

The Role of Healthcare Informatics in Combating the COVID-19 Pandemic

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Abstract : This chapter examines how healthcare organizations harnessed innovative healthcare informatics to navigate the challenges posed by the COVID-19 pan-demic, addressing critical needs and improving care delivery. The pandemic's unprecedented demands necessitated the adoption of new and advanced tools to manage healthcare operations more effectively. Informatics solutions played a crucial role in facilitating the smooth functioning of healthcare systems during this crisis and are anticipated to remain central to future healthcare management. Technologies such as telemedicine helped healthcare professionals minimize ex-posure to COVID-19 patients, thereby reducing infection risks within healthcare facilities. This chapter explores a range of informatics applications utilized worldwide, including telemedicine, AI-driven solutions, big data analytics, drones, robots, and digital platforms for drug delivery, all of which enabled re-mote patient care and enhanced healthcare accessibility and safety during the pan-demic.

Keywords : healthcare informatics, COVID-19 Pandemic, telemedicine, AI-driven healthcare, big data analytics, remote patient care, digital health platforms

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