# Flinders University launches project for AI-powered Public Health Platform to Combat Future Healthcare Challenges

July 1, 2024



**Researchers at Flinders University are pioneering a new era in public health with the development of SMART-PH, the first AI-driven platform designed to tackle complex healthcare issues in Australia.**

This critical initiative, funded by a $2.9 million grant from the Medical Research Future Fund (MRFF), comes in response to the growing strain on healthcare systems due to factors like chronic diseases, natural disasters, and unequal access to health services.

"The COVID-19 pandemic demonstrated the power of innovative AI to drive real-time public health data, improving the speed and reach of public health interventions to diverse populations in Australia, allowing agile responses by industry and the healthcare sector to 'stop the spread'.

"We want to employ the same principles to construct a cohesive public health framework that unites relevant authorities, healthcare institutions, and laboratories to be more efficient, more agile and more effective.

"SMART-PH will function as a common digital infrastructure to eliminate data siloes and improve healthcare decision making by enabling real-time collaboration and communication of information.

"With diligent planning and meticulous implementation, SMART-PH could improve the quality, efficiency, equity, accessibility, and resilience of our health system," she adds.

**SMART-PH: A Collaborative Approach**

SMART-PH (DigitiSing InforMAtion for PRacTice in Public Health) aims to revolutionize public health by:

- **Unifying Data:** Breaking down data silos by creating a central "Public Health Data Lake" that integrates with existing healthcare infrastructure like SA Health's Digital Analytics Platform.
- **AI-powered Solutions:** Utilizing advanced AI techniques to develop tools for improved forecasting, surveillance, and outbreak detection. This will allow proactive planning for future pandemics and other health threats.
- **Enhanced Collaboration:** Fostering real-time communication and information sharing between public health authorities, healthcare institutions, and laboratories.

**Building a More Resilient Healthcare System**

By providing a comprehensive data-driven approach, SMART-PH has the potential to significantly improve Australia's healthcare system. Potential benefits include:

- **Improved Decision-Making:** Empowering public health officials with real-time data for better strategic planning and resource allocation.
- **Enhanced Surveillance:** Enabling faster detection and response to emerging health threats.
- **Increased Equity:** Promoting equitable access to healthcare services for all Australians.
- **Building Resilience:** Strengthening the healthcare system's ability to adapt to future challenges.

The project is currently in its initial phase, with development and implementation planned to begin in July 2024. Evaluation with key South Australian partners will follow during 2027-2029.

This groundbreaking initiative by Flinders University represents a significant leap forward in public health preparedness. By leveraging AI and fostering collaboration, SMART-PH paves the way for a more efficient, equitable, and resilient healthcare system for all Australians.