

Health IT & Biomedical Informatics

Learning Health Networks: Integrated Technologies for a Learning Healthcare System

Brief Description of Technology

A suite of technologies designed to realize the vision of a Learning Healthcare System, complemented by an innovative agent-based model.

TECHNOLOGY ID

2018-0801

COMPLEMENTARY TECHNOLOGY

An Actor-Oriented Architecture
Assessment Tool (2023-0306)

BUSINESS OPPORTUNITY

Exclusive License or Sponsored
Research

TECHNOLOGY TYPE

Digital Health

PATENT INFORMATION

PCT Filed

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Technology Overview

A suite of technologies under the umbrella of Learning Health Networks (LHNs), aimed at transforming the healthcare system into a dynamic learning environment. Over the past 25 years, CCHMC has pioneered a network organizational model that aligns healthcare participants around the common goal of improving health outcomes. This system is built on transparency, collaborative learning, and a flexible framework that encourages team collaboration through standardized processes, including privacy protection and regulatory compliance. The Agent-Based Model (ABM) complements the LHN framework by simulating network dynamics, offering actionable insights for network optimization, and enhancing decision-making processes. This integration of technology and organizational model represents a groundbreaking step towards actualizing a Learning Healthcare System.

Applications

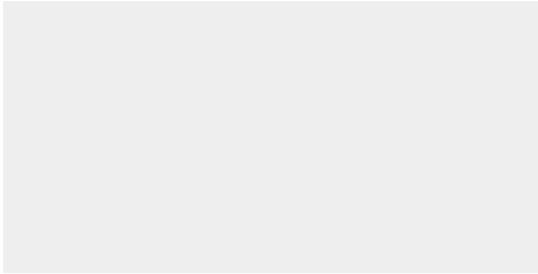
The LHN suite, inclusive of the ABM, is pivotal for healthcare institutions, researchers, and clinicians seeking to engage in evidence-based care and drive discovery from clinical encounters. Its applications range from improving patient care to facilitating research and providing a shared platform for resource distribution and collaborative problem-solving.

Advantages

- Promotes transparency and collaborative learning in healthcare delivery.
 - Includes a pioneering ABM for optimizing network functionality and outcomes.
 - Enhances the capacity for evidence-based decision-making and quality improvement.
 - Aligns with the vision of the National Academy of Sciences for a Learning Healthcare System.

Market Overview

The demand for integrated healthcare solutions that promote



collaborative learning and patient-centered care is increasing. The LHN suite addresses this need, presenting a significant market opportunity in healthcare systems, academic institutions, and technology companies focusing on healthcare innovation.

Investigator Overview

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