



# Creating Mental Health Technologies and Application of Code of Ethics to Scale

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## Introduction

The main objective of the summer was to craft a **Code of Ethics** for the partner organization One Mind, a nonprofit organization dedicated to bettering the lives of those affected with mental health conditions and healing those who are impacted by brain injury and illness.<sup>1</sup> This organization funds initiatives, brings together great minds, and advocates for their mission. Beyond this, **One Mind has worked to set standards for workplace mental health through their One Mind at Work** program.<sup>2</sup> Their work also extends to the incubator space with their One Mind Accelerator program that brings together mental health companies in the pre-seed stage.<sup>3</sup> This code of ethics is meant to serve any organization in the mental health technology space. The code we established needed to **be comprehensive and scalable**.

## What are Mental Health Technologies?

Mental health technologies refers to a wide variety of services, products, and research focused mental health. These technologies vary from platforms to connect patients with providers to novel diagnostic approaches aimed at clinicians. The focus of these technologies is to better mental health through specific approaches dictated by individual companies or organizations.

## What is a Code of Ethics?

Firstly, the term “ethics” is defined by Merriam-Webster as: a set of moral principles: a theory or system of moral values. Morals and ethics are often used interchangeably but morals generally refers to individual ideas of right and wrong whereas ethics refers to the principles of a group or culture.

A code of ethics generally consists of a set of guiding ethical principles that a company or organization adheres to. These principles are shaped by the field in which they are being applied to.

The principles provided in codes of ethics are meant to be followed at all times, from changing business practices to rolling out new products. It is up to individual organizations whether they choose to have penalties for violating their codes or not.

The interest in mental health technologies has soared over the past decade and many ethical issues have come to light from various companies and organizations. With this interest, fast growth has often been prioritized at the expense of ethical, sustainable growth. A code of ethics helps align the conversation surrounding the priorities of companies and organizations. It provides information on core principles that should not be violated in favor of increased revenue or faster growth. It is an important tool in ensuring companies and organizations are maintain ethical practices.

## Our Overarching Principles

<b>Responsible Conduct with Patients and Research Participants:</b> Respecting patient autonomy, obtaining informed consent, and safeguarding data privacy, One Mind prioritizes responsible conduct in patient care and research participation.	<b>Professionalism and Integrity:</b> One Mind upholds professionalism and integrity in all operational aspects by emphasizing clear communication, provider qualifications, ethical market, and transparency.	<b>Data Privacy and Security:</b> To ensure data privacy, we limit collection of personally identifiable information and communication transparently about data protection measures, consent, and data sharing with third parties. We employ robust security measures, comply with data protection laws, and prioritize patient safety and protection.
<b>Research and Innovation:</b> Adhering to ethical research standards, we publish peer-reviewed results to substantiate claims, test and vet emerging technologies responsibly, and prioritize user perspectives in our innovations.	<b>Compliance and Accountability:</b> Adhering to ethical research standards, we publish peer-reviewed results to substantiate claims, test and vet emerging technologies responsibly, and prioritize user perspectives in our innovations.	<b>Continuous Improvement and Evaluation:</b> We conduct periodic reviews of our code of ethics, monitor ethical performance, learn from ethical dilemmas, and promote ethical awareness and education among our employees.

## Case Study: Use of AI Chatbots in Mental Health Technologies at NEDA

**Background:** The National Eating Disorder Association (NEDA) is the largest nonprofit organization that supports those with eating disorders and their families. They are focused on the prevention, cure, and access to care for those with eating disorders.

**Issue:** In May 2023, NEDA telephone helpline employees voted to unionize, promptly the firing of staff and volunteers at a later date. During this time, NEDA released their AI chatbot named Tessa. Tessa was involved in controversy due to its insensitive and triggering comments. Users who had told the chatbot they had an eating disorder were promptly given a plan for weight loss upon request. Plans were detailed and involved instructions to restrict calories, weigh oneself weekly, and purchase a caliper to determine their body composition.

**Resolution:** NEDA took Tessa out of service two days before the telephone line employees were set to be fired.

**What principles in our code of ethics was violated:** This issue most clearly violates the principle of Responsible Innovation of Emerging Technologies due to the lack of oversight that led to the release of this technology. While any new technology may have issues, it is unacceptable to have a technology that has the potential to actively harm users. In this case, Tessa was released before it reached a point where it could adequately replace the services provided by the telephone helpline staff and volunteers. While this effort may have been seen as a solution to cut costs or expand the number of individuals who could access the line, it had the potential to severely impact those who suffered from eating disorders.

## Methods and Methodology

### Making a Code of Ethics

The making of the code of ethics for One Mind consisted of a multi-step process intended to get a better understanding of the field. First, intense research into existing codes of ethics and the purpose these codes serve for their respective organizations was necessary. Along with this, a thorough investigation of the field of mental health technologies was undertaken. The field of mental health technologies is vast and spans from simple Virtual Reality (VR) treatments. Comprehensive understanding of the field was necessary in order to ensure the creation of an effective code of ethics.

**The code of ethics needed to be scalable and flexible.** The final deliverables were crafted to meet the needs of the partner organization and ensure audience engagement. Numerous rounds of feedback and editing were undertaken to achieve the final result. Case studies centered on ethical issues companies and organizations in the mental health space have faced provided valuable insight on key ethical principles.

## Our Insights

The mental health tech space is still a novel field with minimum legislation or ethical oversight. We also realized that despite our best efforts, all ethical dilemmas are not preventable, especially those involving data privacy.

There are also considerable instances in the past few years that we can learn from. These companies, often did not have a code of ethics to follow. Learning from their mistakes allows us to cover a wide range of issues.

Lastly, AI and other new technologies will play a pivotal role in future ethical discussions. We have already seen companies misuse AI unethically, and legislation should be continually updated to reflect the same

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