



## Overcoming Logistics Hurdles – Strategies for Meeting Supply Chain Challenges for Staff RRT

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### Introduction

- Sengkang General Hospital (SKH) made a change to our Rostered Routine Testing (RRT) modality for all staff, at the last half of 2021, as regular testing of Healthcare Workers (HCWs) was mandated by MOH.
- We implemented a new protocol of conducting unsupervised Antigen Rapid Test (ART) twice a week from September 2021.
- The change significantly reduced the workload for the lab staff. (No PCR testing)

Day	Date	Staff	Resulted	Pos	Indet	Neg
Wednesday	11-Aug-21	1,370	1,370	0	0	1,370
Thursday	12-Aug-21	1,618	1,618	0	0	1,618
Friday	13-Aug-21	1,409	1,409	0	0	1,409
Wednesday	25-Aug-21	1,304	1,304	0	0	1,303
Thursday	26-Aug-21	1,714	1,714	0	0	1,714
Friday	27-Aug-21	1,456	1,456	0	0	1,456

Number of Staff PCR tests processed by SKH Lab

### Background

- ART-RRT presented its own set of challenges, including frequent shift in brands and disparities in packaging.
  - On-site training were necessary to cater to more elderly staff and training video needed to be produced for every change of brand.
  - Packaging disparities posed difficulties in both monitoring and distributing processes.
- There was a need for a systematic management of the ART kits, to ensure accountability and consistency in distribution, to minimize over ordering and wastage.
- During the initial transition to the ART-RRT modality, there was a lack of comprehensive oversight. After the situation had stabilized, an accountability audit was conducted for the distribution of ART kits in late October 2021, encompassing the initial two rounds of distribution.
- Audit revealed that the issuance was not based on HR Data but on verbal communication from department to lab. There was no proper documentation. Some divisions and departments were found to have large numbers of excess ART kits.\*



### Methodology

- Phases of operations were standardized for consistency. The process was repeated for every procurement / distribution cycle.

Process Name	Phases of Operations			
	Week 1	Week 2	Week 3	Week 4
1. Requirement Gathering				
2. Procurement				
3. Delivery and Stocking				
4. Preparation and distribution to department				
5. Repackaging by Department and distribution to staff				

#### 1. Requirement Gathering

Division	Department	Headcount	Test Kits Required (10 kits per pax)
Division 01	Department 01-01	3	30
	Department 01-14	74	740
	Department 01-15	3	30
	Department 01-16	62	620
	Department 01-17	115	1150
<b>Division 01 Total</b>		<b>473</b>	<b>4730</b>
Division 12			
	Department 12-02	2	20
	Department 12-03	23	230
	Department 12-04	18	180
	Department 12-05	11	110
	Department 12-28	72	720
	Department 12-29	6	60
	Department 12-30	4	40
<b>Division 12 Total</b>		<b>434</b>	<b>4340</b>
<b>Grand Total</b>		<b>4038</b>	<b>40380</b>

SKH Headcount

S/N	Dept	Headcount	Test Kits Required (10 kits per pax)
1	Service Partner 1	296	2960
2	Service Partner 2	168	1680
3	Service Partner 3	55	550
4	Service Partner 4	180	1800
5	Service Partner 5	44	440
19	Service Partner 19	76	760
20	Service Partner 20	119	1190
<b>TOTAL</b>		<b>1157</b>	<b>11570</b>

Service Partner Headcount

#### 2 & 3. Procurement, Delivery and Stocking



#### 4. Preparation and distribution to department

Division / Department	Staff ART RRT
Division 01	464
Division 02	28
Division 03	95
Division 04	372
Division 05	400
Division 06	90
Department 06-01	62
Department 06-02	10
Department 06-03	10
Department 06-04	4
Department 06-05	4
Division 07	90
Division 08	46
Division 09	1932
Division 10	439
<b>Grand Total</b>	<b>4029</b>

Laboratory distributed the ART kits (rounded up) based on the number of headcount.

i.e.  
Division 01: 464 staff X 10 kits = 4640 kits  
4640 kits / 25 kits per box = 185.6 boxes

Division 01 would be given **186 boxes**

Point of Contact (POC) to sign taking over form for collection



#### 5. Repackaging by department and distribution to staff



Department repackaged to packs of 10 kits before distributing to staff (1 month worth)

### Results

- A streamlined, neat and consistent process where staff were clear on what they were supposed to do, and accountability for stocks ordered and distributed was achieved.

### Sustainability and Conclusion

- The principle of shared responsibilities and accountability helped achieve a sustainable process for distribution, and non-wastage of ART kits.

ART Kit Distribution Audit (SKH ART-RRT)							
Divisions / Departments	ART Kits Issued		HR DATA		AUDIT		Remarks
	1st Distribution (No. of Kits) (a)	2nd Distribution (No. of Kits) (b)	No. of Staff (c)	Supposed No. of Distribution (d) 9sets X (c)	Excess issued for 1st Distribution (a) - (d)	Excess issued for 2nd Distribution (b) - (d)	
Division A	2100	2100	<b>Total: 228</b>	2052	48	48	Frequent movement of doctors hence difficult to account for every ART Kit.
Dept A	2400	2500	<b>Total: 244</b>	2196	204	304	Requested additional to standby for those who needed daily ART.
Division B	4350	4350	<b>Total: 313</b>	2817	1533	1533	Division B drew for all departments under them. However, number of staff provided by HR did not include certain departments which were counted separately.

\* A process was developed to standardize the phases of kit distribution to minimize over ordering and wastage.