



Defense Health Agency (DHA) Clinical Communities Speaker Series

CCSS Aug 2021: Exploration of Innovations in Health Care

S03: Ethical-legal Issues Generated by the Increased Use of Biotechnology in Health Care

Resource List

Technology in health care can continue to move fast and break things, including breaking the trust between patients, family, and staff. The alternative is for health care organizations to start considering technology holistically, including assessing its ethical impact. [The Hastings Center, 2020](#) decided that the public has a choice. Their publication library is filled with bioethical research to support healthcare providers in making these difficult decisions. Return to the link to review the publication that discusses the need for technology ethics committees as well as other biomedical issues that are free for download.

Traditional public health methods for detecting infectious disease transmission, such as contact tracing and molecular epidemiology, are time-consuming and costly. The [Centers for Disease Control and Prevention, 2019](#) facilitated an interdisciplinary meeting of researchers, ethicists, data security specialists, information and communication technology experts, epidemiologists, microbiologists. This group of subject matter experts arrived at suggestions to mitigate the ethical concerns of movement mapping. By discussing information and communication technologies, such as global positioning systems, smartphones, and mobile phones, opportunities for novel approaches to identifying transmission hotspots were discovered. Please return to this report to review details from this interdisciplinary think tank on the commonalities between ethics, disease transmission and technology.

Surgical innovation has advanced outcomes in the field, while continuing to carry inherent risks for surgeons and patients alike. The rapid advancements in technology have impacted surgical procedure therefore, a strong discussion on bioethical issues needs to occur in order to meet and keep up with the demand. The [World Journal of Surgery, 2018](#) outlined mechanisms that exist to support surgeon-innovators through difficulties associated with the innovation process. The research captured in this article highlights several elements of our current state of bioethics as it has been impacted by COVID-19, making it a must read for health care providers and patients planning to undergo surgical procedures in the future.

How will a vaccine change the equation given the hesitancy expressed by many? How can risk categories be established that account for both personal and social vulnerabilities? What is the chance of a virus mutation that puts all of the investments in vaccine production at risk? The [National Academies, 2020](#) publication highlights a framework for equitable allocation of the COVID-19 vaccine.

The [World Health Organization, 2021](#) report identifies the ethical challenges and risks associated with the use of artificial intelligence (AI) within the health care industry. WHO has narrowed down six principles to ensure AI works to the public benefit of all countries. The information in this publication reviews a set of recommendations that can ensure the governance of artificial intelligence for health, maximize the promise of the technology and hold all stakeholders – in the public and private sector – accountable and responsive to the healthcare workers who will rely on these technologies and the communities and individuals whose health will be affected by its use.



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References

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