

## **Ethics - Elderly Care by Robots**

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There have been new advancements in AI technology that have expanded the usage of robots in healthcare, including care for the elderly. In Japan, hospitals have begun considering adopting this technology in the interests of devising a more efficient operation. However, ethical questions arise when you consider that efficiency does not necessarily equal the best care for patients, and we therefore need to understand who has a stake in the adoption of these robots, and what the implications are for each of them.

The "ethically questionable" healthcare robots we will be discussing are for mainly functional purposes, like moving patients, helping them in the bathroom, etc. with a few therapeutic capabilities. The most obvious group with a stake would be the patients who will be interacting with the robots. The elderly often reject new technology, and they will not take kindly to having their human nurses being replaced by large metal structures that can't understand their emotions or adjust their methods when they're uncomfortable. Essentially, the patients will be opposed to the robots because they believe their quality of care will decline. The next group would be the families of the patients, whose stake is not clearly defined. On the one hand, they could believe the same way as the patients, and not want their loved ones having inferior care. On the other hand, if they don't care about that as much, then they could see this as a way to justify not visiting as often, because their loved one will be "kept company" by their robot. The hospital administrators adopting the new technology would also have a stake because this would likely save them money by replacing the work done by some human workers, and in the case of Japan, help with the

shortage of labor. Unfortunately, they have to deal with some liability concerns (i.e. what happens if the robot malfunctions within their hospital). Finally, the creators of the robot have a stake because they will be pushing the benefits and downplaying the risks of their robot as much as possible in order to sell as many units as they can to hospitals and maximize their profit.

It's important to discuss the situation using three moral tests: the utilitarian test, the justice test, and the virtue test. The utilitarian test asks if these robots will produce the best outcomes for everyone. They definitely have the potential to, if used properly. The robots will help keep an eye on the elderly who otherwise wouldn't be able to be monitored, thus protecting their safety. Although they may have to sacrifice some of their human interaction that they likely prefer, their own safety is the priority when deciding what is best for them. The relatives also get this peace of mind, the hospitals save money by using the robots, and the creators make money, so everybody wins and this robot would pass the utilitarian test. The justice test, however, creates a bit more of a debate. There is not a clearly fair distribution of benefits and burdens when it comes to all the groups with a stake. The hospitals benefit because they can save money by using the robots instead of human workers, and the creators benefit because they are getting the money that the hospitals previously would have used on paying human staff. However, the quality of care does not matter to hospital administrators as long as the money they bring in remains constant, which it should. This means that they're pushing the burdens from their choices onto the patients and their families, thus failing the justice test. The

virtue test is probably the most important one when discussing elder care using robots.

The impact that it has in the end is that it deprives elderly people from a portion of the already reduced amount of human contact that they're getting. The question organizations must ask themselves is if they are ok with potentially lowering the quality of life for their patients in the interests of money and efficiency for their business. This is the main roadblock for the adoption of these robots because it becomes clear that the interests of the business do not align with those of the patients, so it's hard to say that adopting these robots would represent the type of organization and people they want to be.

There are also some economic, social, and political constraints and implications to consider. Economically, the increased popularity of the robot caretakers will replace the jobs of many human healthcare workers. By taking their jobs, they are taking the money away from someone who potentially has a family to support, and puts it into the hands of a large corporation. Socially, the potential decreased quality of life in nursing homes due to the robots will cause people to be wary of leaving their loved ones in these homes. Politically, there is an interesting fact that there are no well-defined laws regarding neglect of the elderly, unlike neglect laws for children. Although there are currently legally no barriers to implementing the robots, their rise in popularity will likely lead to new legislation to be passed to appease the patients and their families.

Finally, there must be some sort of solution that could benefit all the stakeholders. One possibility would be to implement the robots into the healthcare system, but not make the change so drastic as to significantly affect the patients' emotional wellbeing. First, the

hospitals can see who is open to trying the new technology out, and start with them. Eventually, if some of the patients see that their friends are enjoying using them, then maybe they'll have an open mind to using them. By making the change gradual, it's possible that the patients will embrace the new robots and even possibly prefer them to human caregivers. At the same time, the families will be happy to hear their loved ones are enjoying themselves, and lowering the necessity of frequent visits and lessening their "burden". By slowly adding robots into the healthcare system, the hospitals will eventually save money and the corporation manufacturing the robots can get their profits as well.

**Links referenced to formulate arguments:**

Business Insider Article:

<http://www.businessinsider.com/japan-developing-carebots-for-elderly-care-2015-11>

Delft University of Technology:

<http://ii.tudelft.nl/~joostb/files/Broekens%20Heerink%20Rosendal%202009.pdf>

Journal: Ethics and Information Technology:

<https://link.springer.com/article/10.1007/s10676-010-9234-6>