

Initial Post – Medical Implant

I picked the Medical Implant case study, as I believe our society will see further large breakthroughs in technologies evolving around our health and well-being.

The medical implant case study describes a medical technology start-up that builds IoT health medical devices able to connect to a smartphone by utilising a short-range wireless connection.

During a security conference, a researcher found a vulnerability in the wireless connectivity, but in consultation with the medical company, the researcher concluded that the risk of attack is negligible.

The medical company claims that its operations embody several principles of the Code of Ethics. Specifically, it remains consistent with principles 1.1, 2.3, 2.5, 2.6, 2.9 and 3.7.

Below is a table comparing the Code of Ethics principles with the principles of the Code of Conduct:

Code of Ethics	Code of Conduct
1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.	1. Public Interest a. have due regard for public health, privacy, security and wellbeing of others and the environment. b. have due regard for the legitimate rights of Third Parties*
2.3 Know and respect existing rules pertaining to professional work.	2. Professional Competence and Integrity d. ensure that you have the knowledge and understanding of Legislation* and that you comply with such Legislation, in carrying out your professional responsibilities. 3. Duty to Relevant Authority a. carry out your professional responsibilities with due care and diligence in accordance with the Relevant Authority's requirements whilst exercising your

	<p>professional judgement at all times.</p> <p>b. seek to avoid any situation that may give rise to a conflict of interest between you and your Relevant Authority.</p> <p>c. accept professional responsibility for your work and for the work of colleagues who are defined in a given context as working under your supervision.</p> <p>d. NOT disclose or authorise to be disclosed, or use for personal gain or to benefit a third party, confidential information except with the permission of your Relevant Authority, or as required by Legislation.</p> <p>e. NOT misrepresent or withhold information on the performance of products, systems or services (unless lawfully bound by a duty of confidentiality not to disclose such information), or take advantage of the lack of relevant knowledge or inexperience of others.</p>
2.5 Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.	<p>2. Professional Competence and Integrity</p> <p>e. respect and value alternative viewpoints and, seek, accept, and offer honest criticisms of work.</p>
2.6 Perform work only in areas of competence.	<p>2. Professional Competence and Integrity</p> <p>a. only undertake to do work or provide a service that is within your professional competence.</p> <p>b. NOT claim any level of competence that you do not possess.</p>

2.9 Design and implement systems that are robustly and usably secure.	1. Public Interest a. have due regard for public health, privacy, security and wellbeing of others and the environment. 2. Professional Competence and Integrity b. NOT claim any level of competence that you do not possess.
3.7 Recognize and take special care of systems that become integrated into the infrastructure of society.	All subcategories of: 1. Public Interest 2. Professional Competence and Integrity 3. Duty to Relevant Authority

Legal and Social Issues:

Medical companies have a strong social impact on our society. That is because people trust their health in them. Additionally, medical companies are governed by further regulations, such as the GDPR for storing and keeping their EU customers' data secure, and HIPPA for the US customers. In both cases, medical data are considered as sensitive personal data and extra caution should be given when these companies process these data (this includes all steps such as data transmission, or stored in databases, etc.).

References:

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