

## **Project Title**

Ready? Go! Supporting the Deployment of Hospital Decontamination Station (HDS)  
Teams

## **Project Lead and Members**

- Lau Ming Yan
- Tan Yeong Horng
- R. Ponampalam

## **Organisation(s) Involved**

Singapore General Hospital

## **Lessons Learnt**

Key lessons learnt/ challenges experienced specific to this project, tips/ pointers for others who wish to embark on a similar project.

## **Project Category**

Safety, Process Improvement

## **Keywords**

Process Improvement, Hospital Decontamination Station , Civil Emergency, Safety, Space Constraints, Reporting & Organisation, Logistics Control, Reduce Turnaround Time, Reduce Set Up Time, Space Optimisation, Decontamination Suits Organisation, Suitable Support Facilities, Operational Feasibility, Clear Communication, Teamwork, Singapore General Hospital

## **Name and Email of Project Contact Person(s)**

Name: Lau Ming Yan (SingHealth - SGH)

Email: lau.ming.yan@singhealth.com.sg



Singapore Healthcare Management 2018

# READY? GO!

## Supporting the deployment of Hospital Decontamination Station (HDS) Teams

Lau Ming Yan<sup>1</sup>, Tan Yeong Horng<sup>1</sup>, R. Ponampalam<sup>2</sup>

<sup>1</sup>Preparedness & Response, Division of Organisation Planning & Performance,

<sup>2</sup>Department of Emergency Medicine, Division of Medicine



### Aim

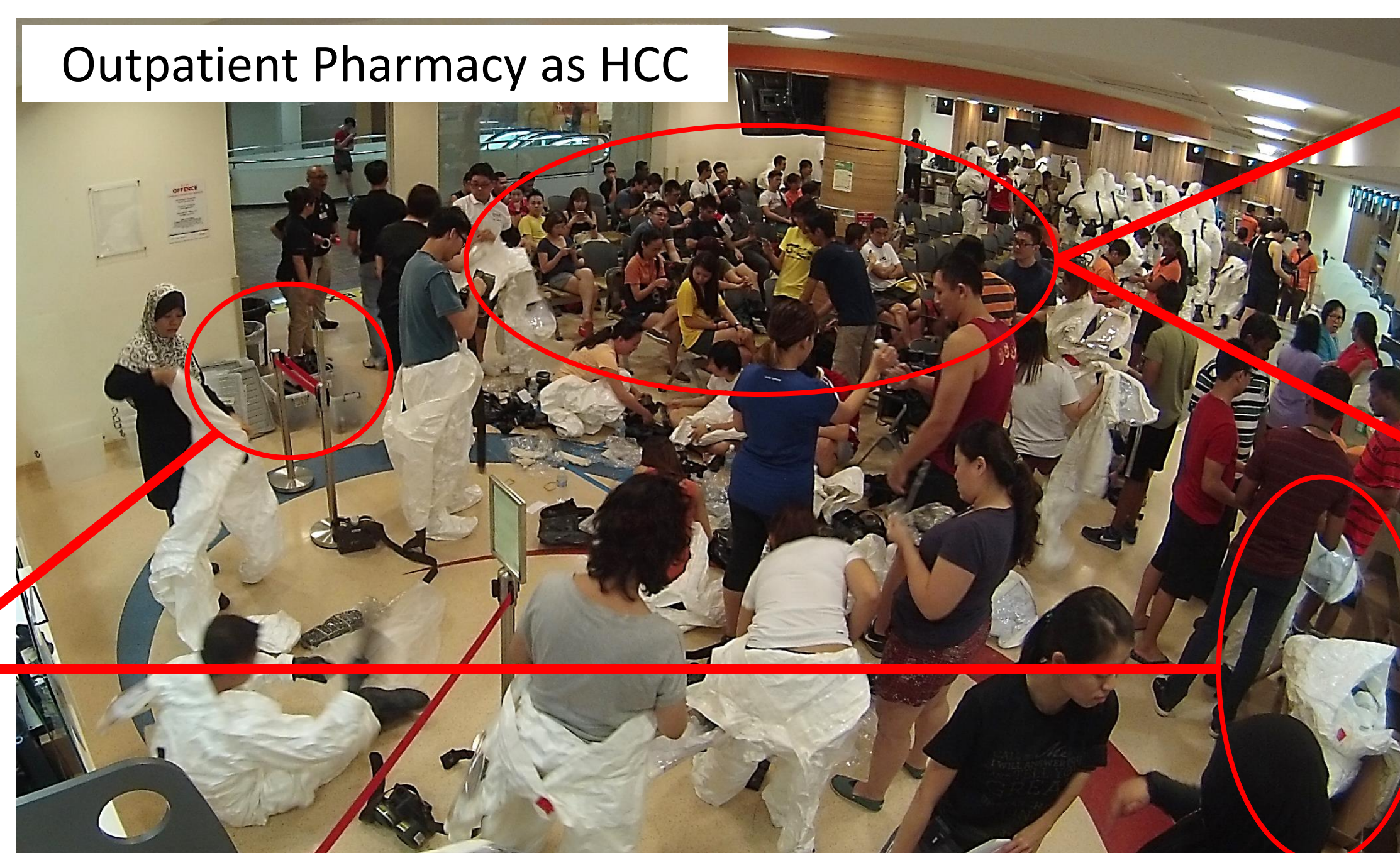
During Civil Emergency (CE), hospitals are expected to swiftly ramp up resources to manage a sudden surge of casualties. If the CE involves hazardous materials and/or radiation dispersal device, HDS is the hospital's first line of defence response, to ensure patient, healthcare worker and public safety and prevent healthcare facility shutdown or evacuation. The previous HDS Coordination Centre (HCC), at SGH Outpatient Pharmacy, used to organise and deploy HDS teams was unable to support the increased number of HDS teams. The project aims to explore suitable existing facilities for the increased number of HDS teams during CE amidst operational and space constraints in SGH.

### Methodology

The requirements for identifying suitable existing support facilities for HDS teams are based on observed benefit and challenges of the previous HCC:

Requirements	
<p>Venue dual functionality – Minimal turnaround &amp; setup time to transform between peacetime &amp; CE</p>	<p>Space to hold at least three HDS Teams</p>
<p>Ease of logistic flow &amp; operations</p>	<p>Proximity to HDS</p>

1. Turnaround time of 30 to 45 minutes
2. No dedicated logistics storage space to facilitate logistics control



3. One holding and rest area for both deployed & waiting HDS members
4. Limited holding capacity of two teams
5. Clear line of sight of leaders

### Results

To meet the consideration factors, with support from various stakeholders, the HCC was reorganised into three locations:

#### 1. Reporting & Organisation - HCC (Medical Student Centre Conference Room)



##### Improvements

- ✓ Minimal turnaround & setup time required for HCC as it is a staff facility for tutorials and meetings
- ✓ Sufficient space to hold three HDS teams fittingly
- ✓ Proximity to HDS
- ✓ Conducive environment for holding briefs / debriefs & updates on situation with in-built projector and microphones

#### 2. Logistics Control – HDS Locker Area (previous Office space)



##### Improvements

- ✓ Readily organised decontamination suits in HDS lockers
- ✓ Orderly and rapid distribution of decontamination suits to HDS members
- ✓ Reduced overall logistics movement
- ✓ Dedicated space to don decontamination suits

#### 3. Post-deployment Rest – HDS Redeployment Centre (Pre-admission Centre)



##### Improvements

- ✓ Sufficient space to hold three HDS teams fittingly
- ✓ Clear segregation between deployed and HDS members awaiting for deployment
- ✓ Dedicated rest area with basic amenities catering to welfare of HDS teams between deployments

On 30 September 2017, the three support facilities were tested in a full-troop deployment exercise after updates of the deployment workflow, three workshops and one mass briefing were conducted. As compared to previous exercises with Outpatient Pharmacy as HCC, these were the overall improvements:

- ✓ 23 minutes (21%) reduction between first HDS Leader arrival and deployment of first HDS team, translated to earlier HDS operations at full capacity to manage casualties.
- ✓ Overall there was increased HDS members' satisfaction with the organisation of HDS operations on a scale of 1 (unsatisfactory) to 5 (Excellent):
  - ✓ 100% satisfaction for the organisation of HDS teams.
  - ✓ 11% increase (from 7% to 18%) in number of participants rated that there was excellent organisation of HDS operations.

The reorganisation of the HCC into three locations has its merits and was made possible with strong teamwork and clear communications amongst HDS members for seamless coordination. Regular exercises will be conducted for HDS members to practice through the updated workflows and continuously seek areas for improvements.

### Conclusion

Civil emergency plans must be developed, tested and reviewed during peacetime to ensure operational feasibility. Opportunities for improvement exist despite established challenges like space constraints.