



National Digital Health Mission

*Health Facility Registry Consultation
Webinar: 7th July 2021*

Agenda

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- II. The Journey to NDHM
- III. Consultation Process Till Date
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- V. NDHM Architecture Overview
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Housekeeping

1. All participants are muted and will not be allowed to share video for the duration of the Webinar.
2. Following the core content of the Webinar, a Q&A session will be held. **All questions are to be submitted through the Q&A Box - our moderator will ensure that they are answered appropriately**
3. Please ensure your questions are concise and targeted towards the points raised in this Webinar or the HFR Consultation Paper released on **Tuesday, 22nd June**
4. If there are any technical difficulties joining, please double check your internet connection and rejoin

NDHM intends to develop HFR in a holistic, consultative manner. Please voice your opinions on issues raised here respectfully.

Journey to NDHM

The National Digital Health Mission (NDHM) is the outcome of an iterative process involving stakeholders across the health ecosystem

National Health Policy 2017

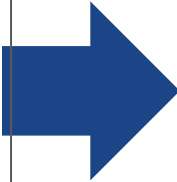
The National Health Policy, 2017 policy advocated extensive deployment of digital tools for improving the efficiency and outcome of the healthcare system

National Health Stack 2018

Vision for a digital stack for health laid out with key objectives and principles

National Digital Health Blueprint 2019

Framework of building the National Digital Health Network finalized



Consultation Process Till Date

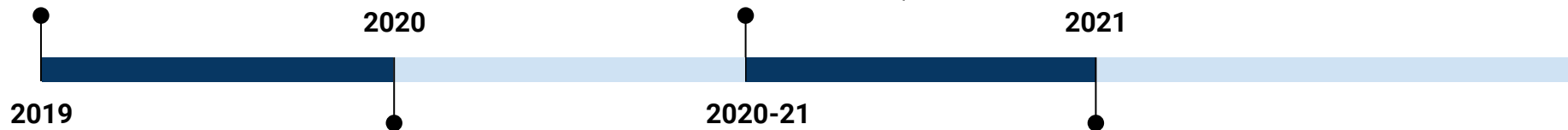
NDHM is currently conducting the fourth round of consultations, and will continue to engage with ecosystem stakeholders as the initiative

1st Level of Consultations

An initial round of consultation was held prior to releasing the National Digital Health Blueprint in 2019

3rd Level of Consultations

One-on-one consultations with specific stakeholders including insurance companies, govt. programmes, licensing authorities, medical councils, among others, were held after the pilot



2nd Level of Consultations

Before launch of the NDHM pilot in August 2020, a series of consultations were held with varied groups of stakeholders at the state and central level

4th Level of Consultations (Current)

Currently ongoing consultations with ecosystem stakeholders through consultation papers released for various building blocks

Principles of NDHM

The NDHM architecture has been designed in keeping with the core functional and technological principles outlined in the NDHB

Functional Principles

Educate and Empower

Universal & Inclusive

Think Big,
Start Small,
Scale Fast

Security & Privacy by Design

National Portability

Accountability

Technology Principles

Interoperability

Building Blocks

Single Source of Truth

Open APIs

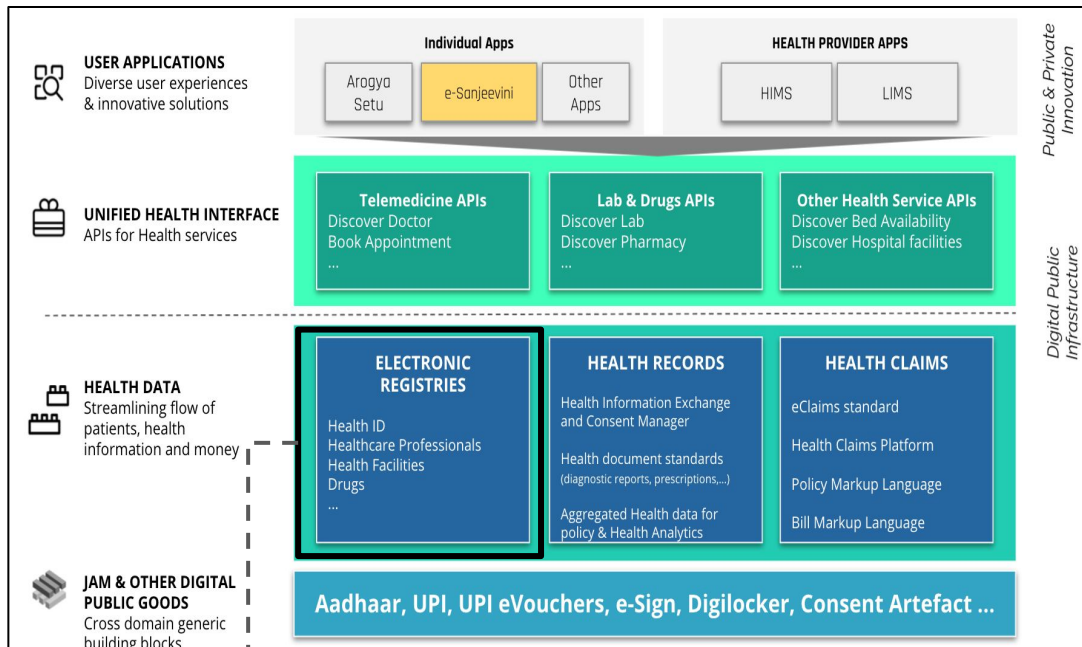
Minimalist Design

Leverage Legacy

NDHM Architecture Overview

NDHM has been designed as a technology stack to enable the interoperability of **health / health related data** and **digital health services**

The NDHM Stack



Features

- Layers work **interoperably** to enable patients, professionals or providers' digital health journeys
- Data layer comprises registries, standards & APIs for **access, exchange & storage** of health / health related data
- Will **connect to other digital ecosystems** in India (e.g., UPI) to activate new use cases and service delivery modes

Consultation papers and webinar focuses on design fundamentals of the core registries

Principles for Building Registries

Three core principles drive the design of the core NDHM registries to ensure concrete value creation for stakeholders

1

Establish Trust

How do we ensure clean, clear and verified data?



Basic Information

Verified State/ UT Administration



Services

Verified by Health Facility Verifier



Personnel

Linked and verified via HPR



Contact Information (Facility Manager)

Aadhaar OTP Authentication

2

Design for Value

Why should a stakeholder be a part of the registry?

- Discovering pain points of an entity for whom the registry is being built
- Identifying possible solutions for the existing gaps and making them an integral part of the registry
- Adding value to the entity by integrating the registry with entire health ecosystem

3

Ecosystem Adoption

What are the use cases of the registry?

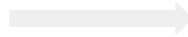
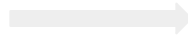
- Identifying all entities in the healthcare ecosystem who currently use data which is planned to be a part of the registry
- Identify avenues of value creation for the entities which align with data captured by the registry
- Engage with entities to adopt the registry as primary source of required data

Enrolment in HFR is completely voluntary; incentives of key stakeholders will be incorporated in design to ensure that the platform constantly generates value for the ecosystem

Key Problems to be Solved

Key Challenges

- **Not Universal** - No registry covers the entire gamut of public and private facilities across all systems of medicine along with comprehensive set of information
- **Lack of Trust & Transparency** - Data in these registries is often unverified and not updated in real-time, making them significantly less usable
- **Not Interoperable** - Technological limitations with respect to easy accessibility of data and integration with existing systems



How HFR Solves These Challenges



Covers both public and private facilities



Basic, financial, civil & medical infrastructure



Across systems of medicine



Data updated regularly by Facility Manager



Data verified by Health Facility Verifier



Audit logs and versioning



Open APIs for easy integration



FHIR standards to ensure interoperability



Digital solutions for online transition

Health Facility Registry

HFR aims to be a centrally maintained comprehensive registry of all information of health facilities in the country with exhaustive information on each health facility



Who are involved?



Health Facilities



Health Facility Verifiers



Organisations/
Programmes



Data User

What does HFR constitute?

HFR Datasets

Import/ Export APIs

Audit Logs & versioning

Data entry / verification
Portals

Building HFR Ecosystem

HFR dataset includes a comprehensive list of attributes in a standardised format to allow for easy ecosystem adoption and ensure trusted, updated and complete information of health facilities.

Proposed HFR Ecosystem Players

Operationalizing the facility registry and making it functional for a health facility will involve engaging and building the ecosystem of key stakeholders



Proposed Ecosystem Players

Who are they?

How will they engage with HFR?

Health Facility

Allopathic hospitals, clinics, diagnostic centres, health and wellness centres, mobile vans, ambulances and pharmacies

Health facilities enroll into the HFR by filling required data. All participating health facilities will provision users to identify and contact the facility through Facility Manager

Health Facility Verifier

An independent agency/ entity that verifies and validates facility data in HFR by conducting onsite assessment

Health Facility Verifier can enter data and evidence in a Health Facility Verifier Application/ Portal which will be reflected in HFR after the verifier e-signs on the portal

HFR Organisation/
Programmes*

Entities engaged in activities such as granting licenses and certification, implementing the government health programmes, insurance companies, etc.

HFR Organisation/ Programmes can consume HFR data and has authority to check/ verify the data and communicates any changes/ discrepancies to HFR

HFR Data User

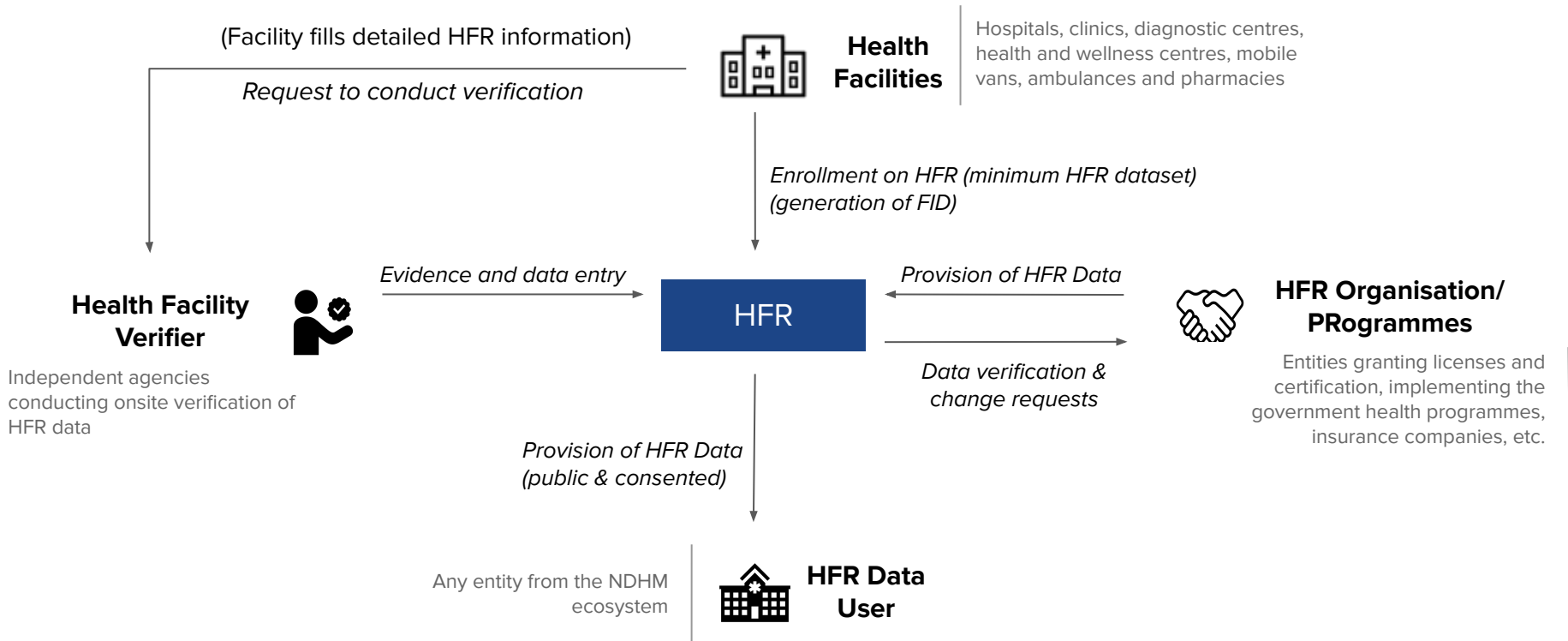
Any entity that is a part of the NDHM ecosystem and has access to HFR data which is not categorized as Public Data

A data user will seek consent to access HFR data through the consent manager and will have to follow data usage policies as defined by NDHM

*Name to be finalized

HFR Ecosystem

How it works: Operationalizing the facility registry and making it functional for a health facility will involve engaging and building the ecosystem of key stakeholders



Key Concepts + Key Issues

HFR Datasets

Information or data attributes that are included in HFR for each health facility

Minimum HFR Data

- Key identifiable data fields (both mandatory and non-mandatory) required to generate a Facility ID
- Restricted to the administrative and geographic details, and general services offered by the facility that remains significantly unchanged over time
- Included as Annexure 1

Detailed HFR Data

- Departments and services, medical and civil infrastructure, quality metrics and accreditation, and more
- Required by empanelment entities - licensing & certification authorities, insurance companies, govt. schemes/ programmes
- Included as Annexure 2

Key Issues Raised for Consultation (Section 3.2.4 of HFR Consultation Paper)

1. Are any required changes in terms of adding/ deleting/ modifying minimum HFR data fields and keeping them mandatory/ non-mandatory?
2. What should be the process flow for a health facility registering on HFR to fill the detailed HFR data fields?

Key Concepts + Key Issues

Health Facility Verifier

Third-Party verification for Facility data will encourage stakeholders to integrate with NDHM and accept the data in HFR to issue certificates/ empanel facilities/ other associated services

Key Elements & Functions

- Data entry, evidence collection and verification of HFR data
- Selection and onboarding of HFVs will be done either by NHA or by an external accreditation body like QCI/ NABCB
- Can use either the NDHM verification platform or their own independent verification portal by making it NDHM compliant
- The details of the verification shall be displayed on the HFR portal as audit logs

Benefits of HFV

- Trusted data to encourage integration and usage for issuing certificates/ empanel facilities/ other associated services
- Direct consumption of verified data leading to significant time savings for health facility while applying for permits, licenses, empanelment
- For policy makers, verified, updated data represents an opportunity to plan for targeted interventions

Key Issues Raised for Consultation (Section 3.3.7 of HFR Consultation Paper)

1. Currently, the state/ UT administration verifies the existence of the facilities. Should there be any changes in this process?
2. Who should be responsible for the selection and onboarding of Health Facility Verifiers - NHA or an external accreditation body?
3. Should NDHM develop the verification portal as a common building block or the independent entities should develop their own portals - or both options should be open?

Key Concepts + Key Issues

HFR Organisations/ Programmes

Any entity including but not limited to insurance companies, licensing and certification authorities, government health programmes, and other users of HFR data that are recognised by NDHM and have mechanisms to verify data in HFR

Key Elements & Functions

- Ability to update details of any independent verification conducted outside of HFR
- If the verification results in a significant business event, for instance granting of a license, update the information in HFR
- Entity may raise a request to NDHM to add fields in HFR as deemed necessary for their business purposes

Integration with NDHM (2 Alternatives)

- **Integration via Open APIs:** Developed by NDHM for the import and export of data after integration via NDHM Sandbox
- **Digital Solutions:** NDHM may act as a solution provider for entities with offline registration processes and serve as an e-services portal for facilities
- In both cases, entities have complete control and autonomy over their business processes

Key Issues Raised for Consultation (Section 3.4.4 of HFR Consultation Paper)

1. HFR Organisations/ Programmes represent entities participating in NDHM. Should there be a different nomenclature for these entities?
2. Which of the two integration approaches should be adopted by NHA to engage with these organisations/ programmes?

Next Steps

Success of HFR depends on active participation and adoption of the registry by the ecosystem

All participants are requested to:

1. Read the full text of the consultation paper released on **22nd June**
2. Deep dive into the list of attributes shared as Annexures and check for applicability and consistency
3. Provide comments on the consultation paper against relevant questions by **20th July**
4. Share your feedback through the form shared on your email after this webinar

Pre-Submitted Q&A

1. How to integrate with existing health information systems used by service providers ?
2. What is the metric of success for this project? How are we dealing with remote locations for data collection ?
3. Who shall host, maintain and audit the registry?
4. What are the roles and responsibilities of states in the development of the registry?
5. Is there any possibility of inviting open source contributions?
6. How is this exercise different from NHRR?
7. How do we build a streamlined process of facilitating hospitals in our database onto the registry?
8. What are the standards facilities will follow while entering data in HFR?



National Digital Health Mission

Thank you!

Please send your comments on ndhm@nha.gov.in