



THE HUMAN SIDE OF AI: PATIENT EXPERIENCE & DONATION RATE



AMY WATERMAN, PHD
Division Chief for Patient Engagement
and Diversity
Houston Methodist, TX

Amy Waterman, PhD, Division Chief for Patient Engagement and Diversity at Houston Methodist Hospital, introduced a human-technology co-care model that integrates artificial intelligence (AI) and machine learning (ML) into patient care. Her presentation highlights how AI can be used to strengthen human connection while helping to improve patient access, engagement, and outcomes in transplantation.

A patient care model was introduced that integrates the strengths of human-delivered medical care with Artificial Intelligence and Machine Learning (AI/ML) technologies. Early test cases demonstrated how this approach can enhance the patient experience and lead to better health outcomes. AI is the ability of a computer to recognize patterns, perform tasks, and solve problems that would normally require human intelligence. However, one consequential threat could be a transition toward “robotic” healthcare, which could lead to an uncaring and harmful dynamic for patients. Though there will be tremendous breakthroughs in diagnosis, treatment, and management, and in patient engagement and support, US Policy strongly demands that the development of AI must proceed ethically.

CHALLENGES

- The need for scalable, personalized support tools that preserve compassion in care
- “Robotic” healthcare, which can lead to uncaring and harmful dynamics for patients
- Wrong assumptions are being made, and the human touch is missing
- Misinformation and financial concerns that deter potential living donors
- High attrition rates among patients in transplant evaluation

INNOVATIONS INTRODUCED

- **Human-Technology Co-Care Framework:** A care model was created where AI tools assist with diagnostics, engagement, and decision-making. In the meantime, clinicians focus on empathy and individualized support.
- **Data Scraping Methodology to Understand Public Sentiment:** Over 200,000 public comments were analyzed across platforms like Reddit, Twitter, and YouTube. By filtering threads for quotes, findings revealed that most comments focused on practical concerns, such as financial questions, time off work and out-of-pocket costs.
- **AI-Driven Donor Profiling:** 3 donor personas were developed by analyzing online behavior:
 - **Caretakers:** Motivated after being emotionally moved to help someone in need
 - **Purpose Seekers:** Motivated to act to express their sense of purpose
 - **Pragmatists:** Motivated to act from a life of abundance to give something back after personal impact
 - These profiles helped to build a national digital campaign, “How far would you go to save a life?” which reached over 121,000 people and prompted 1,400 individuals to begin the donor evaluation process.
- **Predictive Modeling to Support High-Risk Patients for Tailored Care:** At Houston Methodist, only 40% of patients completed transplant evaluation within 12 months. AI models now identify high-risk individuals early in the process, allowing for tailored interventions and the development of patient-informed support programs. Additionally, programs are being developed to listen to patients at higher risk for dropout.
- **Empathetic AI Chatbots:** A transplant AI mentor, capable of responding to emotionally complex questions about donation, was developed. Content is drawn only from trusted sources, such as the National Kidney Foundation, with ethical guidelines in place to ensure accuracy and respect.

CONCLUSION AND NEXT STEPS

AI can accelerate understanding of patient fears, motivations, and needs, but only when grounded in compassionate, interdisciplinary collaboration to preserve the human touch. As the field moves forward, technology enhances, rather than replaces, human connection, and human cross-disciplinary partnerships will be essential to ensuring that AI innovations support fair, person-centered transplant care.

**Content presented on May 8, 2025 as part of The Alliance National Innovation Forum on Harnessing AI*

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