Hi Kingsley

A good read, thank you for sharing.

In addition, to adequately protect medical devices in a healthcare network, the surrounding I.T network infrastructure needs to be protected as well. These include wireless access points, network routers and switches as well as computers that has access to patient information. Very often these computers are left with legacy and unpatched operating systems, outdated anti-virus software and are easily accessible with the use of weak passwords (Williams & Woodward, 2015). Furthermore, I.T network devices are often connected to the same VLAN as medical devices since this network architecture is less complicated to implement. This brings about additional threats as well; if a single device in the network is hacked, others can be easily accessible and hacked as well. Network segmentation is highly important in network design and is one mitigation technique that limits and minimizes the attack surface (Williams & Woodward, 2015).

Computers and/or laptops that are used in a medical environment should have the latest anti-virus installed, operating systems should be patched up to date and local hard disk drives should be encrypted. Furthermore, USB ports should be disabled to prevent downloading of any sensitive information.

In relation to the above-mentioned points, according to Sametinger et al. (2015) I.T infrastructure used to connect medical devices must comply with the Health Insurance Portability and Accountability Act (HIPAA) which aims to protect medical records and personal information (HIPPA, 1996).

List of References

HIPPA (1996) *Health Insurance Portability and Accountability Act of 1996*. Available from: https://www.healthit.gov/sites/default/files/rules-regulation/health-insurance-portability.pdf [Accessed 20 November 2021]

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