

## VMS UPGRADE TO REFLECT PATIENT VACCINATION STATUS REN CI COMMUNITY HOSPITAL

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### Introduction/Background

MOH had released a directive that only allows patients/residents who are fully vaccinated / medically ineligible to have visitors. Clinical evidence showed that allowing visitors for partially vaccinated / unvaccinated (PV/UV) patients/residents increases the risk of infection spread, thus, visitation was not allowed. Triage Ambassadors (TA) had no overview if patients/residents were vaccinated and Nursing had no overview on the visiting appointments made. Pre-intervention, the clinical system had inconsistent/inaccurate information on patient's vaccination status (40 to 60%) and the information cannot be pulled over to VMS to restrict at system level thus staff had to track the information and visitor movements manually.

### Goal/Objective

To increase the number of Patients with accurate vaccination status & number of Patient with Vaccination Status Updated from 60% & 40% respectively to 100% in CH within 1 month.

### Problem Analysis

#### Data

- Number of Patient/Resident with Accurate Vaccination status in CH (~60%)
- Number of Patient/Residents with Vaccination Status Updated in CH (~40%)

#### Feedback from Triage Team

- No overview of patient's vaccination status, TAs would not be able to gatekeep patients the NOKs are visiting.
- Manual vaccination tracking list is not complete and sometimes inaccurate.

#### Feedback from Nursing

- Unable to keep track or stop visitors when they arrive at the wards.
- Might lead to complaints from NOKs.

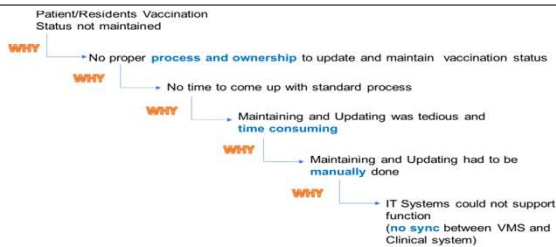
#### System Configurations

- Current clinical system had no information on patient's vaccination status and the information cannot be pulled over to VMS to restrict at system-level, thus staff had to track the information and visitor movements manually.

#### Clinical Evidence

- Based on clinical evidence, allowing visitors for PV/UV patients increases the risk of infection spread.

**5 Whys, was used to identify root causes and implement appropriate interventions.**



### Implementation Plan

ROOT CAUSE	INTERVENTION	TIMELINE	PDCA
Tracking patient vaccination status is a manual process	<ul style="list-style-type: none"> <li>• Leverage on clinical system to have the option to input vaccination status</li> <li>• Perform a one time exercise to input all existing patient/residents vaccination status in the system</li> </ul>	2 weeks	<ul style="list-style-type: none"> <li>• Monitor upgraded system is functioning well</li> <li>• Send feedback from ward staff if fields are easy to update</li> </ul>
VMS and clinical systems do not sync	<ul style="list-style-type: none"> <li>• Upgrade VMS system to auto pull patient/resident vaccination status from clinical system</li> <li>• Educate TAs on verifying vaccination status on VMS</li> </ul>	2 weeks	<ul style="list-style-type: none"> <li>• Monitor upgraded system is functioning well</li> <li>• Send feedback from TAs if they have challenges using system</li> </ul>
No proper process to regularly update Vaccination Status	<ul style="list-style-type: none"> <li>• Emplace a process to ensure vaccination status is updated for all new admissions</li> </ul>	1 week	<ul style="list-style-type: none"> <li>• Monitor staff compliance to the new workflow</li> </ul>

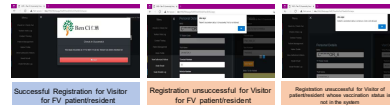
### Benefits/Results

- ✓ Number of patients with accurate and updated vaccination status increased significantly. The process improvement also saved manhours. Feedback gathered from Nursing staff and TAs were also positive showing that the tasks were easier to accomplish.

Patient Vaccination Status



- ✓ Prior to the system upgrade in the clinical systems and VMS, all the vaccination status verification had to be done manually by staff. System upgrade clearly showed if the visitor is allowed or denied visiting the patient. If the vaccination status is not updated, it would also prompt for TA to check with Nurse-in-charge.



- ✓ Positive Feedback

#### Nursing

- Do not need to spend time verifying if visitors are visiting patients/residents who are vaccinated.
- Can focus on clinical work
- Do not have to keep maintaining manual vaccination list

#### TAs

- Do not need to keep verifying patient's/resident's vaccination status on a manual list which may not be accurate or contacting ward nurse
- Easier to refer to vaccination status on VMS

1. Main impact of the project was the **Prevention of Spread of Covid'19 clusters** resulting from visitations.
2. **Time Saving** was also a key impact for Nursing and TA teams

#### Nursing team

- Focus more on patient care rather than verifying if visiting is allowed
- 1 CH/CSU ward per day - Average 13 Visitor with 3 minutes checking per visitor
- **Total Time saved for nursing staff for 1 ward per day : 39 minutes**

#### TAs

- Did not have backlog at Triage counter because of the verifications that had to be done. Faster queuing time for other visitors
- Average 10 calls per day for CH/CSU with 3 minutes call time per verification
- **Total time saved for triage staff to verify per day: 30 minutes**

### Sustainability & Reflections

- ✓ Perform **monthly checks** with Nursing if all new admission vaccination status is being updated
- ✓ Feedback from TAs on the volume of patients with no updates in patient vaccination status
- ✓ Spread the efforts to NHs

#### PROBLEMS ENCOUNTERED

1. Staff were not familiar with the upgraded system.
2. Staff were not familiar with the new workflow to verify patient/residents vaccinations status.
3. Limitations on system when upgrade was being done.
4. Staff was unsure who should update the patient's vaccination status.
5. Clinical system in CH/CSU and NHs were different so configurations done had to be unique to the system if spread was done to standardize the system.

#### LESSONS LEARNT

All stakeholders must be updated on the updates before go live of the workflow and upgraded systems.

#### CONCLUSION

The upgraded VMS system made verification of vaccination status streamlined and efficient for Nursing and TA teams. Compliance to MOH directive was achieved.