

# Chapter 8

## WHO–Compatible EHR Systems to Align With Health Sustainable Prevention Measures, UN Sustainable Development Goals, and the WHO Pandemic Agreement

### ABSTRACT

*This chapter synthesizes the technical and policy requirements for developing EHR systems that align with WHO standards, the Sustainable Development Goals (SDGs), and the WHO Pandemic Agreement. It outlines interoperability benchmarks, equity safeguards, and governance mechanisms necessary for LMICs to participate meaningfully in global health data ecosystems. The chapter concludes with a roadmap for integrating digital health infrastructure into pandemic prevention strategies, emphasizing the need for inclusive design and sustained investment.*

### INTRODUCTION

There is an erroneous, and often accepted belief that the needs of the nation state always supersede the needs of the global community, or global challenges, are without question more important than the needs of a sovereign nation (Waldman & Javidan, 2020). Although in some instances both ideologies are appropriate, disease

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surveillance and pandemic preparedness, however, demand a global approach. Ebola, COVID-19, Marburg, and Nipah, are deadly viruses and make no distinctions between demographics, nationalities, religions, political leanings, or sexual orientations. The false dichotomy between globalism and nationalism has hindered progress in global health also stated that global pandemic preparedness requires a multinational approach to combating disease, and that multinational EHR interoperability increases accessibility to urgent data for disease surveillance. The shortfalls in the 2005 IHR iteration reveal gaps in equality and data-sharing between national and global health systems, which contributed to a global pandemic and the deaths of millions. Fortunately, the World Health Assembly (WHA), in partnership with nation states, now share the vision and objective of a global approach to pandemic preparedness.

On April 16, 2025, during the 78<sup>th</sup> World Health Assembly, the Intergovernmental Negotiating Body (INB) approved a draft for a proposal for a global approach to pandemic prevention, preparedness, and response (UN, 2025). The WHO Pandemic Agreement lists three chapters and 35 articles that support a global approach to pandemic preparedness. *Chapter II, Articles 4-18, The World together equitably: Achieving equity in, for and through pandemic prevention, preparedness, and response*, available at <https://www.who.int/news/item/20-05-2025-world-health-assembly-adopts-historic-pandemic-agreement-to-make-the-world-more-equitable-and-safer-from-future-pandemics> highlight critical tenets of the agreement that has an immediate impact on frontline healthcare professionals battling disease. Fortunately, many of the articles listed in the agreement align with UN Sustainable Development Goals (SDGs), and Sustainable Prevention and Intervention Measures commonly practiced in global and public health, and the WHA is already positioned to implement the agreement with a WHO-Compatible data-sharing system EHR system.

## **SDGS / PREVENTION MEASURES / WHO PANDEMIC AGREEMENT ARTICLES**

1. **SDG 1 (No Poverty) - Primary Prevention Measure – WHO Pandemic Agreement, Article 4 Pg10.** Pandemic preparedness must include increased surveillance and access to global health metadata sets from remote LMICs (Carter, 2024). Impoverished nations have a greater susceptibility to disease due to poor sanitation, unclean drinking water, unsafe food, and others socio-economic causation to disease (Worsley-Tonks et al., 2022). Poverty is a leading indicator to disease outbreaks, and poor recovery once infected due to poor infrastructure, accessibility to care, and exposures.
2. **SDG 2 (Zero Hunger) - Primary Prevention Measure – WHO Pandemic Agreement Article 4 Pg 10.** One in nine people do not have enough food; es-

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