



ЭРҮҮЛ  
МЭНДИЙН ЯАМ



ЦАХИМ ХӨГЖИЛ,  
ХАРИЛЦАА ХОЛБООНЫ ЯАМ

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ЦАХИМ  
ЭРҮҮЛ  
МЭНД



# Амийра Хамид

Азийн цахим эрүүл  
мэндийн холбооны олон  
улсын зөвлөх

# Factors affecting the implementation of digital health technologies

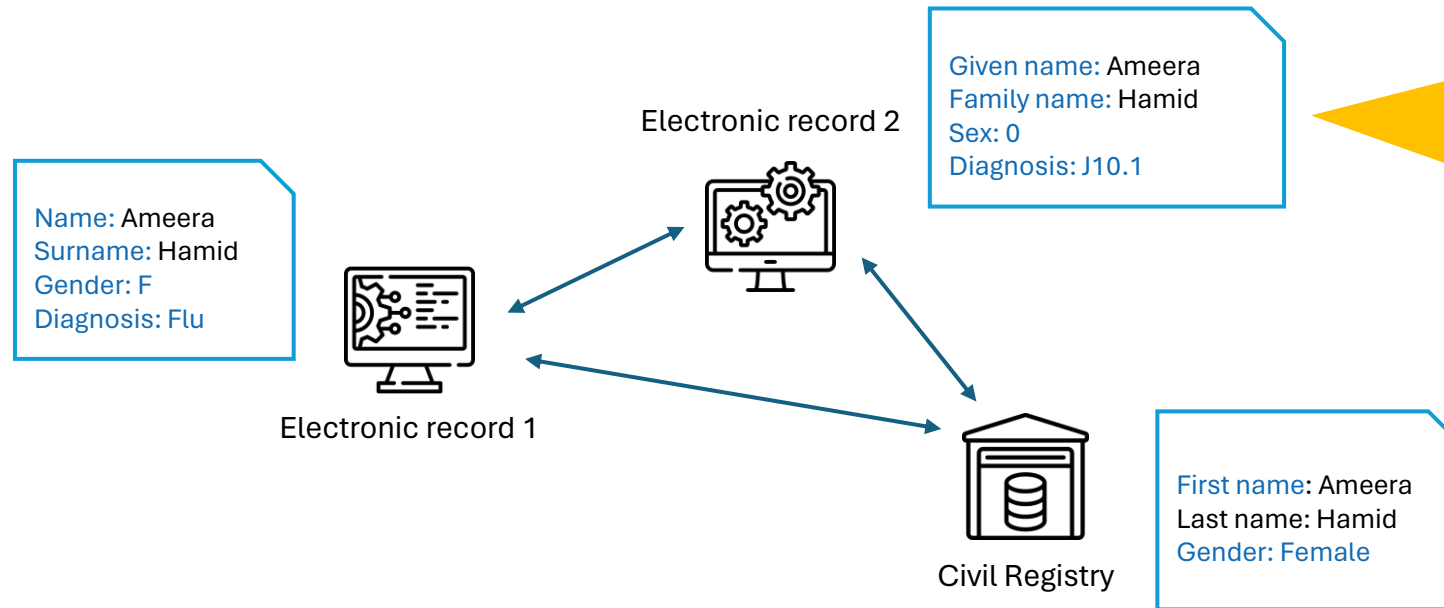
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9 April 2024



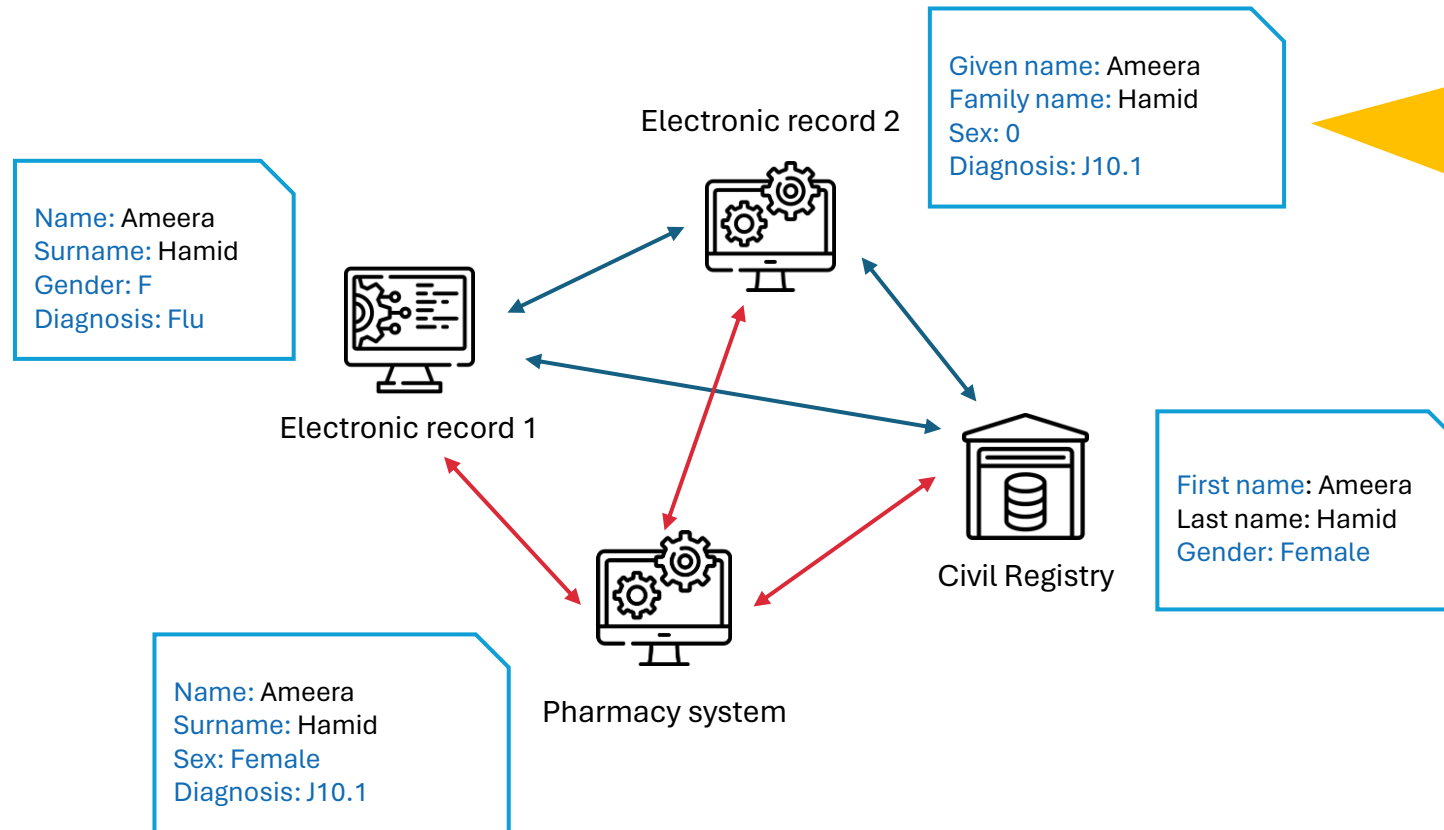
# Challenges of a growing digital implementation



**When there are just a few systems;**

- Only 3 bi-directional API connections to manage
- Translating data between systems is not too difficult

# Challenges of a growing digital implementation

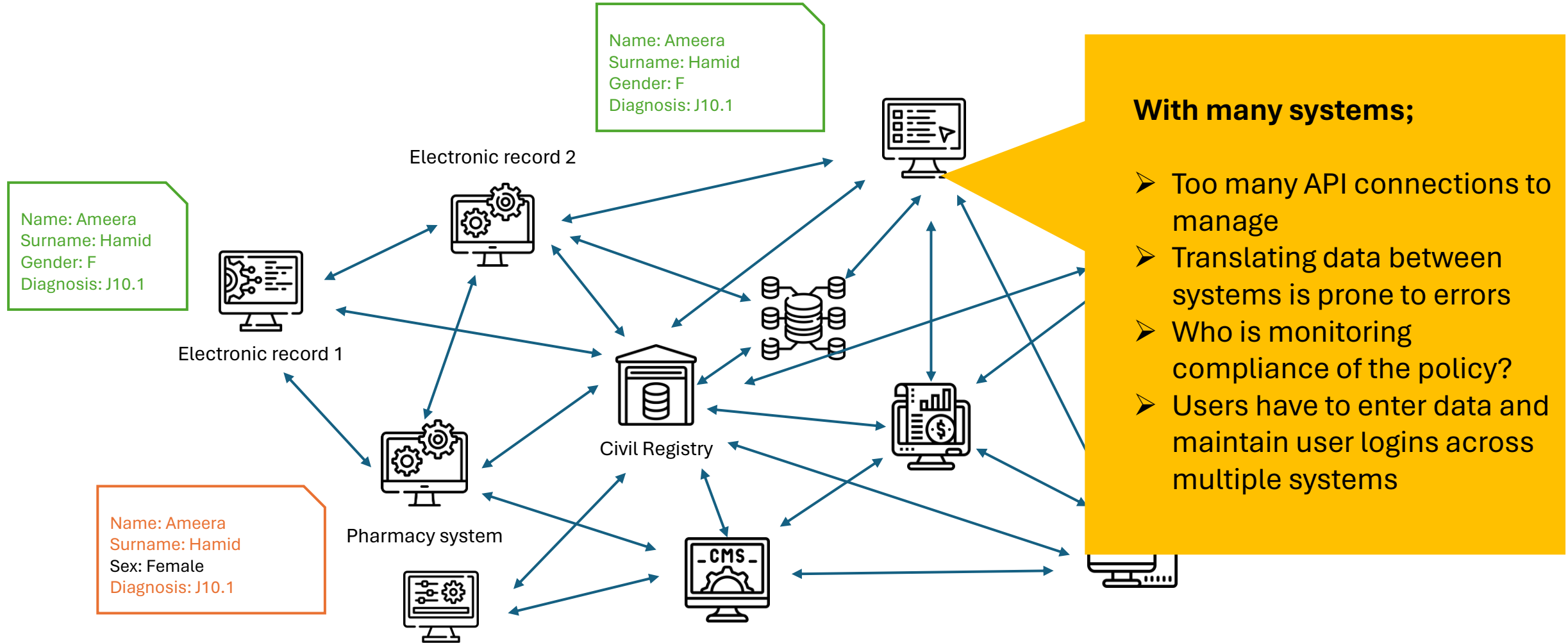


## If we add another system;

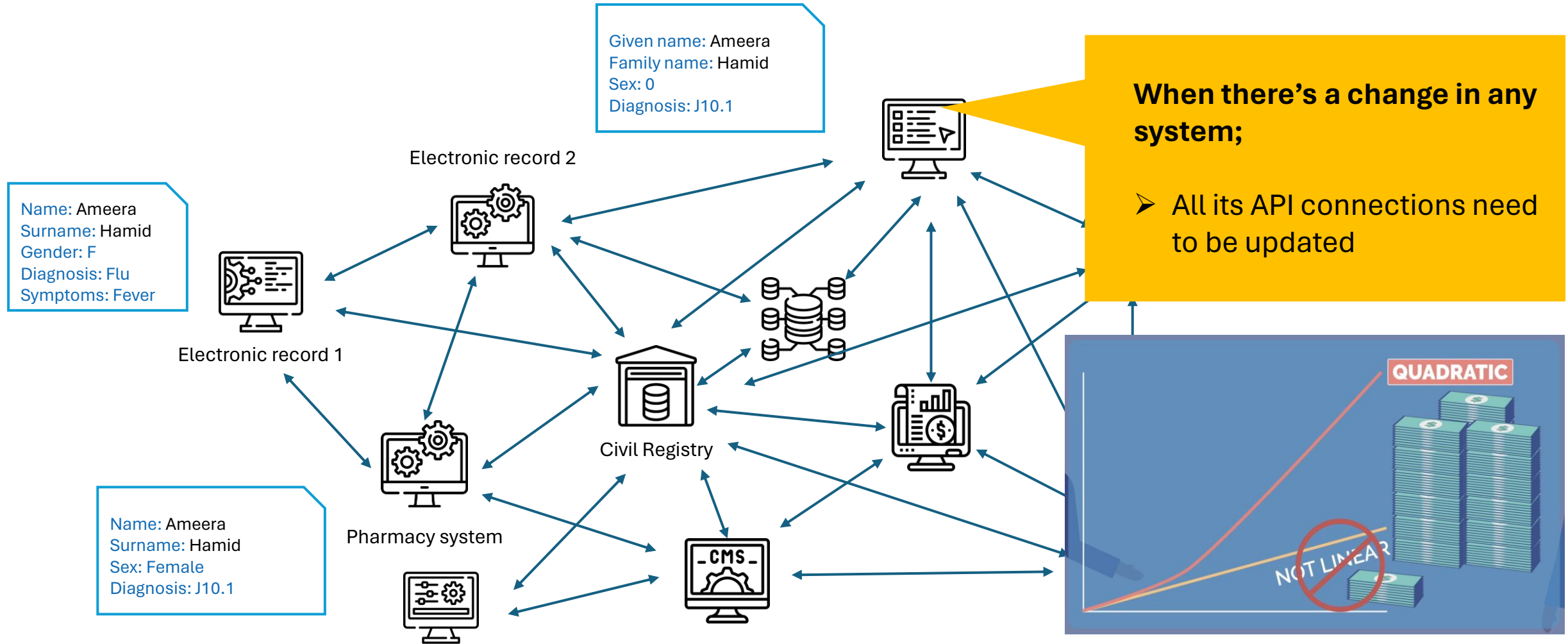
- It changes from 3 bi-directional API connections to manage to 6.
- Translating data between systems becomes a little more difficult

You introduce a policy to standardise the collection of patient data

# Challenges of a growing digital implementation



# Challenges of a growing digital implementation



Growth can increase complexity, so we need to continually improve the enabling environment!

What does this mean?

# Managing increasing implementations

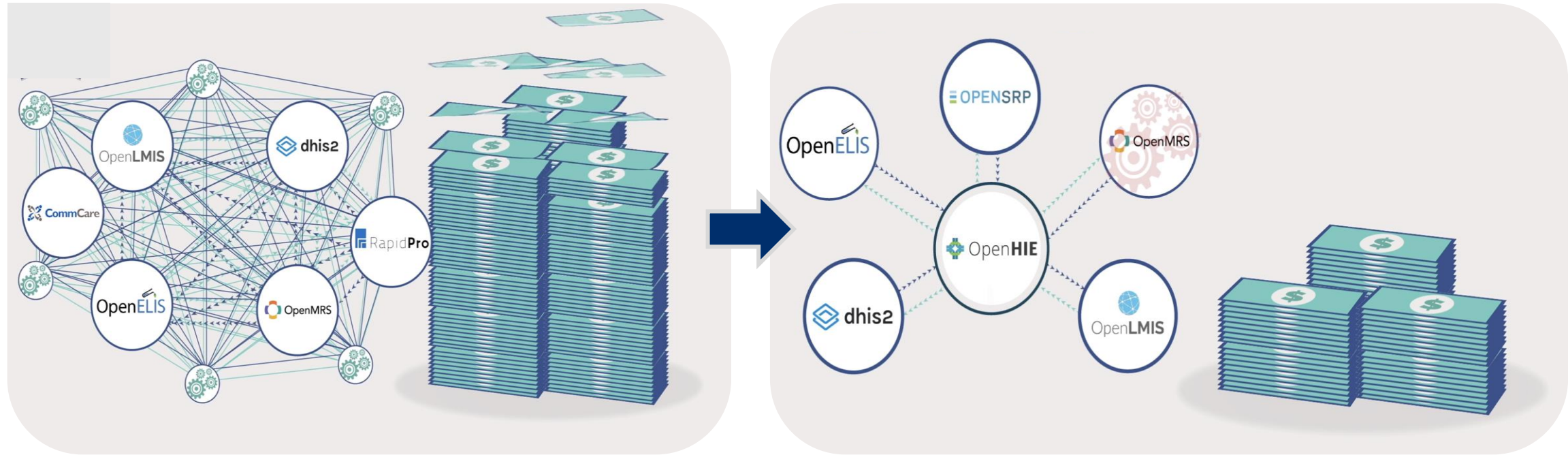
- Integration should become interoperability!
- There should be a permanent unit to coordinate digital health activities (active, centralised governance and program management)
- Policy documents may be strengthened through compliance mechanisms
- The architecture should be clear to all stakeholders
- User consultation and testing are recommended in the development process



# Integration vs Interoperability



# What is the difference



Data exchange shifts from API integration across systems to a health information exchange platform!

A central platform that translates data and facilitates exchange across systems.

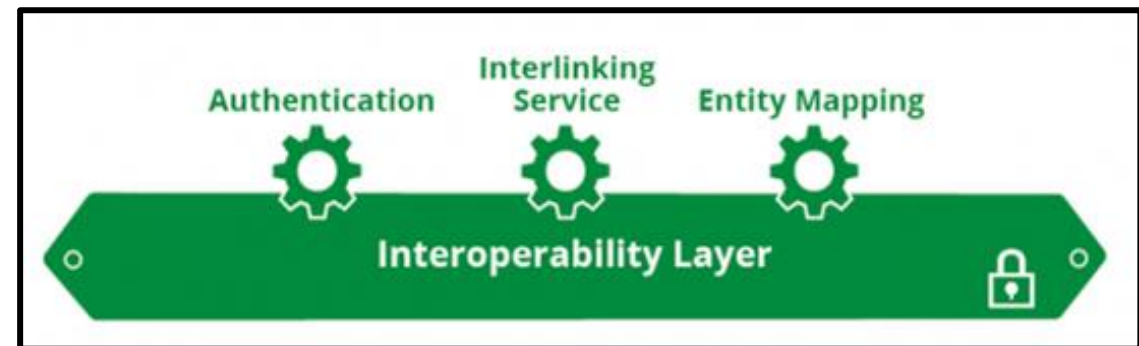
# What does an HIE consist off?

## Components Layer

- Stores only COMMONLY exchanged data: people, places, things
- Includes data warehouses for analytics and management

## Interoperability Services Layer

- Checks who is accessing data and if they have permissions
- Translates data structures and formats
- Maps the data between the application and the data storage component



# Compliance monitoring through regulatory sandbox



# What is it?

- A controlled testing environment to allow software developers and companies to test their systems and innovations
  - Does it meet the regulatory requirements
  - Is it compatible with the national architecture
- Already being used in Germany, Singapore, Malaysia, Canada

# How is it used?

- Government manages the platform
- Any system developer and business can register to test their system or innovation
- During testing, both government and the business can evaluate the system or innovation
- If the system passes the government evaluation, the company can be certified for use by the health system
- Hospitals can check the sandbox website for approved systems before purchasing any.

# Benefits



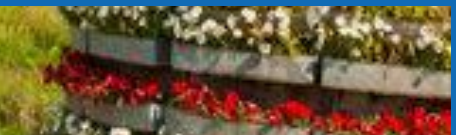
Businesses are incentivised to develop systems that align with government requirements



Governments can ensure implementations will be successful and make decision before investing in software



Businesses can test the system with users to ensure it is user friendly, thereby reducing dissatisfaction.



HIE and regulatory sandboxes are global best practices that can help Mongolia fast-track their digital transformation journey!

Thank you