Open Call for Expression of Interest (EoI) for Innovative solutions around the health registries

National Health Authority (**NHA**) is responsible for implementation of "Ayushman Bharat Digital Mission" (**ABDM**) to create a National Digital Health Ecosystem. Details are available at https://abdm.gov.in/.

The national launch of ABDM was announced by the Honourable Prime Minister on 27th September 2021. ABDM aims to develop the necessary backbone to support the integrated digital health infrastructure of the country. It will bridge the existing gap amongst different stakeholders of the Healthcare ecosystem through digital highways. ABDM shall create a seamless online platform through the provision of a wide-range of data, information, and infrastructure services, duly leveraging open, interoperable, standards-based digital systems while ensuring the security, confidentiality, and privacy of health-related personal information. NHA had released an EOI titled "Open Call for Expression of Interest (EoI) for creating digital health ecosystem for India" in April 2022 for which NHA received a number of positive responses. The current EOI is being released as a continuation to the aforementioned document.

NHA has rolled out the following key registries of ABDM

- 1. Patient Registry Ayushman Bharat Health Account (**ABHA**)
- 2. Healthcare Professionals Registry (**HPR**)
- 3. Health Facility Registry (**HFR**)
- 4. Drug Registry (to be launched shortly)

These registries perform the following key functions:

- 1. Single source of truth for the respective participant e.g. HPR for health professional identification/verification
- 2. The data contained in the registries is verified using standard ABDM approved protocols/processes.
- 3. Allow Verification of respective participants by other interested stakeholders in the ecosystem
- 4. Facilitate and enable exchange of interoperable health data (with patient consent) amongst the various healthcare ecosystem players.
- 5. Maintained by NHA through a regular process of updation by the data owner.

Annexure 1, **Annexure 2**, and **Annexure 3**, provide further details of ABHA, HFR and HPR respectively. More details regarding the same is available at the ABDM website.

In order to ensure the benefits of these health registries are made available in a speedy and useful manner to the entire ecosystem, NHA is looking forward to creating innovative solutions/services, like 'Know your Doctor', 'Know your Health Facility' etc. The prime objectives of this is to ensure that the public at large and / other ecosystem users are able to:

- a. easily search and find the doctors/ facilities as per their requirement,
- b. ascertain that the doctors/ health facilities are duly registered,
- c. provide a digital way of verification and authentication,
- d. make use of other innovative services that can be built on the underlying registry infrastructure by the entire healthcare and other startup/entrepreneurial ecosystem.

This would assist in better services at lower cost available to patients, professionals, health facilities and other constituents in the healthcare ecosystem. Also with this infrastructure, startups etc can build new businesses and provide innovation.

NHA invites Expression of Interest from all interested parties who are interested to work with NHA regarding the same. The broad framework being conceptualised is as follows:

- 1. NHA will make available Data in the respective registries that the owner has consented to share via relevant Application Programming Interfaces (APIs).
- 2. This data may be used to provide value added services by the participating entity to the entire health ecosystem and beyond, if relevant. An indicative list (not limited to) of the types of services that these innovative solutions may provide is listed below:
 - a. Search (textual or graphical) including search on various parameters like demographic, specialization, drugs, location, accreditation status (e.g. NABL/NABH accredited), empanelment status (PMJAY/CGHS empaneled) etc.
 - b. Verification: wherein the authenticity of the doctor/facility is verified via e-KYC/verifiable credentials, etc. For Example-
 - Verification of doctor/facility during telemedicine consultation by platform providers/patient/regulator etc.,
 - verification of the medical practitioner issuing the medical fitness certificate for purposes like educational/leave/job/legal, driver's licence, visa, etc.
 - Enhancing credibility of Healthcare professional /facility data provided by any online system marked as verified with HFR/HPR.
 - c. Registration Updation of registries

- d. Single sign in facility using the registry credentials that enables users to securely authenticate with multiple applications and websites by using just one set of credentials.
- e. Any other service.
- 3. Any feedback received to the aforementioned registry data (like non-existence) may be made available to NHA and concerned facility/person to enhance the accuracy of the registry.

We request you to please write to us at **abdm.legal@nha.gov.in** expressing interest to work containing the following particulars:

- a. Name of Company
- b. Registration Details (Copy of Certificate of Incorporation/ Registration to be provided)
- c. Communication Address of the Company
- d. Brief Profile of the Company
- e. Details of Point of Contact (email and contact address)
- f. Services that will be provided using the Registry data.
- g. Potential users of the services being provided.
- h. Estimated volumes of services (like the number of transactions, bifurcation of the beneficiaries and likewise)
- i. Benefits of the proposal for the resident patients and other players within the healthcare ecosystem and the Central Registry (HFR/HPR data).
- j. Broad timelines in which the participant intends to provide these services.
- k. Any other information that the participant deems fit to provide.

Other Terms

- 1. Currently the relevant services shall be provided free of charge for a period of 2 years. Any decision or changes thereof will be communicated from time to time.
- 2. This Expression of Interest will not be time bound and will continue until further notification by NHA in this regard.
- 3. NHA is keen to collaborate with all technology providers/individuals to build a digital health network that works for all. All stakeholders shall be a non-exclusive partner for the subject matter and this EOI does not impose any obligations on either party. Furthermore, there shall be no financial implications for the same. However, any cost for integration with NHA APIs shall be borne by the respective service provider.
- 4. It is hereby clearly understood by the Parties that NHA shall have no responsibility or liability in relation to failures of services provided by interested parties.

Annexure 1

Ayushman Bharat Health Account Number

Purpose and Meaning

ABDM aims to achieve a seamless exchange of health information among various stakeholders of the healthcare sector and in order to achieve this, a common factor is required. This common factor will support identifying the person for which the record needs to be shared or transferred. Accordingly, the concept of the Ayushman Bharat Health Account (ABHA) Number was introduced which is a unique 14-digit number generated by the system for each individual.

Initially, the unique number was known as "Health ID", however, considering multiple IDs already available with an individual like AADHAR, PAN, Driving license, passport, etc., it was renamed as "ABHA" number. Also, all the records will be linked to this ABHA number, it works like an account.

Presently, each hospital or lab or any other facility allot a different patient ID or reference number to each patient visiting their facility and thus, the health records pertaining to Mr. P at ABC hospital and at XYZ hospital cannot be shared. However, if there is a unique number that is used at both the hospitals, health records can be mapped and shared.

Accordingly, ABHA will support the linking of health records to an individual and will support identifying and exchanging the information seamlessly. A similar concept has been adopted in different countries like Estonia, Australia, Taiwan, etc. named like eID, Individual healthcare identifier, etc.

Further, AADHAR or any other existing ID cannot be used as a unique health identifier because each ID is being created with a specific purpose and is voluntary in nature.

Features and Benefits of ABHA

Ayushman Bharat Health Account is a unique number that helps to access the medical records of the person. The major features of ABHA number are as follows –

- a. It is a random system-generated 14-digit number
- b. All medical reports are linked to ABHA and stored with the healthcare information provider (HIP)

- c. The health records are being shared through a Health information exchange consent management system that ensures data is not shared among healthcare information providers and users without the approval of the person to whom data is related.
- d. The usage of ABHA is completely voluntary and individuals may delete/de-activate ABHA anytime.
- e. Safe and secure mechanism to share health records. The individual can decide the reports/ records to be shared and the time period for which such record is to be shared.

The data collected through the platform can be anonymized and used for developing health policies and schemes having more relevance and are targeted toward prominent diseases and health issues. Anonymization means masking all the parameters through which individual identity can be traced.

Role of ABHA in ABDM eco-system

ABHA number is the unique identifier for citizens of India and will work as a source of identification while exchanging health records within the ABDM ecosystem. ABHA will support in easy registration reducing long queues, appointments with healthcare professionals in advance, teleconsultation, document sharing during teleconsultation, etc.

A QR code may be placed by the facilities at the registration counter through which registration can be done in a faster and smooth manner. The inter-departmental reports will be shared pertaining to a specific ABHA digitally and the patient will not be required to move physically with documents.

Annexure 2

Healthcare Professional Registry - HPR

Purpose and Meaning

A registry is a compilation of similar kinds of information along with a unique identity. Under ABDM, the Government of India is envisaged to develop four major registries, namely; ABHA, Healthcare professional registry, healthcare facility registry, and drug registry.

The registries are intended to provide compiled and verified information of stakeholders of the health ecosystem making these registries the single source of truth. As the name suggests, Healthcare professional registry is for professionals working in the field of healthcare and includes:

- Doctors (allopathy and AYUSH)
- Nurses
- Para-medical staff
- Lab technicians
- ASHA/ANMs
- Any other healthcare professional

The registry will provide the details of healthcare professionals registered with ABDM like specialization, work area, location, contact details, educational qualifications, etc. The details will be verified by the concerned council before the same is added to the registry. In order to ensure privacy and security of data of healthcare professionals, the details relevant and agreed by the professional will be reflected the public.

Internationally, countries like the US, Denmark, Sweden, Australia, etc. have such registries in place even if the digital health system is in process of deployment.

Healthcare Professional ID

The healthcare professional ID is a unique 14-digit number provided to the healthcare professionals registering under ABDM. This ID will be different from any other identity and will be used in the ABDM ecosystem to ensure that information/health records shared reach to the right

professional. This ID will support in identifying the professional and ensuring the correctness of the qualification, specialization, registration, and basic demographic details of such professional. Although only the relevant information will be made public subsequent to the consent of the professional, the information will be stored at the central location.

Usage and role in ABDM eco-system

Healthcare professional registry will provide a single source of truth for the professionals available in India. The registries available in the market or different apps like Practo, JustDial, etc. are not verified and thus, HPR has its own importance.

HPR plays an important role in the ABDM eco-system for sharing of health records. The professionals can raise a request to view the health records linked with a particular ABHA number. Whenever a patient visits the facility, registration can be done through ABHA, and healthcare professional can request for previous records. The request will be received by the patient on its ABHA App to give consent to share the records requested to which patient can provide consent to all or partial records.

The professionals not registered under HPR will not be able to access ABDM ecosystem and hence cannot raise request and not receive health records for further process.

Features and Benefits of Healthcare Professional Registry

The major features and benefits of HPR are as follows –

- 1. For professionals
 - a. Ease of doing business
 - b. Identification by Government of India
 - c. Easy access to medical history for better consultation
 - d. Cater to more patients considering reduced time for history and waiting

2. For citizens

- a. Easy search and access to specialists across India
- b. Easy search for professionals near to the area of need
- c. Verified professionals and hence trustable

d. Easy sharing of historical medical records

Registration with Healthcare Professional Registry

Healthcare professionals can register themselves under various categories (presently, doctors and nurses) by visiting https://hpr.abdm.gov.in/en and following the steps. The registration can be done through Aadhaar or a driving license.

Once the registration is completed and submitted by the professional, the application is sent to concerned council/ board automatically for verification. The council after validating their records can directly verify or can raise query from the professional for further details. Once the verification is completed by the council, the professional is included in the HPR and is being maintained by NHA centrally.

The professionals are free to modify/edit/update their credentials/details anytime, however, the same will be verified by the council each time before the same is reflected in the HPR.

Annexure 3

Health Facility Registry - HFR

Purpose and Meaning

HPR is being created for healthcare professionals and Health Facility Registry (HFR) is to provide compiled and verified information on health facilities available in India. Health Facility Registry is a comprehensive repository of health facilities of the country across modern and traditional systems of medicine. It includes both public and private health facilities including hospitals, clinics, diagnostic laboratories and imaging centers, pharmacies, etc.

The registry will facilitate providing a verified list of facilities available along with the details of specialization, available facilities and professionals, teleconsultation, etc. The registries will be verified by the district verifier/national verifiers appointed by the States/ Central Minsitries

Health Facility ID

The health facility ID is a 12-digit alpha-numeric ID provided to the facilities pursuant to application submission and verification by district verifiers. The health facility ID provides the information about the facility and provides the assurance of its existence.

The district verifiers, as appointed by the state verify only the existence of the facility at the stated location and do not verify the services provided by the facility.

Usage and role in ABDM eco-system

The health facility registry is the third pillar of the eco-system; ABHA is the first and HPR is second. Most of the professionals are associated with one or the other facility to provide their services. The facilities ensure registration of patients, consultations, tests to be undertaken, maintenance of records, follow-ups, etc., and thus would be required to integrate their system with ABDM.

As ABDM is based on federated architecture, i.e., data is stored at the place of creation and shared digitally among professionals with the consent of the patient. Accordingly, the facilities are the majority of HIPs and HIUs in the ABDM eco-system and will play a crucial role to implement ABDM.

Features and Benefits of Health Facility Registry

The major features and benefits of HFR are as follows –

1. For facilities

- a. Ease of doing business
- b. Identification by Government of India
- c. Easy registration reducing waiting time and registration process
- d. Better service delivery ensures quality of care

2. For citizens

- a. Easy search and access to healthcare facilities across India
- b. Easy search for hospitals, clinics, labs, pharmacies, etc. near to the area of need
- c. Easy sharing of historical medical records

Registration with Health Facility Registry

Health facilities can register themselves under various categories by visiting https://facility.abdm.gov.in/ and following the steps depending upon the type of facility (Government or Private).

Once the registration is completed and submitted by the facility, the application is sent to the concerned verifier automatically for verification of the existence of the facility. Pursuant to approval, the facility is listed in HFR and will be visible to public on HFR website.