Interoperability

Understanding National Digital Health Mission – Challenges, Opportunities and Solution

Key Benefits Interoperability

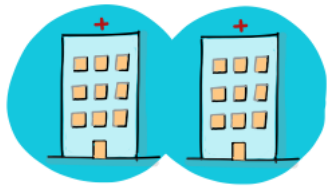
Patients

Care continuity, elimination of redundant testing, improved outcomes

Clinicians

Faster and more accurate diagnosis, decision support tools

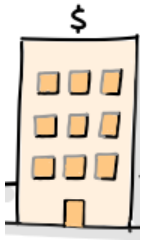
Hospitals



Administrative efficiency, eliminate paper & delays, disease registries , Clinical trials and research

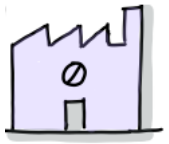
Key Benefits Interoperability

Insurance



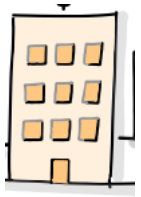
Faster settlement, improved efficiency , fraud detection

State



Public health policy and strategic planning

Vendors



Exchange and repurpose health data for innovative services

Three Laws of Interoperability

1. Interoperability: It's all about the people

2. You can hide the complexity, or make it worse, but you can't make it go away

3. Cheap, flexible, and interoperable: when developing healthcare software, you can have two of these

Grahame's Grieves laws

Interoperability : All about the people

- Technical communication is easy
- To make it useful, people have to agree on what they are communicating
- You need the right kind of people

Three legs of Interoperability process

Platform Standard

Adapting to a Community of Use

Driving into production

Barriers of Interoperability

- Technical barriers.
- Financial barriers.
- Trust barriers.
- Administrative requirements.
- IT usability.

https://www.beckershospitalreview.com/ehrs/6-barriers-to-healthcare-interoperability-according-to-onc.html

Key challenges that need to be addressed

- How to identify the patient uniquely and unambiguously? Health ID
- How to identify the provider uniquely and unambiguously? Digi Doctor Facility Registries
- How to leverage standards and combine in a summary view? FHIR,SNOMED,LOINC etc
- How to create a unified longitudinal patient record? PHR
- How to ensure security, privacy and allow for rigorous consent management? Consent Managers
- How to leverage existing clinical data without copying them centrally? FHR
- How to scale to cope with regional and longitudinal volumes?
- How to reuse EHR data for secondary uses?