strong interpersonal skills and the ability to engage patients in their healthcare journey are vital.
- 5. **Continuous Learning and Adaptability:** The field of digital health is rapidly evolving. Pharmacists need to embrace a mindset of continuous learning and be adaptable to new technologies, emerging trends, and changing healthcare landscapes. Staying informed about the latest advancements and industry standards through professional development activities, conferences, webinars, and relevant literature is essential to effectively contributing to digital health initiatives.
- 6. **Collaboration and Interprofessional Skills:** Digital health often involves interdisciplinary collaboration. Pharmacists should possess strong teamwork and interprofessional collaboration skills to work alongside healthcare providers, IT professionals, data analysts, and other stakeholders. Effective collaboration enables pharmacists to contribute their expertise, align goals, and deliver integrated patient-centred care.

By acquiring these skills, pharmacists can fully leverage digital health technologies, improve patient care, and contribute to the advancement of healthcare in the digital era. The digital health revolution presents an unprecedented opportunity for pharmacists to enhance patient care, improve medication management, and transform pharmacy practice. By embracing emerging technologies, pharmacists can position themselves as key players in the digital healthcare ecosystem. Armed with this knowledge, pharmacists can confidently navigate the digital health revolution and deliver better outcomes for their patients.

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