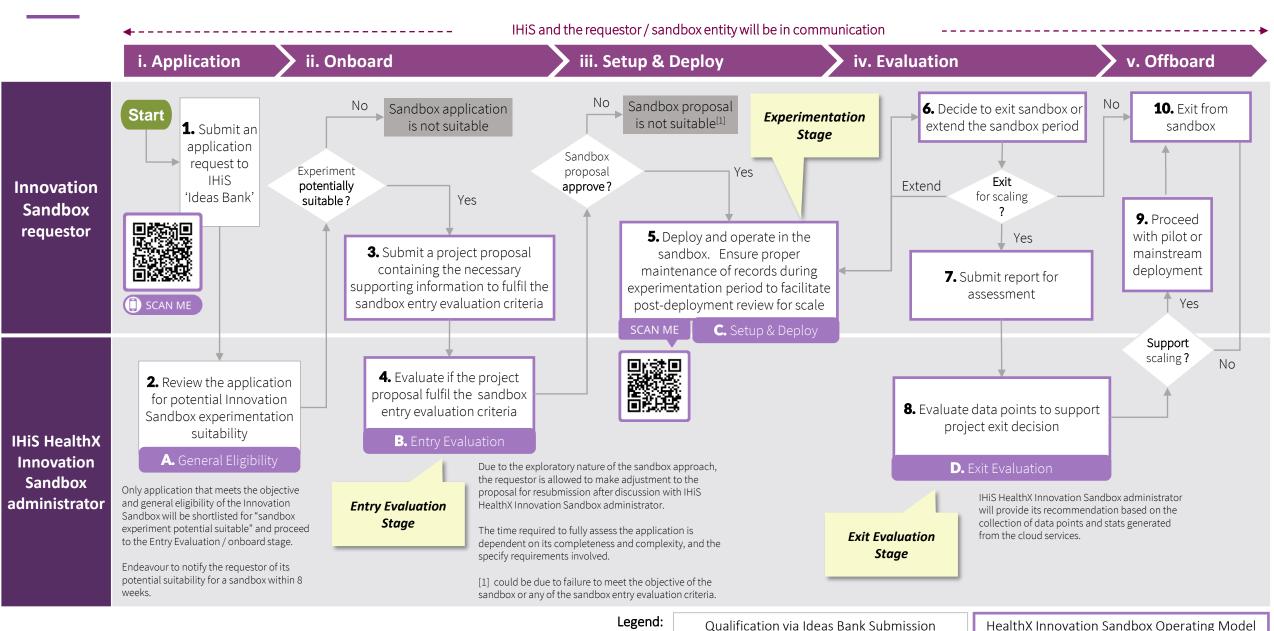
# **HealthX Innovation Sandbox Overall Process**



## Annex A: Objective and eligibility of HealthX Innovation Sandbox

- The **objective of HealthX Innovation Sandbox** is to <u>establish suite of enablers including a conducive policy-ops Innovation Sandbox that is accessible, safe, self-contained and realistic in simulating a production environment that allow innovators to "start fast and prove fast / fail-and-recover fast" on their innovations.</u>
- General Eligibility for shortlisting of "sandbox experiment potential suitable" and proceed to the next stage during qualification process



#### The sandbox

- can leverage on existing Sandbox Enabling Environment in Healthcare Commercial Cloud ("HCC"); and
- ✓ must ensure baseline security & data management and entry & exit requirements with adequate consideration for scale: and
- must have a well-defined and short-term duration (< 9 months from setup to deployment in sandbox environment) for the proposed technology to be launched, within which the consequences of failure can be contained.



The requestor is required to form a team ("Project Team") comprising

- ✓ Preferably at least one (1) interested healthcare provider or institution to formulate the use case(s) to address a problem or bring benefits and define the intended outcomes to unlock potential impact; if not, it will be up to the discretion of the HealthX Innovation Sandbox administrator recommendation; and
- At least one (1) technical personnel with HCC certification to provide the solution architecture diagram and specify the environment requirement for the sandbox experimentation.



Funding and resources intended for the innovation sandbox project should be catered; including

- workloads operating cost for Innovation Sandbox hosting; and
- workloads management in HCC (including setup and operations).

Note: Experimentation on the enhancement of existing products will be subjected to further discussion.

#### **Annex B: Sandbox Entry Evaluation Criteria**

- The requestor must submit a project proposal with the project team composition and project information (including list of Cloud Service
  Provider (CSP) requirements or services required, solution architecture diagram and entry & exit requirement for the project).
- The criteria listed below shall be used for the evaluation of the Sandbox Proposal

<b>Evaluation Areas</b>	Component		Evaluation Criteria
General	1	Team Evaluation	<ul> <li>Locally-based Team Lead to oversee the sandbox project</li> <li>Project Team: Team members' capability or ease of access to relevant business / technical subject matter expert(s) at working level to undertake and coordinate the sandbox implementation during the sandbox period</li> </ul>
	2	Pre-requisites	Availability of technical personnel for solutioning and business sponsorship for funding the experimentation
Biz - Tech	3	Stakeholders experience	<ul> <li>Specify what is the         <ul> <li>intended benefits to innovate and fulfil the target users' needs</li> <li>potential impact generated from the solution and use case(s) for the target users</li> <li>potential scalability of the care model and solution beyond the sandbox period for wider adoption in Singapore (e.g., within its own organisation or to other healthcare services)</li> <li>entry and exit requirement for the project</li> </ul> </li> </ul>
	4	Technology Alignment	<ul> <li>Abide by a set of "Terms of Use" (TOU) [1] to ensure baseline security and data management</li> <li>Leverage on existing Sandbox Enabling Environment (host in Healthcare Commercial Cloud platform) [2]</li> <li>Solution architecture diagram which indicates all the requirements or services required (e.g., which type of compartment and services in HCC Border Control Services (BCS) and HCC Compliance Services (CS))</li> </ul>
Implementation	5	Project Feasibility	<ul> <li>Short term nature (&lt; 9 months) of sandbox project implementation plan (quick and fast development)</li> <li>Budget is catered or ease of access to gain funding</li> </ul>

<sup>[1]</sup> Please refer to the FAQ page in IHiS HealthX Innovation Sandbox portal for the Terms of Use (TOU).

<sup>[2]</sup> Healthcare Commercial Cloud (HCC) is a commercial cloud platform managed by IHiS with customized infrastructure to support healthcare staff and organisations. HCC platform is constructed upon the leading Cloud Service Providers (CSPs), i.e., Microsoft Azure and AWS for start. It enables Healthcare applications to consume securely a broad range of cloud infrastructure and services offered by the CSPs.

HCC Foundation Training is offered for free to help subscribers, project managers, and vendors demonstrate the ability to select and use the appropriate HCC services to host their systems and applications on HCC. To attend the HCC Foundation Training course, you may register for a free Udemy account at <a href="https://www.udemy.com">www.udemy.com</a> and provide a valid Udemy account email address during course registration. Note that your Udemy email address is case sensitive. You will receive the invitations via email within 3 working days.

<sup>✓</sup> HCC Foundation Training Course
✓ HCC Foundation Certification Exam

### Annex C: Process to setup & deploy workloads in Sandbox environment

#### **Project Team and HealthX Innovation Sandbox (HX-IS) administrator**











 Submit Account ID request form published on HealthX Innovation Sandbox portal. Acknowledgement to the Terms of Use. 2. Understand what workload is required by Project Team and HX-IS administrator will raise the Service Requests (SRs) to relevant HCC teams

#### 3. <u>Handover workload account ID to</u> Project Team

Average turnaround time is within 10 working days for the SRs and handover the necessary permissions, service access to Project Team to kick start the workload deployment and management

#### **Project Team**







- 7. Decide whether to extend or proceed to scale the newly validated ideas and technology under experimentation in production using the exit evaluation (successful outcome) criteria or stop the project
- 6. Monitor and track workload performance to make informed decisions

Review to adjust the activities and refine the prototype based on business model to be tested 5. Project Team to verify and acknowledge the HCC billings

such as the one-time onboarding fees, monthly cost for Workload, compliance fee and platform fee) from HCC Product Management team (Business Office). Subsequent month billing is estimated based on previous month spent

4. Project Team can start to access the service offering and deploy the prototype solution on the sandbox environment

### Annex D: Extending or Exiting the Sandbox

- Project Team can decide to exit sandbox or extend the sandbox period at its own discretion.
- Upon exiting, the Project Team must submit a report to IHiS HealthX Innovation Sandbox administrator @ ihis.co-lab@ihis.com.sg within 1
  month from the expiry of the sandbox period.
- IHiS HealthX Innovation Sandbox administrator will evaluate the data points and provide its recommendation to support project exit decision based on stats generated from the cloud services (e.g., number of users and usage, transactions supported)
- Project team will "graduate" from the sandbox and may proceed to scale the technology under experimentation in production, provided that:
  - ✓ the Project Team has provided an acceptable exit and transition strategy<sup>[1]</sup>;
  - the sandbox has achieved successful outcome in actualizing its goal and objective (i.e., fulfil the entry and exit requirement of the project).
- At the end of the sandbox period, the Project Team must settle the HCC billings, teardown the workloads, de-activate the account(s) and
  exit from the sandbox.
- For the purpose of transparency, relevant information of all approved sandbox projects such as the name of the requestors, the start and end dates of the sandbox experimentation, experimentation conclusion and exit outcome will be included in IHiS documentation repository as part of the Sandbox lessons learnt and may be shared with wider innovation community or published on IHiS HealthX Innovation Sandbox portal.

<sup>[1]</sup> Review and approval by appropriate forums will be required as exemption from Solution Review Board (SRB) would only be for the purpose of experimentation conducted in Sandbox. Pending for policy approval.