# **Managing Risks in Analytics Projects** Development of the SingHealth Access Restricted Cluster (ARC) to Facilitate External Collaborations

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Privacy and security have always been key considerations in the



 $\checkmark$  To protect the privacy and ensure the security of personal,

management of risks associated with the usage of clinical and operational data for the improvement of health services.

To effectively generate insights for the improvement of patient care from data in public healthcare institutions, strong collaborative ties need to be forged with academic and industry partners who are leaders in the field of healthcare analytics.



Preliminary Research

- Interviews and literature survey with existing analytics partners
- Evaluations of access-restricted ("sandbox") systems

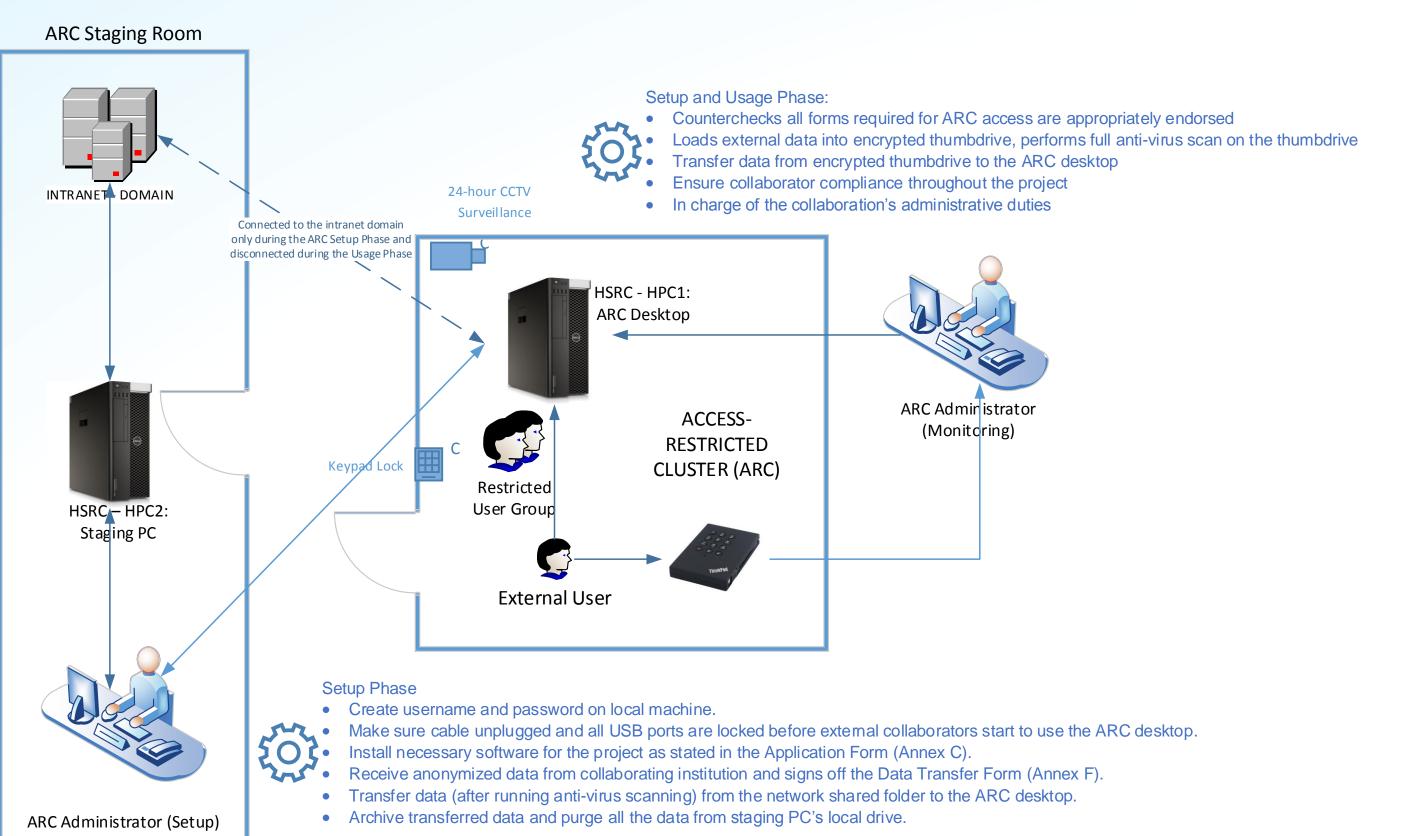
Design of the ARC data management Validation of Framework

- clinical and operational data under the care of SingHealth, and;
- To <u>facilitate collaborations</u> with external industry and academic partners in leveraging healthcare analytics for the improvement of patient care.



- ✓ Technical The SingHealth Access Restricted Cluster (ARC) within the SingHealth Health Services Research Centre (HSRC), and;
  - Policy The SingHealth Research Data Management Policy for the usage of the SingHealth ARC.

### **SETUP AND USAGE PHASE**



#### framework

Development of the SingHealth

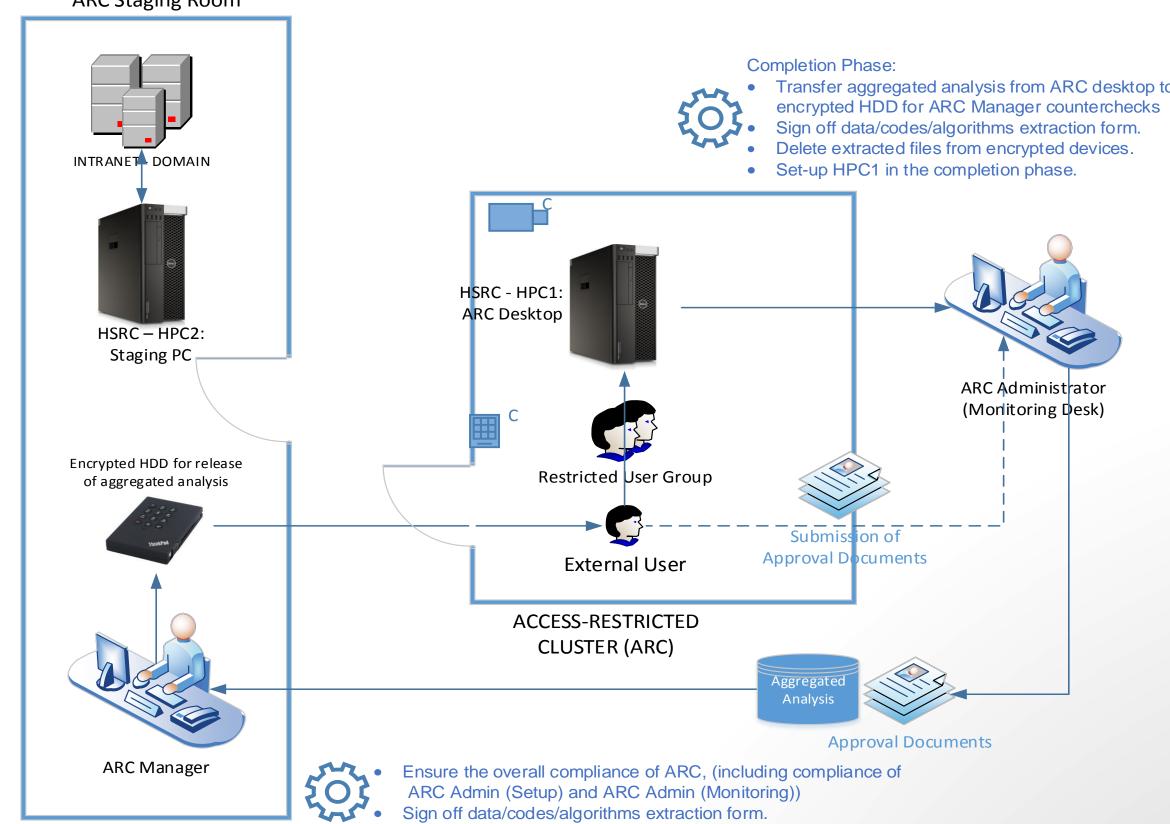
- ARC infrastructural setup and workflows
- Research Data Management Policy(RDMP)
- Pilot case study involving an external collaborator
- Reviewed by MOHH Group Internal Audit.



 Secured and monitored environment with at least two layers of controlled access. 2. No electronic data entry devices to be operated within the ARC.

### **COMPLETION PHASE**

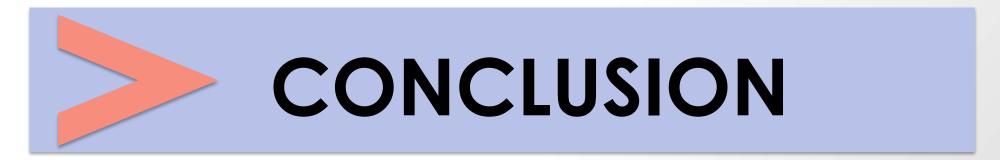
ARC Staging Room



Core characteristics of The SingHealth Access Restricted Cluster (ARC) :

3. At least two layers of integrity and security checks for data transfer processes.

4. Conformance to the Personal Data Protection Act (2012) with confidentiality of information to be kept by all parties.



Manage data sharing risks in external collaborations
Encourage responsible data management

Facilitate high quality analytics outcomes

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