



ETHICAL AI INITIATIVE

A YEAR IN ACTION

2022

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SUMMARY

As artificial intelligence technologies become pervasive in healthcare settings, providers and developers need language, tools, and organizational support to address ethical problems they produce. Effective education resources, best practices, and industry standards require action from diverse and interdisciplinary stakeholders.

The Ethical AI Initiative employs a novel approach devised by leaders in the KC region providing practical interventions focused on ethical problems that arise at various stages throughout AI's lifecycle within healthcare. These issues, caused primarily by inequitable power dynamics in healthcare and healthcare IT, need a community-based participatory model as a foundational design principle. This method of approach puts community members in leadership and decision-making positions as a core feature.

To date, Initiative stakeholders have tasked themselves with building a framework for success that requires an educational curriculum, diverse partnerships, best practices standards, and validation of tools to address inequities, biases, and potential harms, particularly to marginalized communities.

INTRODUCTION

MISSION

By embracing the mission of the Ethical AI Initiative to identify and address ethical problems in the development and use of artificial intelligence systems in healthcare, we seek to achieve three aims: 1) identify and articulate specific ethical problems and risks associated with the use of AI in healthcare; 2) leverage industry know-how, academic expertise, and community-based local knowledge to design, pilot, and disseminate interventions that address these ethical problems and risks; and 3) develop a sustainable model for ongoing development and support of interventions.




















COMMUNITY BASED APPROACH

The Ethical AI Initiative employs a novel approach in addressing ethical issues related to AI in healthcare by drawing on community-based participatory methodologies. Community-based approaches have long been used in the implementation of public health promotion and services, including programs centered on creating new products, tools and services intended to improve health outcomes. By incorporating community-based feedback and evaluation into the development of practical ethical guidelines in health IT, the project works to reduce potential harms caused by systemic biases negatively impacting marginalized members of the community.

COUNCIL AND COLLABORATORS

With first year funding from the Sunderland Foundation awarded in late 2020, the initiative is now poised to implement educational programming and test recommendations identified by collaborators. The Initiative has formal support from BioNexus KC, Children's Mercy Research Institute, KC Digital Drive and The University of Kansas Health System. The Ethical AI Advisory Council (established May 2021) also has representation from numerous institutions across the KC region and nationally.

Ethical AI Advisory Council

 Anurag Patel Abada Health	 Sierra Davis Data Scientist, Children's Mercy	
 Mark Hoffman Chief Research Information Officer, Children's Mercy	 Dennis Ridenour CEO-President, BioNexus KC	 Gerald Wyckoff Professor & Chair, UMKC School of Pharmacy
 Casey Overby Taylor Assistant Professor, Johns Hopkins University	 Julie DeJean CEO, The Whole Person	 Aaron Deacon Managing Director, KC Digital Drive
 Dick Flanigan Senior VP, Cerner Corporation	 Tapan Bhatt CEO-Founder, TeraCrunch	 Tony Jenkins Healthcare IT Business Partner, UKHS
 Md Mobashir Hasan Shandhi Assistant Professor, Duke University	 Aleksander Eskilson Director of Engineering, Softex Illuminate	 Saroj Gupta CEO-Founder, Asuun Blockchain
 James (J.D.) Martindale Director of Data Science, Anthem	 Alexs Thompson Director of Data Strategy, O'Reilly Auto Parts	 Sara Hart Weir CEO, RareKC
 Ann Ogborn EHR Instructional Designer Training Env. Coordinator, UKHS	 Lindsey Adams Public Policy & Government Affairs, Cerner Corporation	

Ethical AI Advisory Council Members 2021 *as of November 2021



GOALS FOR 2022



MAIN PRIORITIES

- Develop and Implement Pilot (Educational Content & Process Improvement) with The University of Kansas Health System
- Recruit members for Community Action Workgroups (CAWGs)



ADDED PRIORITIES

- Create a “guide” for those buying healthcare IT tools such as AI
- Create a sustainable model for development, engagement, and communication of Ethical AI Initiative with communities



COMMUNITY OPPORTUNITIES

- Student/Intern Support
- Membership on CAWGs
- Development Partners

PILOT PROGRAM

Develop and implement a pilot program with The University of Kansas Health System across two phases of implementation.

In *Phase 1*, we will develop and disseminate initiative educational resources for healthcare IT practitioners, executives, and healthcare providers. In *Phase 2*, we will develop and disseminate process improvements and recommendations for healthcare IT practitioners and providers.

COMMUNITY ENGAGEMENT

Formation of Community Action Work Groups (CAWGs) to engage members of diverse populations and advocates from marginalized communities within the Kansas City region. Efforts will target those who:

1. **Personally** utilize the healthcare system regularly or frequently in traditional ways due to health conditions or non-traditionally (e.g., using emergency care in lieu of primary care services) due to a host of social and health concerns. Emphasis on persons who identify and represent diverse backgrounds and/or underrepresented and marginalized communities who will work directly with the Ethical AI Advisory Council and Project Team.
2. Serve in **advocacy roles** with persons from underserved populations ensuring a more inclusive accounting from segments of society and those outside traditional health systems in the Kansas City metro region.

The CAWGs will provide presentations to the Ethical AI Advisory Council and partner with the Council on community presentations about the initiative, consulting on deliverables from the Ethical AI Advisory Council and Project Team.

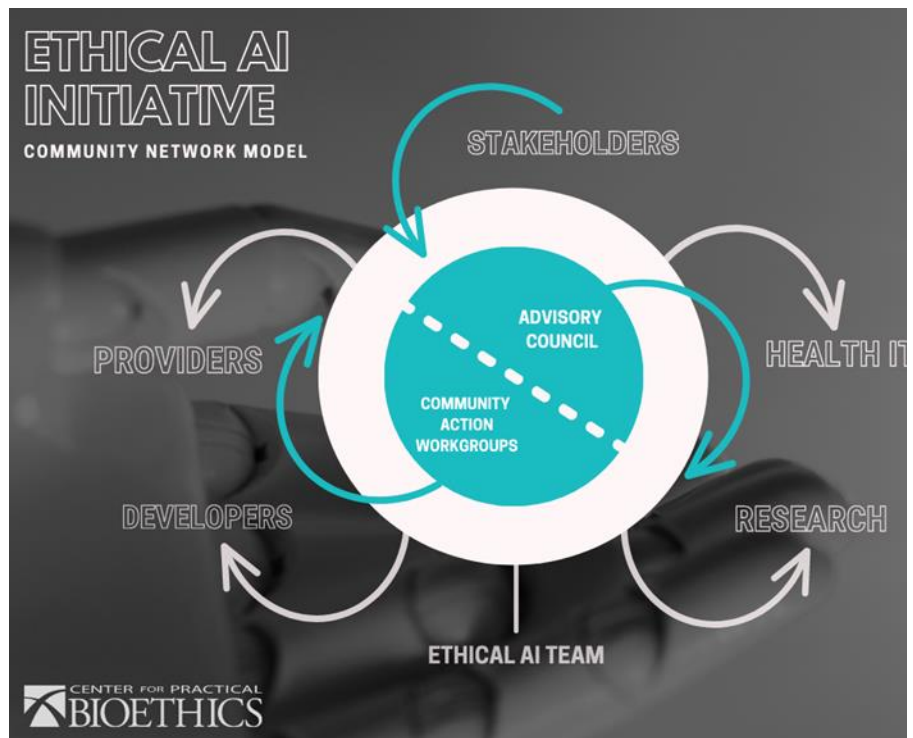
PROCESS IMPROVEMENT

As a part of this work, we will develop practical guidelines upholding established ethical principles and create a community action plan for engagement of advocates of marginalized communities. Process improvements and recommendations by the Ethical AI Initiative will serve as interventions for the purposes of identifying ethical issues and recognizing risks, benefits, and potential harms. As the Initiative expands, our long-term goal of developing consultation and certification services for healthcare IT practitioners and healthcare providers will be realized by supporting the maintenance of ethically informed best practices that predict, prevent, and ultimately reduce harms to impacted populations.

WHAT'S NEXT

Communities can work together to ensure that AI positively impacts healthcare.

The Ethical AI Initiative will comprise of a network of individuals with a shared goal of promoting ethical use of Artificial Intelligence (AI) in healthcare. Using a community-based, participatory model, the Ethical AI team supports and provides resources for members of the Advisory Council and the Community Action Workgroups. These groups form the core of our community network model and contain stakeholders working at the cross-section of AI and healthcare, all of whom span various disciplinary, institutional, and societal backgrounds. Using resources and support provided by the Ethical AI team, these groups offer crucial insights for the deployment and sustainability of Ethical AI practices in healthcare (as captured by the blue arrows). The Ethical AI team will then incorporate this information to promote concrete strategies for effecting change in healthcare AI development. The goal is for these concrete changes (represented in the white arrows) to impact the members of the council and the communities that they represent, as well as provide an environment for addressing new issues as they emerge.



Overall, the success of the initiative depends on interrelationships between and among key stakeholders focused on equitable treatment and care for vulnerable persons in the deployment of AI in healthcare. The interventions being developed in the initiative play a critical role in a larger *theory of change* aimed at broad adoption of ethical best practice for AI in healthcare.