

# ETHICS IN TECH PRACTICE:

## Case Study: The Autism Carebot

MARKKULA CENTER FOR APPLIED ETHICS

*at Santa Clara University*



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## The Autism Carebot: An Ethics Case Study

by Irina Raicu

The nature and prevalence of autism are currently hotly debated, as are its causes. [Wikipedia describes it](#) as “a developmental disorder characterized by troubles with social interaction and communication, and by restricted and repetitive behavior.” The most obvious signs of autism usually appear when children are 2-3 years old.

A [recently published report from the Centers for Disease Control and Prevention](#) finds that autism’s prevalence appears to have increased. It adds that children diagnosed early and provided with key services are “more likely to reach their fullest potential.” However, multiple studies have shown that children from minority families, children of parents with a lower degree of education, and residents of rural areas were less likely to receive such services.

Recent efforts to address that gap (and possibly reduce the cost of intensive services) have included [experiments with telemedicine](#). In addition, some [schools are now deploying a “doll-like robot”](#) which is “designed to help young students with autism learn new vocabulary, calming techniques, and other coping skills.” Students at those schools interact with the robot via a tablet.

However, not all schools can afford to purchase such a robot, or pay the ongoing related fees for updated lessons. And the students can only access the robot for a limited amount of time, during school days. Your company proposes to build a better, more affordable, more widely accessible autism carebot, aimed at preschool-age children, and intended for use in the children’s homes.

### Discussion questions:

1. Should this project be pursued? If not, why not? If so, how could it be done ethically? What unique ethical concerns does it raise?
2. Who are the stakeholders involved? Who should be consulted about the project’s goals and development?
3. What additional facts might be required? What practical steps might you need to take in order to access the information/perspectives needed to manage the ethical landscape of this project?
4. What are some of the ethical issues that any designers/developers of such a device would need to address?
5. How might this project be evaluated through the various ethical 'lenses' described in the “Conceptual Frameworks” document?
6. In this project, what moral values are potentially conflicting with each other? Is there any way for the disagreeing sides to reconcile or does success for one necessarily mean failure for the other?

7. As a project team, how might you go about sorting through these ethical issues and addressing them? Which of the ethical issues you have identified would you prioritize, and why?
8. Who would be the appropriate persons on a team to take those steps? At what level, and by what methods, should decisions be made about how to manage the ethical issues raised by this project?