

# **Consultation Paper**

on

Operationalising Unified Health Interface (UHI) in India

December 2022

National Health Authority

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# **Table of Contents**

Chapter 1: Introduction and Background	3
(a) Objectives of the Consultation	3
(b) How to submit a response	3
Chapter 2: Setting the Context: Interoperability in Healthcare	3
(a) Overview of Ayushman Bharat Digital Mission (ABDM)	3
(b) Unpacking Unified Health Interface (UHI)	4
Chapter 3: Elements in operationalising Unified Health Interface	8
(a) Search and Discovery	8
(b) Service Booking	10
(c) Service Fulfilment	11
(d) Payment and Settlement	12
(e) Reschedule and Cancellation	14
(f) Grievance Redressal	14
(g) Miscellaneous	16
(i) Metrics	16
(ii) UHI's Common Taxonomy	16
(iii) Scoring	17
Chapter 4: Summary and Conclusion	17
Appendix: Consolidated list of Questions	18

## **Chapter 1: Introduction and Background**

## (a) Objectives of the Consultation

- (i) This document has been published to invite stakeholder comments and consultation on Operationalising Unified Health Interface (UHI) in India.
- (ii) In this document, an attempt has been made to outline different operational elements of UHI for consultation and provide adequate context for the citizens and concerned stakeholders to weigh in with their comments.
- (iii) The desired outcome from this process of consultation is clear feedback and answers to the questions posed at the end of each section. Additionally, stakeholders are welcome to raise any other issues they deem critical for the development of such a platform.
- (iv) The final decisions on the various elements of UHI shall be taken after considering suggestions and feedback received.

## (b) How to submit a response

Interested persons can access the form for submitting responses at <a href="https://abdm.gov.in/operationalising-uhi-consultation-form">https://abdm.gov.in/operationalising-uhi-consultation-form</a>. The public consultation is open till **Friday, 13th January 2023.** 

#### Chapter 2: Setting the Context: Interoperability in Healthcare

## (a) Overview of Ayushman Bharat Digital Mission (ABDM)

The visionary project of Ayushman Bharat Digital Mission ("ABDM") was conceived in 2017 when the National Health Policy ("National Health Policy") was published with an objective to digitise the Indian healthcare ecosystem. It advocates for the development of 'Digital Health Technology Ecosystem' where digital health tools will be built and deployed across the continuum of care. The policy recognizes the importance of digital technologies in the delivery of healthcare and highlighted the need for "delivery of better health outcomes in terms of access, quality, affordability, lowering of disease burden and efficient monitoring of health entitlements to citizens."

The objective of ABDM is to create a national digital health ecosystem that supports universal health coverage in an efficient, accessible, inclusive, affordable, timely and safe manner. It aims to do so by prescribing common health data standards, developing core modules such as health facility registry, healthcare professionals registry etc. that form the base for interoperability; so that various digital health systems can interact with each other by

enabling seamless sharing of data across various healthcare providers who may be using different digital health systems. The architecture of ABDM is built on open, interoperable, standards based digital systems, and ensures the security, confidentiality and privacy of health-related personal information to prevent any misuse of sensitive health data. It leverages the current strong public digital infrastructure—including that related to Aadhaar, Unified Payments Interface (UPI) and wide reach of the Internet and mobile phone connectivity—and builds on them to create the foundation for India's digital health ecosystem.

ABDM is conceptualised as a set of 'digital building blocks' which is a set of extensible frameworks that different stakeholder groups can use for designing, developing and delivering healthcare services at scale. These building blocks include ABHA Number, Registries, Health Information Exchange and Consent Manager (HIE-CM), Unified Health Interface (UHI), and more. As the ABDM architecture evolves, it is important to have in place clear guidelines on how different elements of each of these building blocks will be operationalised in a fair, efficient and transparent manner.

It is against this backdrop that this consultation paper will focus on Unified Health Interface and its various operational elements. The objective of the paper is to seek feedback on how different elements of UHI should function. Inviting public feedback will allow for early course correction, which will in-turn engender trust in the network and enhance market adoption. The feedback received through this consultation will be used to refine the functionalities of UHI so as to limit any operational issues going forward.

## (b) Unpacking Unified Health Interface (UHI)

The current digital health ecosystem is highly fragmented. The digital health landscape in India exists in siloes, which makes it difficult to search and avail services in a seamless manner (Figure 1). In the current infrastructure, doctors and patients need to use the same application for a good digital experience. As a result, a doctor does not have an easy way to let patients know how to reach them digitally; and for a patient, the discovery of a specific Health Provider is difficult as transactions & data are fragmented across different applications.

This siloed infrastructure hinders users from making optimal choices. Consider a situation where a patient is on application 1 and chooses a doctor A out of the limited options available on the application, while in reality, the patient prefers a doctor B on, say Application 2. As a result of siloed infrastructure and limited options, the patient is matched with doctor A instead of doctor B even though doctor B may have a vacancy in their quota of patients. According to the matching model literature in economic theory, such a patient is said to have *justified envy* and this matching is not *fair*. <sup>1</sup> In the present healthcare ecosystem, where

<sup>&</sup>lt;sup>1</sup> Diamantaras, D. (1991) "Envy-free and efficient allocations in large public good economies," Economics Letters, 36(3), pp. 227–232. Available at: https://doi.org/10.1016/0165-1765(91)90024-f.

<sup>&</sup>lt;sup>2</sup> Foley, D. K. (1967). Resource allocation and the public sector. Yale economic essays, 7(1), p. 45-98.

information exists in a fragmented manner across different apps, there is a high likelihood of patients having *justified envy*, which hinders optimal matching between doctors and patients. Hence, the UHI seeks to break this siloed infrastructure by creating an open interoperable network that connects the various End User Applications (EUAs) and Health Service Provider Applications (HSPAs) in a seamless manner (Figure 2), which can improve the matching and lead to better outcomes for all.

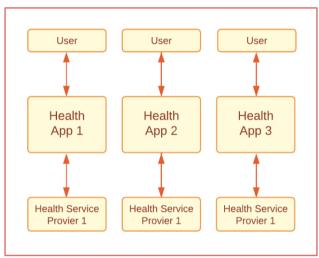


Figure 1: Current siloed infrastructure

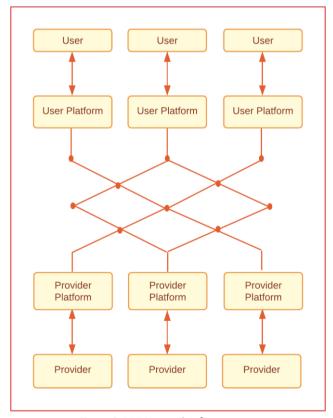


Figure 2: UHI Network Infrastructure

The UHI is envisioned as an open protocol for various digital health services. The UHI Network will be an open network of EUAs and HSPAs. The UHI will enable a wide variety of digital

health services between patients and health service providers (HSPs) including, but not limited to:

- Booking physical appointments at hospitals / clinics
- Booking Teleconsultations
- Discovering availability of critical care beds
- Discovery of lab and diagnostic services
- Booking of home visits for lab sample collections
- Booking an ambulance

The UHI seeks to ensure that a digital health service can be delivered between any EUA with any HSPA in this ecosystem. The best example of a similar interoperable model is from the financial services domain - the Unified Payment Interface. Today, users can choose any end user application (eg: BHIM app, Paytm, PhonePe, etc) to make seamless payments from their bank account or wallet to any other bank account. Similarly, through UHI enabled applications, patients can discover, book, conduct and pay for services offered by a variety of participating providers from any application of their choice.

Any service transaction in UHI involves five entities:

User is any patient seeking digital health services through UHI.

**End user application (EUA)** is any application chosen by the user to access health services. EUAs can be of diverse forms like mobile apps, interactive voice response systems (IVRS), virtual assistants in English and local languages, etc.

**Health Service Providers (HSPs)** are individual doctors, hospitals, labs, companies that aggregate health services, etc. They provide digital health services using Health Service Provider Applications (HSPA) that uses UHI protocol.

**Health Service Provider Application (HSPA)** is any provider-facing application allowing health service providers to respond to EUA requests and fulfil digital health services. HSPAs can be standalone providers or aggregators of services/businesses. Through an HSPA, a health professional can manage their services, calendars and payments.

**UHI gateway** routes the initial service/provider discovery requests and responses involved in UHI transactions between HSPAs and EUAs.

## UHI Protocols in Action: An example

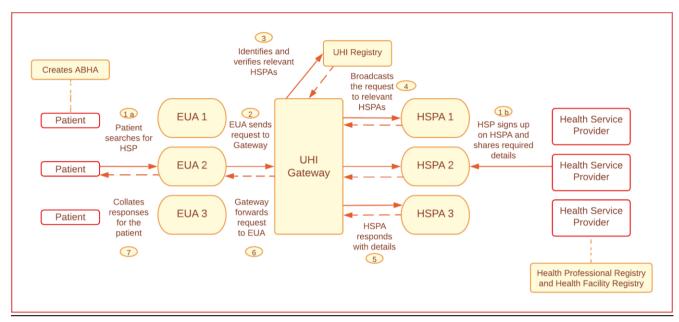


Figure 3: Transaction on UHI Network

#### Patient experience can be visualised as follows:

- 1. The patient logs into an EUA of their choice using their ABHA Number.
- 2. The patient searches for the type of service they wish to avail. Under the chosen service, they may search for a health service provider/health facility/speciality/symptom. The patient is shown a list of search results. The result could be a department at a hospital (without a specific doctor name) or could be the name of the specialist who will conduct the consultation. The time slots available and price for the consultation is shown.
- 3. Patient picks, say, a dermatologist and requests to book an appointment for teleconsultation.
- 4. The patient makes the payment for the consultation. The booking is confirmed once the amount has been paid.
- 5. At the appointed time, the patient gets a call from the doctor.

## **Doctor Experience** can be visualised as follows:

- 1. Doctor logs into a Health Service Provider application using their Healthcare Professional ID. This ensures that their verified credentials show up and improves trust in the teleconsultation.
- 2. The doctor can specify the digital and physical health services they are willing to offer along with price for the consultation and time at which they are available.
- 3. The doctor can view all the appointments booked for the day in the HSPA. The doctor may request the patient's history if they wish to.
- 4. The doctor initiates the teleconsultation by calling the patient.

- 5. The doctor can then fill out their consultation notes, prescriptions, advice and any follow-up required.
- 6. Payment for their services will be settled as per the outlined payment & settlement process.

## **Chapter 3: Elements in operationalising Unified Health Interface**

# (a) Search and Discovery

The UHI network enables HSPAs to declare the digital health services they want to offer on the network, and the end users can discover these health services, their pricing and service availability using any EUA. *Figure 4* summarises the search and response process on the UHI Network. A user searches for a service on an EUA - the search can be in the form of the service, provider, symptom, facility or speciality. The EUA then routes the search discovery request to the Gateway, which in-turn broadcasts this request to all registered HSPAs to whom this discovery request is relevant. HSPAs can view the incoming request and decide if they want to respond or not. If an HSPA decides to respond to this request, it can do so by providing the details of their service, price they expect for the service, how they accept payments, etc. The gateway forwards these results with the end user application, which in-turn presents all the choices to the user.

The HSPAs will be able to choose what services they want to provide, and which cities they want to service in. The UHI gateway will respect the preferences of the HSPAs and route the searches to only the relevant HSPAs. To enable this level of classification, the UHI Sandbox will be designed such that an HSPA can certify themselves for each health service separately and add it to their list of services offered on UHI. This 'intelligent routing' by the UHI gateway will help optimise the search process and maximise overall efficiency.

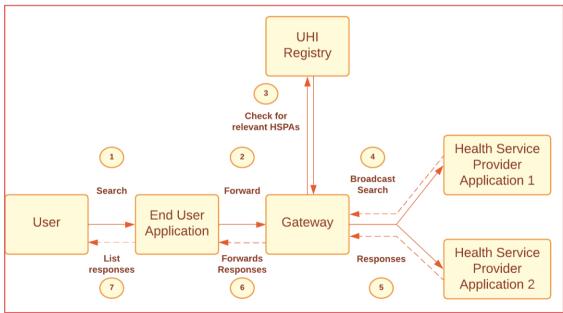


Figure 4: Search and Discovery process on UHI

Some examples for service discovery have been described below:

<u>Discover a doctor for teleconsultation:</u> The user can search for say an eye specialist in retinal diseases who speaks Hindi. The UHI gateway sends this request to all HSPAs registered for teleconsultation service. Interested HSPAs respond with the details of their doctor, consultation fee expected, payment methods and doctor availability to the UHI gateway.

<u>Discover availability of your doctor</u>: In many cases, patients seek a follow-up consultation from their doctors. Patients can search using a health professional ID, UHI gateway will help discover the HSPs where the doctor provides digital consultations. For example, the same doctor may provide digital consults from multiple HSPAs (e.g. a corporate hospital Health Management Information System (HMIS) and an aggregator). The times when the doctor is available, consultation fee from each HSP etc, is presented to the user.

<u>Discover an ambulance</u>: The user can search for the closest ambulance service. The UHI gateway sends this request to all HSPAs registered to provide ambulance services. The HSPAs respond with details of their closest ambulance, service charges, payment methods and estimated time for the ambulance to reach the user.

<u>Discover the closest lab:</u> Users can search for a lab looking for a specific test say in a 10 KM radius. The UHI gateway sends this request to all HSPAs registered to provide lab services in that area. HSPAs respond with details of their lab, price for the test, payment methods and time to complete the test

To prevent any preferential treatments in the search & discovery process, the UHI Network Policy has guidelines in place that all the NPs are required to follow. The HSPAs are responsible for providing accurate and complete information; the Gateways are required to relay the search discovery request to all relevant registered HSPAs without any personal discretion; and the EUAs are required to faithfully display all the results received from the Gateway. In the event that an EUA has a closed group of HSPs on its platform outside of the UHI Network, the EUA is not allowed to prioritise responses from such HSPs only because they are part of the EUAs' closed group. The UHI Network Policy mandates the EUA to treat its HSPs and HSPs from the UHI network on the same level. Further, if an app comes on the UHI network as an EUA but has a closed-group HSPs, it is forbidden from sending a search request to its closed-group HSPs. In order to be able to send requests to its group of HSPs, the EUA has to come onboard as an HSPA on the network.

While the EUA is free to rank the results in any order keeping in mind the preferences of the consumer, the app should clearly publish the criteria used for the same. Further, if the EUA allows HSPs or health facilities to promote their ranking on its platform, it should publish a transparent process by which they can do so as well as clearly indicate the promoted results for the benefit of the user. The EUAs may also provide users the option to sort the results

according to price, proximity, etc. for their convenience. This will allow the users to make their decisions in an easy manner.

An important consideration at this stage is to discourage monopolies by preventing large companies from using their market power to create entry barriers for smaller companies. This tendency of leveraging market power has been observed across sectors, and so, the UHI Network seeks to put in place measures to level the playing field for all network participants by prohibiting non-discriminatory practices. These measures are still under development and will be rolled out in time.

#### Questions for consultation:

- What are the issues (if any) with the search & discovery process?
- What more can be done to make the process of search and discovery fair for EUAs and HSPAs?
- What are some of the ways to level the playing field between start-ups and established network participants to prevent monopolies in the sector?

# (b) Service Booking

A user books a service after they receive the search results of the service they wish to avail. Upon receiving the search results on the EUA, the user can proceed to select the HSP of their choice and confirm their booking (Figure 5). Thereafter, the EUA, in communication with the HSPA, fetches the details of the chosen service including the available dates & timings for the service, price of the service, offers & discounts (if any), terms and conditions, rescheduling & cancellation policies, etc. If the user is satisfied with the terms shared, they confirm the booking and make the payment. It must be noted that while the search & discovery process happens through the Gateway, all the following steps happen directly between the EUA and the HSPA, as seen in the figure below.

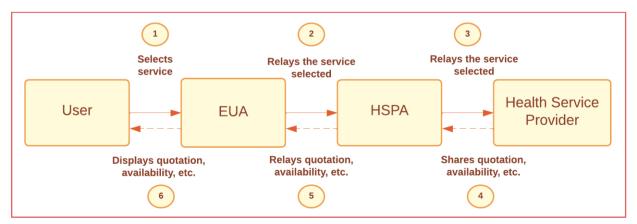


Figure 5: Service Booking process on UHI

As a part of the booking confirmation, the transacting EUA and HSPA enter into a transaction-level contract which lays down terms pertaining to the rights and obligations of both Network Participants in relation to the booking, including settlement terms, rescheduling and

cancellation terms, among others. The transaction-level contract is digitally coded and is executed through a protocol during the confirmation of the booking. The contract, upon being signed by both the Network Participants, is binding on the transacting entities and violation of the same can be a ground for raising a grievance through the proposed UHI Grievance Redressal Mechanism.

To facilitate a smooth transaction process and engender trust in the Network, the UHI Network Policy mandates the participating NPs to maintain accuracy, transparency and fairness in the manner in which information is exchanged within the network. It also requires HSPAs to have clear and transparent policies on refund in the event of cancellations, rescheduling and no-show. These will be displayed prominently on the EUA for the user to make an informed choice. In case there is any breach of these terms, the aggrieved party can raise a grievance, and it will be addressed in a time-bound manner.

#### Questions for Consultation:

- What are the disclosures, in addition to service charge and cancellation & reschedule policy, that should be made to the user at the time of service booking?
- What, if any, are the potential issues with the proposed flow?

## (c) Service Fulfilment

Once a user has booked a service, it is the responsibility of the HSP to deliver the service as per the time, price and other parameters shared with the user during service booking. To fulfil a teleconsultation between a patient side and provider side application, UHI offers WebRTC as a video solution and leverages its message API to establish a video connection between EUA and HSPA. While this is available on the UHI sandbox, platforms are not mandated to use this solution for service fulfilment.

In case there is any rescheduling, cancellation or no-show, the refund to the user should be processed as per the terms and conditions of the booking. Any breach of these terms can be grounds for raising a grievance through the Issue and Grievance Redressal Mechanism of UHI. Upon the completion of the service, the HSPA must report completion of service fulfilment and this would be confirmed by the EUA. The EUA and the HSPA will also be required to send service fulfilment metrics at regular intervals, as decided by NHA. The details of the metrics requirements are under development and will be shared soon.

#### Questions for Consultation:

• In what other ways can UHI ensure interoperability in video calling between the patient side and provider side applications?

## (d) Payment and Settlement

Every transaction is a bilateral agreement between an EUA and HSPA. To avoid conflict on settlement terms and to enable ease of transactions between EUAs and HSPAs, a network-wide settlement flow is being proposed. While the payment and settlement between different participating entities will happen using existing payment technology (e.g. payment gateway, UPI, wallets, etc.) and takes place outside the network, the terms of settlement, settlement advice and the proof of payment will be transmitted using the underlying protocol to cultivate trust in the UHI Network.

There are two payment & settlement flows proposed. Figure 6(a) describes the first flow, wherein the EUA is the collector of the payment. That is, the user makes an online payment to EUA when they book the service. Upon payment, the Reconciliation Service Provider (RSP)<sup>3</sup>, which can be an in-house entity of EUA or a third party entity, will prepare a settlement advice. The RSP will then route it to EUA's Settlement Agency<sup>4</sup> which will then carry out the money transfer to the HSPA's bank account based on the settlement advice received from the RSP. The settlement between the HSPA and the health service providers will happen outside the network as per their terms of contract.

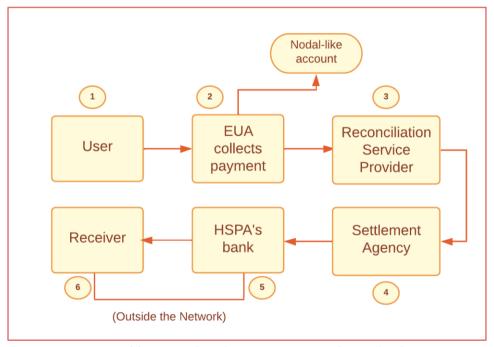


Figure 6(a): Payment & Settlement process on UHI (EUA collects)

Figure 6(b) describes the alternative flow where the HSPA is the collector. Here, the HSPA sends their payment link to EUA as a part of the booking confirmation, and the user pays

<sup>3</sup> **Reconciliation Service Provider (RSP**) is any entity, within or outside the participant boundary, that prepares settlement advice and initiates the transfer of funds between Nodal like accounts through the settlement agency

<sup>&</sup>lt;sup>4</sup> **Settlement Agency** is any RBI regulated body, within or outside the participant boundary, that receives the payment instructions form the RSP and performs the settlement to counterpart bank accounts and provides due confirmation to RSP post settlement

through the link provided by the HSPA. Upon payment, the RSP, which can be an in-house entity of HSPA or a third party entity, will prepare the settlement advice in the manner described above. Thereafter, the RSP will route the advice to HSPA or HSPA's settlement agency which will then settle with the EUA's bank account. Hence, the process will remain identical to Figure 6(a) with the only change of the HSPA collecting the amount as against the EUA.

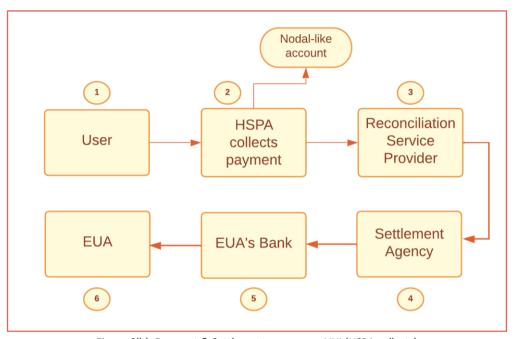


Figure 6(b): Payment & Settlement process on UHI (HSPA collects)

It must be noted that, in both the cases, the collector will be the one settling it as well. That is, in case of services like lab consultation or physical consultation, a user may opt for paying in person. In such cases, the HSPA is often the collector of the amount since they are the provider of the service. In such an event, HSPA will settle the amount with the EUA in the same manner as described above. Further, it is also important to note that when the collector receives payment from the user, the amount will be held in a nodal-like account until the settlement advice is prepared and shared. It is only after receiving the settlement advice the amount is settled as per the terms in the advice. This is to ensure that the payment received is not used for other expenses in the meantime. The UHI Network Agreement will require all NPs to maintain a nodal-like account to transact on the UHI Network. Given the complexities involved in the payments & settlements process, the NHA seeks to mandate one of the NPs (i.e., either EUAs or the HSPAs) to collect and settle the amount for the time being.

## Questions for Consultation:

- Who should perform the collection and settlement process for the time being EUAs or HSPAs? What are the pros and cons associated with each?
- What are the issues in the system proposed by UHI for payments and settlements?
- How can the payments & settlement system be made more robust?

- An important consideration to cultivating trust is to ensure timely settlement:
  - O Should the trigger for settlement event<sup>5</sup> timeline be standardised? That is, after a service is rendered, what should be the time period after which the settlement event can be triggered by the transacting NPs to settle as per the settlement advice?
  - O Should the window for settlement be standardised? That is, after a settlement event is triggered, what should be the timeline within which the transfer of the money takes place?

# (e) Reschedule and Cancellation

Transparency in rescheduling and cancellations is crucial to establish trust in the UHI Network. It is the responsibility of HSPAs to provide clear and comprehensive rescheduling and cancellation policies. These policies are communicated to the transacting EUA as a part of booking confirmation. The UHI Network Policy will mandate HSPAs to outline these policies in a transparent manner, and the EUAs to display the terms accurately and prominently for the user on their application. Any refunds to the user in case of rescheduling or cancellation will be processed on the basis of these terms.

The UHI Policy Network requires HSPAs to disclose their terms with respect to rescheduling and cancellation at the time of service booking confirmation. These terms are also coded into the Transaction-level Contract for easy implementation of the same. It must be noted that UHI does not prescribe a set template for refunds, rescheduling and cancellations, but merely requires the participating HSPAs to have policies in place that will govern these aspects in a transparent manner. These terms are binding and any party can raise a grievance in accordance with the grievance redressal mechanism of UHI in case of a breach of these terms.

#### Questions for consultations:

- What, if any, are the issues in the proposed approach to rescheduling and cancellations?
- What other mechanisms can be put in place to avoid issues related to rescheduling and cancellations from escalating into grievances?

#### (f) Grievance Redressal

A robust grievance redressal mechanism plays a crucial role in building trust in the network. Timely and satisfactory resolution of grievances is an important element that enables the network participants to transact confidently on the network. It is with this objective that a comprehensive grievance redressal mechanism is proposed that allows for a structured and

<sup>&</sup>lt;sup>5</sup> Settlement event is the trigger for initiating settlement. This can be triggered immediately after a service is fulfilled, or say, 48 hours after a service is completed, or 7 days after a service is completed, etc. Once the settlement event is triggered, the transfer of the money is facilitated.

transparent process by which entities can raise and escalate grievances till they are satisfied with the resolution proposed. Figure 7 outlines the proposed grievance redressal mechanism.

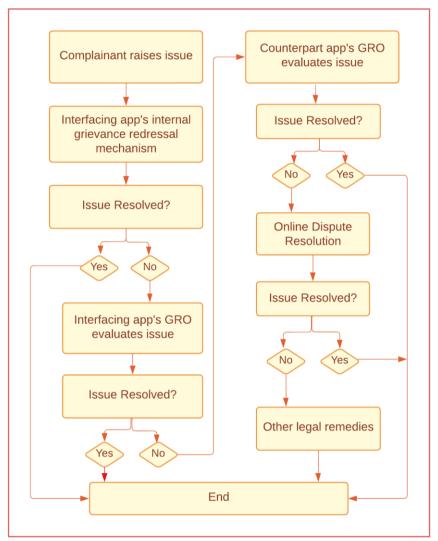


Figure 7: Grievance Redressal process on UHI

The grievance may be raised by the user or the health service provider. The UHI grievance redressal process is has 4 levels:

1) Internal Grievance Redressal Mechanism: When a complaint is raised on the interfacing application,<sup>6</sup> the app generates a ticket for the same. At the level 1 of the Grievance Redressal Mechanism, the NPs will be required to have internal mechanisms such as an FAQ page, automated chat bot, online customer care portal, customer care number, etc. in place to resolve minor grievances at the app level. This will ensure that the grievance redressal system is not choked with relatively minor issues.

15

<sup>&</sup>lt;sup>6</sup> Interfacing app refers to the app that the complainant uses. For a patient, the interfacing app is the EUA; and for a health service provider, the interfacing app is the HSPA.

2) **Resolution through Grievance Redressal Officers (GRO):** If the user is not satisfied with the first level internal grievance redressal mechanism, they can escalate the grievance to the GRO of the interfacing application. The GRO will evaluate if the grievance raised by the complainant falls under their purview, and if so, route it to the relevant team of the application and work towards its resolution. If the GRO concludes that the grievance lies outside their purview, the grievance is forwarded to the counterpart application's GRO who performs a similar evaluation.

To operationalise the grievance redressal mechanism in a seamless manner across the network, the Network Participant Agreement will require all the participating NPs to have a Grievance Redressal Officer who will be the primary point of contact in this system.

- 3) **Resolution through ODR Service Providers:** If neither of the applications claim responsibility for the resolution of the grievance, the users can approach the ODR mechanism, which uses methods such as negotiation, mediation, conciliation, and arbitration between the parties to reach a decision.
- 4) **Resolution through legal remedies:** The final recourse for the complainant is to explore other legal remedies available to them.

#### Questions for Consultation:

- What, if any, are the gaps or issues in the proposed Grievance Redressal mechanism?
- What should the timelines for resolution of grievances at each of the levels Level 1 and Level 2?

#### (g) Miscellaneous

## (i) Metrics

The UHI Network Agreement will entail the metrics that the participating EUAs and the HSPAs will have to share with NHA in an anonymized and aggregated manner to help monitor service fulfilment and gain service insights. The proposed metrics will be important to not only track the growth of the UHI Network but also contribute to the larger aggregate health datasets. The metrics to be collected are still under development and will be released in time.

#### (ii) UHI's Common Taxonomy

Taxonomy refers to a system of classification. Adopting common taxonomy structures in the healthcare ecosystem enables interoperability between different healthcare applications and health management information systems. A common taxonomy will enable efficient and accurate exchange of search requests and responses in an easy and quick manner. In the

<sup>&</sup>lt;sup>7</sup> Counterpart Application refers to the non-interfacing application. For a patient, the HSPA is the counterpart application; and EUA is the counterpart application for a health service provider.

absence of such a structure, communication between different applications will be inefficient and slow since each entity will have a different classification structure in place.

To allow for market players to integrate with the UHI Gateway and carry out transactions with ease, NHA will publish a common taxonomy and a common language that all NPs can adopt to transact seamlessly on the network.

## (iii) Scoring

The UHI Network Policy does not lay out the guidelines for enabling scoring of either health service providers and health facilities or the users. However, the NPs are free to create and implement a scoring mechanism in compliance with the law of the land.

Questions for Consultation (Miscellaneous):

- What kind of data should the UHI dashboard provide to cultivate transparency and trust?
- Should there be network-wide guidelines for scoring? If yes, how should it look?
- What mechanisms should be put in place to avoid/remove fake reviews and scores?
   What other miscellaneous elements should be considered or taken into account, in addition to those that have been mentioned here?

## **Chapter 4: Summary and Conclusion**

Healthcare in India is transforming rapidly. As we grow leaps and bounds in using technology in providing better, improved and intelligent healthcare services to the users, it is important to keep in mind the underlying principles of inclusivity, fairness, transparency, citizencentricity and market participation. These principles underpin a robust healthcare ecosystem that is efficient, affordable, accessible and safe.

It is against this backdrop that this consultation paper seeks to invite comments from stakeholders on the market rules that govern different operational elements of UHI and the ways in which they can be made more robust. Market participation at early stage development of the UHI building block can help prevent future roadblocks in implementation, and help make adoption faster and easier for the market players. Hence, we invite stakeholders to share their valued comments on the questions for consultation and play a role in shaping India's digital healthcare ecosystem.

## **Appendix: Consolidated list of Questions**

# (a) Search and Discovery

## Questions for Consultation:

- What are the issues (if any) with the search & discovery process?
- What more can be done to make the process of search and discovery fair for EUAs and HSPAs?

# (b) Service Booking:

## **Questions for Consultation:**

- What, if any, are the potential issues with the proposed flow?
- What are the disclosures, in addition to service charge and cancellation & reschedule policy, that should be displayed to the user at the time of service booking to ensure fairness and transparency?

## (c) Service Fulfilment:

#### Questions for Consultation:

• In what other ways can UHI ensure interoperability in video calling between the patient side and provider side applications?

## (d) Payment & Settlement:

#### Questions for Consultation:

- Who should perform the collection and settlement process for the time being
   EUAs or HSPAs? What are the pros and cons associated with each?
- What are the issues in the system proposed by UHI for payments and settlements?
- How can the payments & settlement system be made more robust?
- An important consideration to cultivating trust is to ensure timely settlement:
  - O Should the trigger for settlement event<sup>8</sup> timeline be standardised? That is, after a service is rendered, what should be the time period after which the settlement event can be triggered by the transacting NPs to settle as per the settlement advice?

<sup>&</sup>lt;sup>8</sup> Settlement event is the trigger for initiating settlement. This can be triggered immediately after a service is fulfilled, or say, 48 hours after a service is completed, or 7 days after a service is completed, etc. Once the settlement event is triggered, the transfer of the money is facilitated.

O Should the window for settlement be standardised? That is, after a settlement event is triggered, what should be the timeline within which the transfer of the money takes place?

# (e) Reschedule & Cancellation:

## Questions for Consultation:

- What, if any, are the issues in the proposed approach to rescheduling and cancellations?
- What other mechanisms can be put in place to avoid issues related to rescheduling and cancellations from escalating into grievances?

## (f) Grievance Redressal:

## Questions for Consultation:

- What, if any, are the gaps or issues in the proposed Grievance Redressal mechanism?
- What should the timelines for resolution of grievances at each of the levels Level 1 and Level 2?

# (g) Miscellaneous:

# Questions for Consultation:

- What kind of data should the UHI dashboard provide to cultivate transparency and trust?
- Should there be network-wide guidelines for scoring? If yes, how should it look?
- What mechanisms should be put in place to avoid/remove fake reviews and scores?
  - What other miscellaneous elements should be considered or taken into account, in addition to those that have been mentioned here?
- What are some of the ways to level the playing field between start-ups and established network participants in the health-tech sector?