Health Facility Registry

The consultation paper is good start for stakeholders to discuss on the approach and architecture for Health Facility Registry ("**HFR**"). The NDHM has the potential to transform healthcare practices in India; we remain committed to contributing to the development of an internationally trusted health care system that will improve the quality and safety of care in the country. AWS APN partners globally leverage AWS healthcare service portfolio to offer solutions that support compliance under regulatory regimes.

Based on international experience and global best practices, NHA should be open and flexible in adopting various cloud deployment models. We suggest that the best principals of cloud native design and hyperscale cloud hosting services be used to achieve ensured scalability, high availability, and durability of the application being envisaged.

There are several areas that need further clarification for stakeholders as they look to participate in the ecosystem. Please find our suggestions for your reference

1. **Integration of existing platforms/programs**
   - In case registries mentioned in 2.1.1 continue in the future, there is a need to clarify how will the data from HFR flow back to these registries in their respective fields. State Governments will have some form of registries already available. It is important to understand how would the State(s) expand to become compliant to NDHM HFR?
   - There is no reference or proposal for integration of the Ayush system. The paper must lay down how Ayush facilities be integrating with the NDHM health facility registry.
   - While there is an acknowledgement of the federated nature of the existing and state registries, there is no clarity on how these will be integrated or how new applications will access data. We recommend a highly scalable API services be leveraged to support the large number of transactions expected in a national system.
   - Compliance requirements with reference to data processing, data privacy and security of data be clearly outlined and be aligned with the upcoming Data Protection legislation.

2. **Suggestions for features /functionality and incentives**
   - Provision to add more fields in the future in HFR, as the ecosystem develops and more data can be captured.
   - Expedite the adoption of the proposed registries through a suitable incentivizing factor for any hospital/facility
   - Published a list shared for all certifications/audits/compliance checks that different types of facilities have to do – hospitals, clinics, pharmacies, labs, diagnostic centers etc. For example, compliance to health data standards – e.g. LOINC, ICD 10/11 or SNOMED-CT be suggested for facilities
   - The system should be built on open standards & details of all respective APIs should be provided.

   To expedite and enhance the adoption, we suggest that the Sandbox API onboarding which is currently limited to specific APIs. Be expanded and a dedicated support/team for helping those aspiring to use NDHM onboarding.

3. **Single source of truth and validation**
   - The Authority should clarify if HFR would be designed to be the single source of validation/verification for all other registries whether existing or to be created including validation/verification for all certifications/ audits/ compliance/ license/ permit/ empanelment checks for facilities? This will have an impact on the scope and size of the deployment as well as the architecture.
   - Clarity on how already empaneled entities (Ref 3.3.6) will be treated including proposed exemptions are needed.

Healthcare Professionals Registry

The consultation paper is good start for stakeholders to discuss on the approach and architecture for Health professionals Registry. The NDHM has the potential to transform healthcare practices in India; we remain committed to contributing to the development of an internationally trusted health care system that will improve the quality and safety of care in the country. AWS APN partners, globally leverage AWS healthcare service portfolio to offer solutions that support compliance under regulatory regimes.

Based on International experience and global best practices, NHA should be open and flexible in adopting various cloud deployment models. We suggest that the best principals of cloud native design and hyperscale cloud hosting services be used to achieve ensured scalability, high availability and durability of the application being envisaged.

We would like to suggest the paper clarify the following

- Status of HPR with respect to MCI/NMC registries to avoid duplication and also to be able to integrate existing data
- Modes of eKYC that maybe adopted to avoid data duplication and misuse / unauthorized access of profiles. For example - If place of practice is optional, can the same health professional be able to create multiple profiles with different locations. Also, post an approval of HP at an HF is done, security parameters need to be defined to ensure that the credentials of HP are not being used by others.