Noninvasive Detection of Genetic Syndromes
Clinical AI

Children's National

Business Need & Use Case Overview

Annually, 1 million children are born with a genetic syndrome(s). Delay or error in diagnosis causes these children suffering, irreversible injury and even death, resulting in up to 53% of hospital admissions and 20% to 30% of childhood deaths.

A non-invasive technology that leverages computer vision to assess the structure of the face for specific feature attributes associated with these genetic disorders.

Ethical/Regulatory Considerations

Not disclosed

Archetype

Maker

AI Technique(s) Used

Computer Vision

Core System(s) Used

Not Disclosed

Digital Solution(s) Used

mGene

Implementation Stage

In Development

Assessments

Risk	Complexity	Financial Impact
3/5	3/5	$$$

Challenges/Lessons Learned

Not disclosed

Initial Outcomes

- Smartphone application that allows clinicians to screen newborns and young children without the need for blood tests and specialized genetic expertise
- The accuracy of the system to detect a wide range of genetic syndromes achieving 95% accuracy

Source: https://research.childrensnational.org/labs/precision-medical/research/early-detection-genetic-syndromes