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Forum 4 Companion Glossary

A reference guide to terms used in The Latino Cancer Institute's Friday Forum Series on AI and Health Tech in Latino Lives

To view presenter biographies, download slide presentations and supporting materials, or watch the online video, visit [Latino Cancer Research & Care: 2024 Friday Forum Series](#).

See also [Forum 4 Resources & Supporting Materials](#).

Organizational Abbreviations

NHIT (National Health IT Collaborative for the Underserved) Definition: Organization working at the intersection of healthcare and innovation through health information technology **Used by:** Luis Belen **Context:** Discussion of telehealth equity and digital inclusion initiatives.

<https://www.nhit.org/>

PRST (Puerto Rico Science, Technology & Research Trust) Definition: Organization fostering innovation and economic development in Puerto Rico **Used by:** Luis Belen **Context:** Partnership for data integration and sharing.

<https://prsciencetrust.org/>

TLCI (The Latino Cancer Institute) Definition: Organization convening forums, among other aims, to exchange dialogue and raise awareness about Latino cancer research, diagnosis and care **Used by:** Multiple speakers **Context:** Host organization for the forum series.

<https://latinocancerinstitute.org/>

WHO (World Health Organization) Definition: United Nations agency responsible for international public health **Used by:** Multiple speakers **Context:** Referenced for air quality standards and health guidelines.

<https://www.who.int/>

AI-Related Terms

Artificial Intelligence (AI) Definition: Technology that enables computers to perform tasks that would normally require human intelligence. AI systems can analyze large amounts of data, recognize patterns, make decisions, and learn from experience. In healthcare, AI helps doctors analyze patient records, predict health risks, diagnose conditions, and create personalized treatment plans. **Used by:** Multiple speakers **Context:** Discussing healthcare applications and their potential impact on Latino communities, with a focus on addressing health disparities and improving access to care.

AI Algorithms Definition: Step-by-step procedures that AI systems follow to solve problems or make decisions **Used by:** Multiple speakers **Context:** Discussion of potential biases and the need for Latino representation in algorithm development.

Deep Learning Definition: A type of machine learning that works by processing information in layers, similar to how our brains handle complex information. It helps computers automatically spot patterns in large amounts of data, like medical images, genetic details, and patient records. This makes deep learning very powerful in healthcare, helping doctors provide more personalized care by analyzing medical information more accurately. **Used by:** Dr. Velasquez Villarreal **Context:** Development of AI models at City of Hope to analyze healthcare-related text data and enhance precision medicine for Latino communities.

Local AI Models for Latino Health Definition: AI systems specifically developed and trained using Latino health data that operate within local institutional computing environments rather than cloud services, designed to reduce bias and improve healthcare accuracy for Latino populations. Unlike cloud-based AI systems, these models maintain data privacy by keeping sensitive health information within institutional boundaries while still generating insights for precision medicine. **Used by:** Dr. Enrique Velazquez Villarreal **Context:** Development of AI models trained on Latino colorectal cancer data at City of Hope Comprehensive Cancer Center to reduce healthcare disparities and protect patient privacy.

Machine Learning Definition: A subset of artificial intelligence where computer systems learn and improve from experience without being explicitly programmed. Instead of following strict pre-defined rules, these systems analyze large amounts of data to identify patterns and make predictions or decisions. **Used by:** Multiple speakers **Context:** Applications in healthcare prediction and diagnosis.

Natural Language Processing (NLP) Definition: AI technology that enables computers to understand, interpret, and respond to human language. NLP allows machines to work with text and speech, making it possible for them to perform tasks like translating languages, answering questions, or analyzing healthcare-related text data. **Used by:** Dr. Velasquez Villarreal **Context:** Development of AI models that can process healthcare-related text data.

Health Technology and Science Terms

Air Quality Index (AQI) Definition: A numerical scale used to communicate how polluted the air is, measuring key air pollutants including particulate matter, nitrogen dioxide, and sulfur dioxide **Used by:** Julio Garcia **Context:** Discussion showed South San Francisco exceeded WHO's recommended AQI threshold of 57 for 23 days in 2023, far beyond the WHO guideline of 3-4 days per year.

Clinical Trials Definition: Research studies that test how well new medical treatments work in people. The forum emphasized the importance of including Latino participants in these trials to ensure that new treatments are effective for Latino populations and that AI models are trained on diverse data. **Used by:** Multiple speakers **Context:** Discussion of improving Latino representation in medical research and ensuring AI healthcare tools are developed using diverse data.

Genomic Data Definition: Information encoded in an organism's complete set of DNA, including statistical and biological information **Used by:** Dr. Velasquez Villarreal **Context:** Discussion of integrating Latino genomic data into AI models for more accurate healthcare insights.

Particulate Matter (PM) Definition: Mixture of solid particles and liquid droplets in the air, including dust, dirt, soot, and smoke; smaller particles (PM2.5) are particularly dangerous as they can enter the bloodstream **Used by:** Julio Garcia **Context:** Discussion of highway and airport-related pollutants affecting South San Francisco communities.

Precision Medicine Definition: A healthcare approach that takes into account individual differences in people's genes, environments, and lifestyles when designing treatment plans. In the context of Latino health, this means considering genetic variations, cultural factors, and social determinants specific to Latino populations to provide more effective, personalized care. **Used by:** Dr. Velasquez Villarreal **Context:** Discussion of using AI to develop more accurate diagnoses and treatments tailored to Latino communities.

Telehealth Definition: The delivery of healthcare services through digital communications technologies **Used by:** Luis Belen **Context:** Discussion of access barriers and opportunities in Latino communities.

Community and Social Terms

Community-Owned Data Definition: Data collected, controlled, and interpreted by community members rather than outside researchers **Used by:** Julio Garcia **Context:** Description of air monitoring project where community controls their environmental data.

Cultural Sensitivity Definition: The awareness, respect, and adaptation to cultural sensitivity in healthcare delivery **Used by:** Luis Belen **Context:** Highlighted as a crucial consideration in AI healthcare applications.

Data Brokers Definition: Companies that collect, buy, and sell people's personal information, including health data. These organizations gather data from various sources and often sell it without individuals' direct knowledge or consent. **Used by:** Andrea Downing **Context:** Discussion of privacy concerns and the need to protect patient health data from being collected and sold without consent.

Data Privacy Definition: The protection and proper handling of personal health information **Used by:** Andrea Downing **Context:** Discussion of patient rights and concerns about health data sharing.

Digital Divide Definition: The gap between demographics and regions that have access to modern information and communications technology and those that don't **Used by:** Luis Belen **Context:** Discussion of broadband access disparities affecting telehealth adoption.

Frontline Communities Definition: Populations most directly affected by environmental hazards and climate change **Used by:** Julio Garcia **Context:** Demonstration model of air quality monitoring and environmental justice activated by community.

Health Literacy Definition: The ability to find, understand, and use health information and services. This includes understanding medical terms, treatment options, and healthcare instructions. AI tools like

chatbots can help bridge health literacy gaps by providing information in accessible, culturally appropriate ways. **Used by:** Multiple speakers **Context:** Discussion of using AI and digital tools to improve healthcare access and understanding in Latino communities.

Latino Subpopulations Definition: Distinct groups within the Latino population, comprising 14 major subgroups **Used by:** Multiple speakers **Context:** Need for disaggregated health data analysis.

Patient-Led Governance Definition: The active participation and leadership of patients in decisions about how health data and technology are used **Used by:** Andrea Downing **Context:** Part of Patient AI Rights Initiative principles.

Social Determinants of Health (SDOH) Definition: Conditions in which people live, learn, work, and play that affect health outcomes **Used by:** Multiple speakers **Context:** Integration into AI models and health analysis.

Programs and Initiatives

Data Fusion Center Definition: NHIT initiative that combines multiple data sources to analyze social determinants of health **Used by:** Luis Belen **Context:** Using big data to address health disparities.

Patient AI Rights Initiative Definition: Program defining AI standards to include patient interests in health technology **Used by:** Andrea Downing **Context:** Discussion of patient data rights and privacy.

WHO Air Quality Guidelines Definition: Global standards that specify safe levels of key air pollutants to protect public health **Used by:** Julio Garcia **Context:** Used as benchmark to demonstrate that Latino communities near highways and the airport face excessive air pollution exposure.

Note: This glossary reflects terminology used in the October 11, 2024, Forum presentation on AI and Health Tech in Latino Lives.