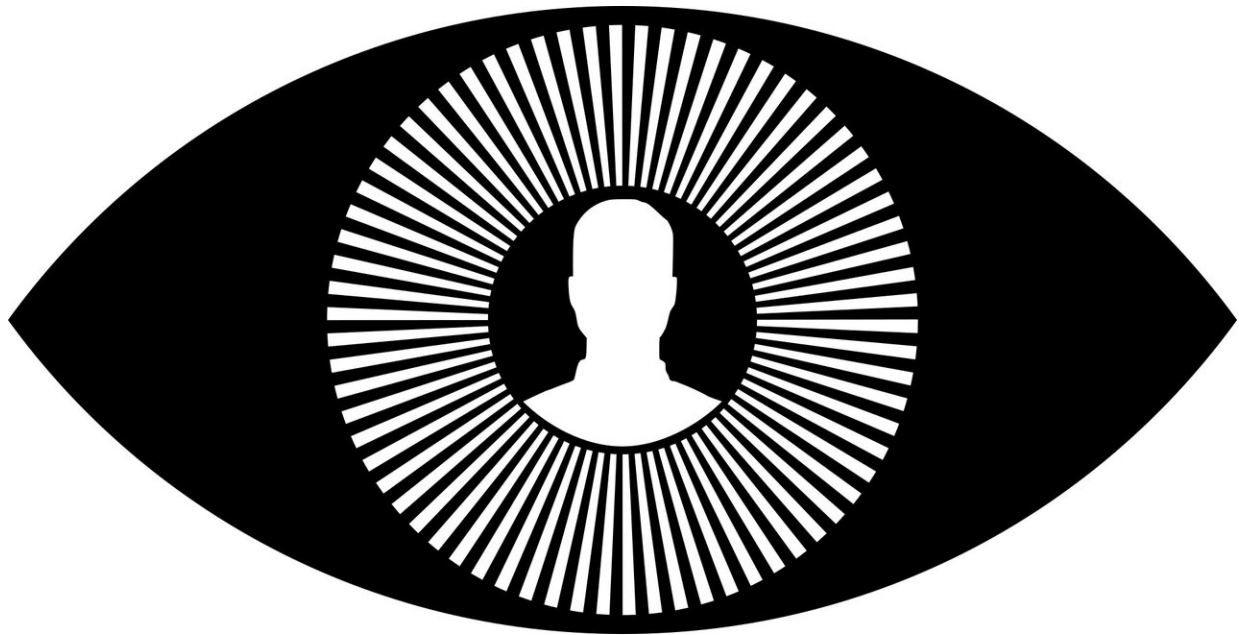# Many US adults worry about facial image data in healthcare settings

October 14 2021

Credit: CC0 Public Domain

Uses of facial images and facial recognition technologies—to unlock a phone or in airport security—are becoming increasingly common in everyday life. But how do people feel about using such data in healthcare and biomedical research?

Through surveying over 4,000 US adults, researchers found that a significant proportion of respondents considered the use of facial image

data in [healthcare](#) across eight varying scenarios as unacceptable (15-25 percent). Taken with those that responded as unsure of whether the uses were acceptable, roughly 30-50 percent of respondents indicated some degree of concern for uses of facial recognition technologies in healthcare scenarios. Whereas using facial image data in some cases—such as to avoid medical errors, for diagnosis and screening, or for security—was acceptable to the majority, more than half of respondents did not accept or were uncertain about healthcare providers using this data to monitor patients' emotions or symptoms, or for [health research](#).

In the biomedical research setting, most respondents were equally worried about the use of medical records, DNA data and facial image data in a study.

While respondents were a diverse group in terms of age, geographic region, gender, racial and ethnic background, educational attainment, household income, and political views, their perspectives on these issues did not differ by demographics. Findings were published in the journal *PLOS ONE.*

"Our results show that a large segment of the public perceives a potential privacy threat when it comes to using facial image data in healthcare," said lead author Sara Katsanis, who heads the Genetics and Justice Laboratory at Ann & Robert H. Lurie Children's Hospital of Chicago and is a Research Assistant Professor of Pediatrics at Northwestern University Feinberg School of Medicine. "To ensure [public trust](#), we need to consider greater protections for personal information in healthcare settings, whether it relates to medical records, DNA data, or facial images. As facial recognition technologies become more common, we need to be prepared to explain how patient and participant data will be kept confidential and secure."

Senior author Jennifer K. Wagner, Assistant Professor of Law, Policy and Engineering in Penn State's School of Engineering Design, Technology, and Professional Programs adds: "Our study offers an important opportunity for those pursuing possible use of facial analytics in healthcare settings and biomedical research to think about human-centeredness in a more meaningful way. The research that we are doing hopefully will help decisionmakers find ways to facilitate biomedical innovation in a thoughtful, responsible way that does not undermine public trust."

The research team, which includes co-authors with expertise in bioethics, law, genomics, facial analytics, and bioinformatics, hopes to conduct further research to understand the nuances where public trust is lacking.

More information: *PLOS ONE* (2021). journals.plos.org/plosone/arti
… journal.pone.0257923

Provided by Ann & Robert H. Lurie Children's Hospital of Chicago