



Singapore Healthcare Management 2024

Keeping our patient's Next of Kin at ease

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Introduction/ Problem

Next of Kins (NOKs) of patients admitted to the Emergency Department (ED) consistently experience anxiety regarding the well-being of their loved ones.

Due to the high bed waiting time and fuelled by their anxieties, NOKs will frequently seek updates from ED staff on beds availability, leading to disruptions to ED Clinicians, Nurses and PSAs who are already overwhelmed with high patient workload. This in turn negatively impacts their Joy@Work and adds on unnecessary pressure to the already highly stressful environment in ED.

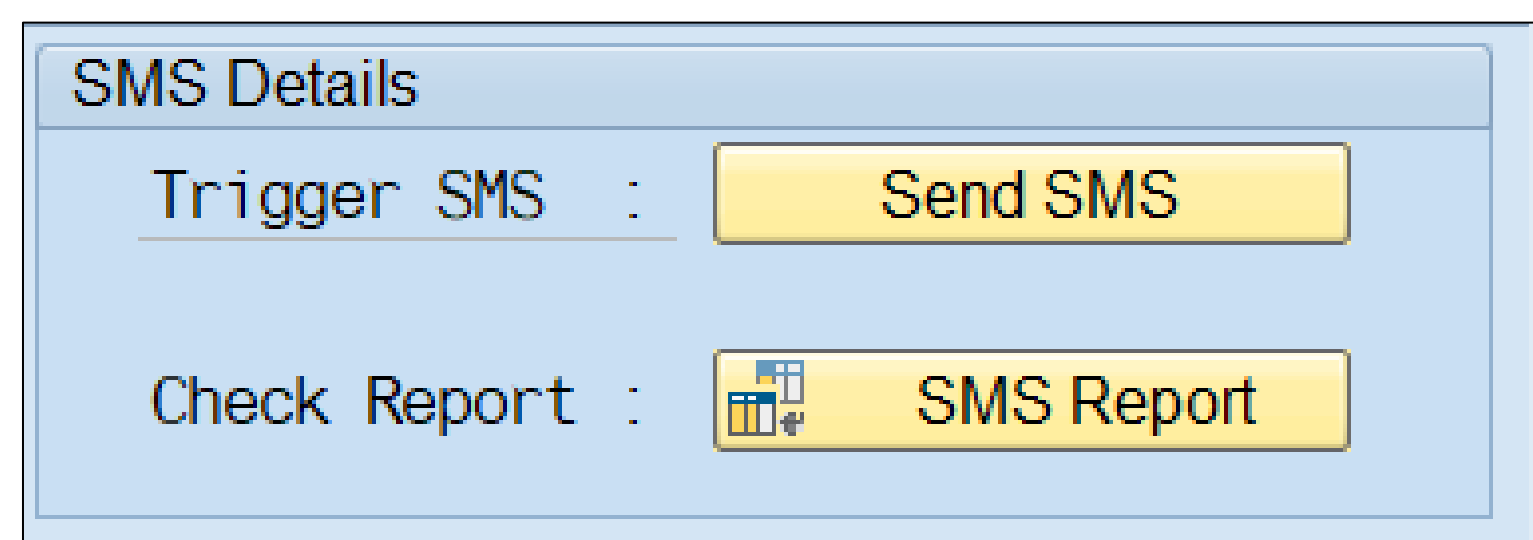
This project thus aimed to alleviate this issue and improve staff's satisfaction by enhancing our SAP system, tapping on the SMS function within the system to send out timely SMS updates to NOKs upon patient admission in the ED and their subsequent transfers and arrival to the ward.

Methodology

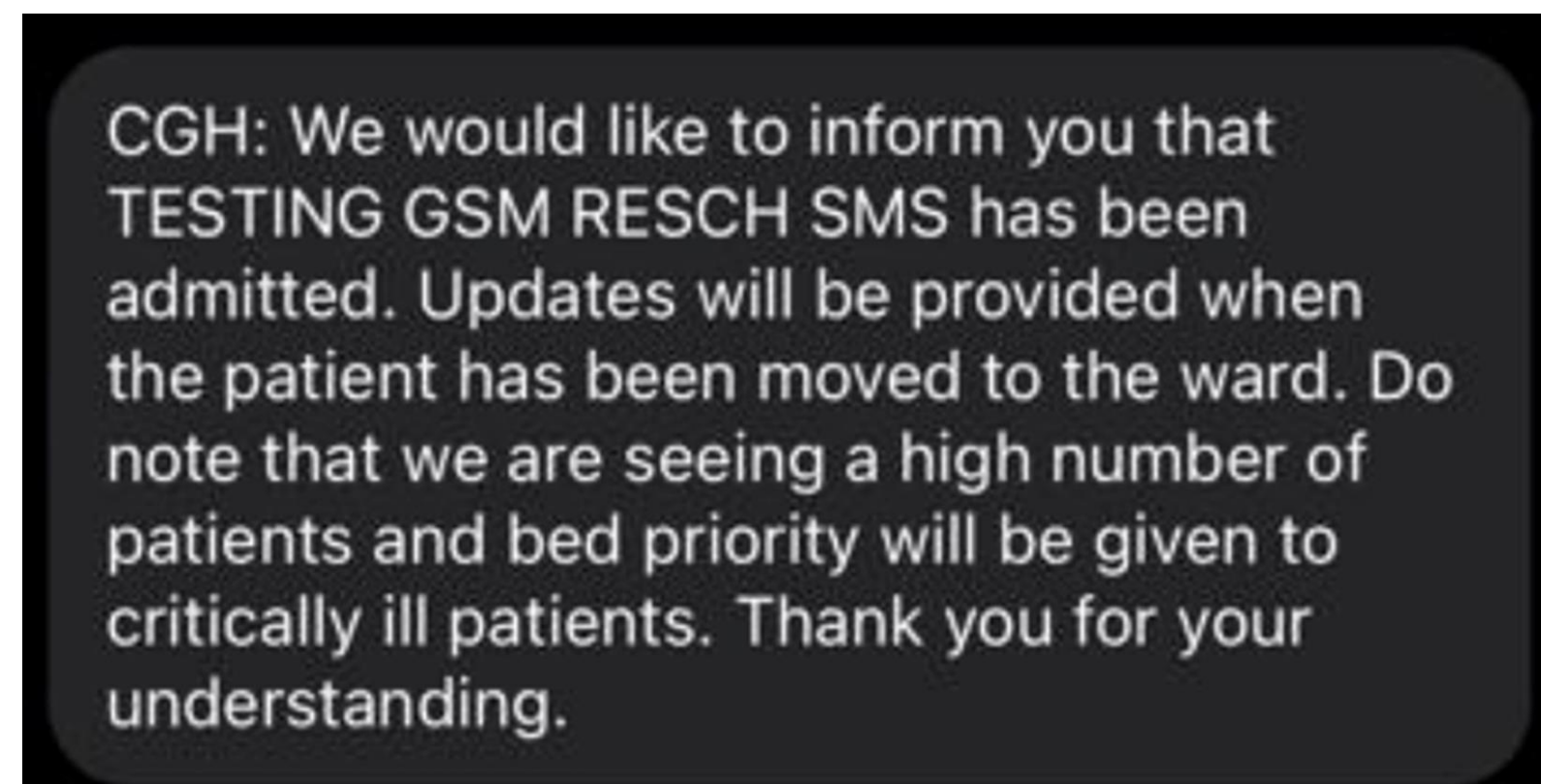
Leveraging on the SMS features in SAP, ED Operations and Inpatient Operations collaborated with Synapxe to augment SAP's capabilities.

This enhancement equips SAP with the ability to automatically dispatch notifications to patient's NOKs whenever there is an update on patient's status. Messages are triggered twice:

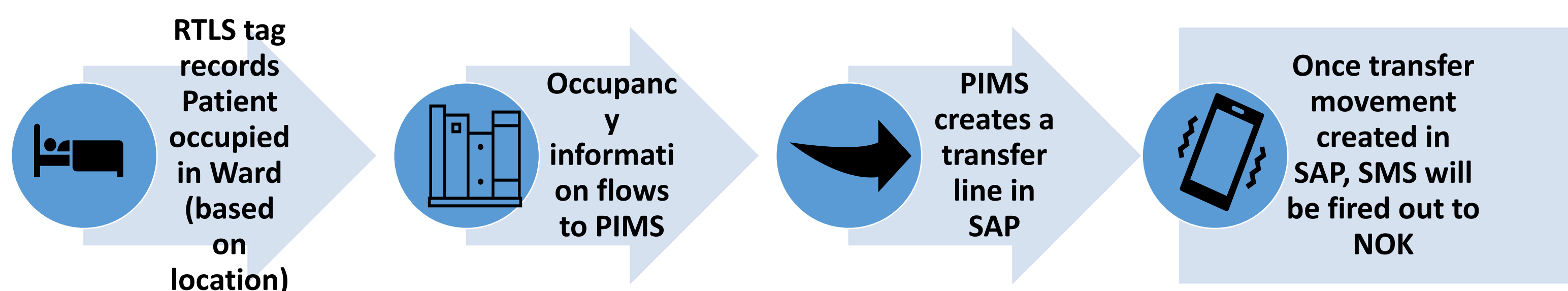
First, when the patient is admitted in ED, and the admission process is done by ED Patient Service Associates (PSAs) in SAP.



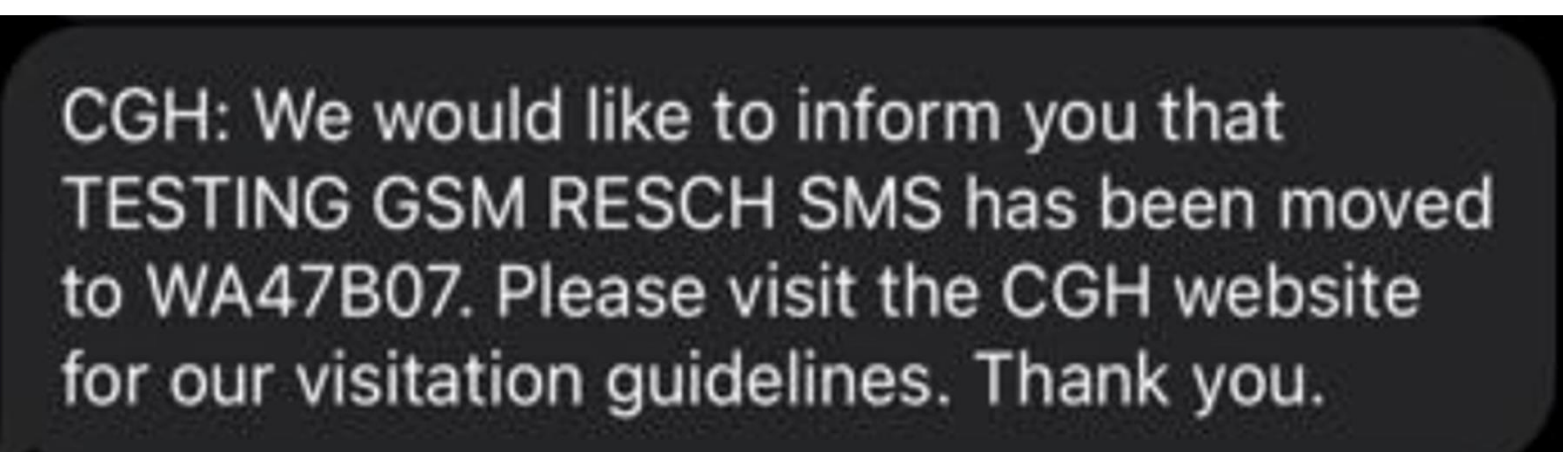
Once admission PSA verifies the NOK's phone number, she will click on this triggers SMS "Send SMS" button. This will cause SAP to fire out the first SMS (as shown on right) to the registered NOK's number.



Second SMS will be fired out when the patient arrives in the ward after a bed is booked for the patient. How this works:



Sample picture (as shown on the right) of the second SMS which NOKs will receive when their loved ones is occupied in the ward.

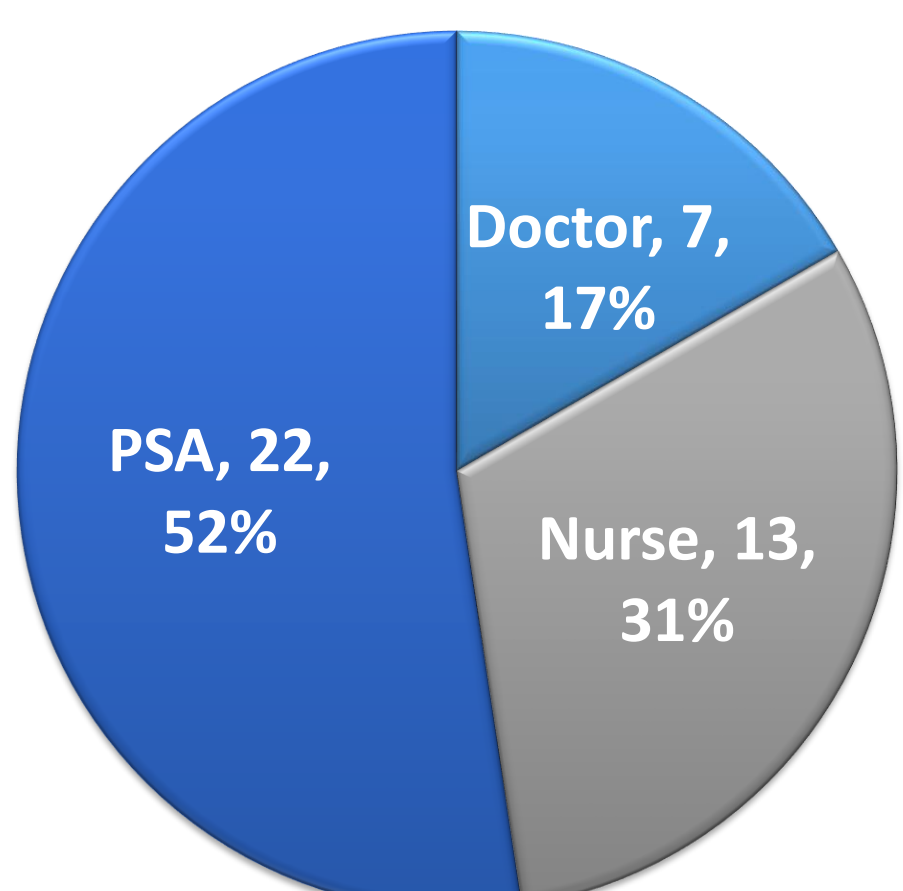


A few rounds of user's acceptance test (UAT) sessions were conducted involving Synapxe, Inpatient Ops and ED Ops, to test the SMS function and if it works as intended.

In addition, different scenarios where SMSes should not be triggered were also taken into consideration. Example of such scenarios includes if patient is a CAT A patient, NOKs should not be notified of their admission and hospital stay. These special scenarios were also tested during UAT sessions to ensure robustness of the system.

Results

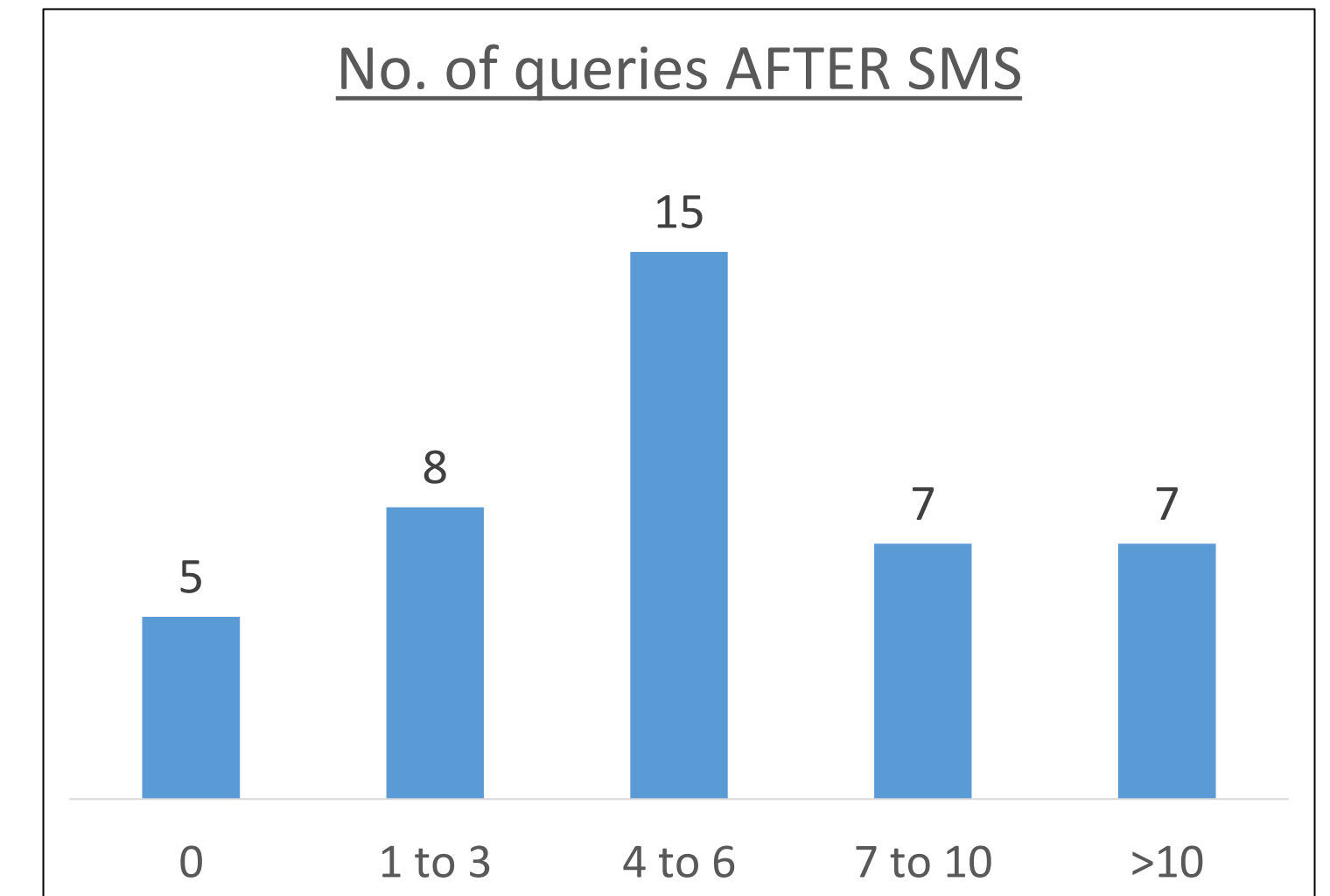
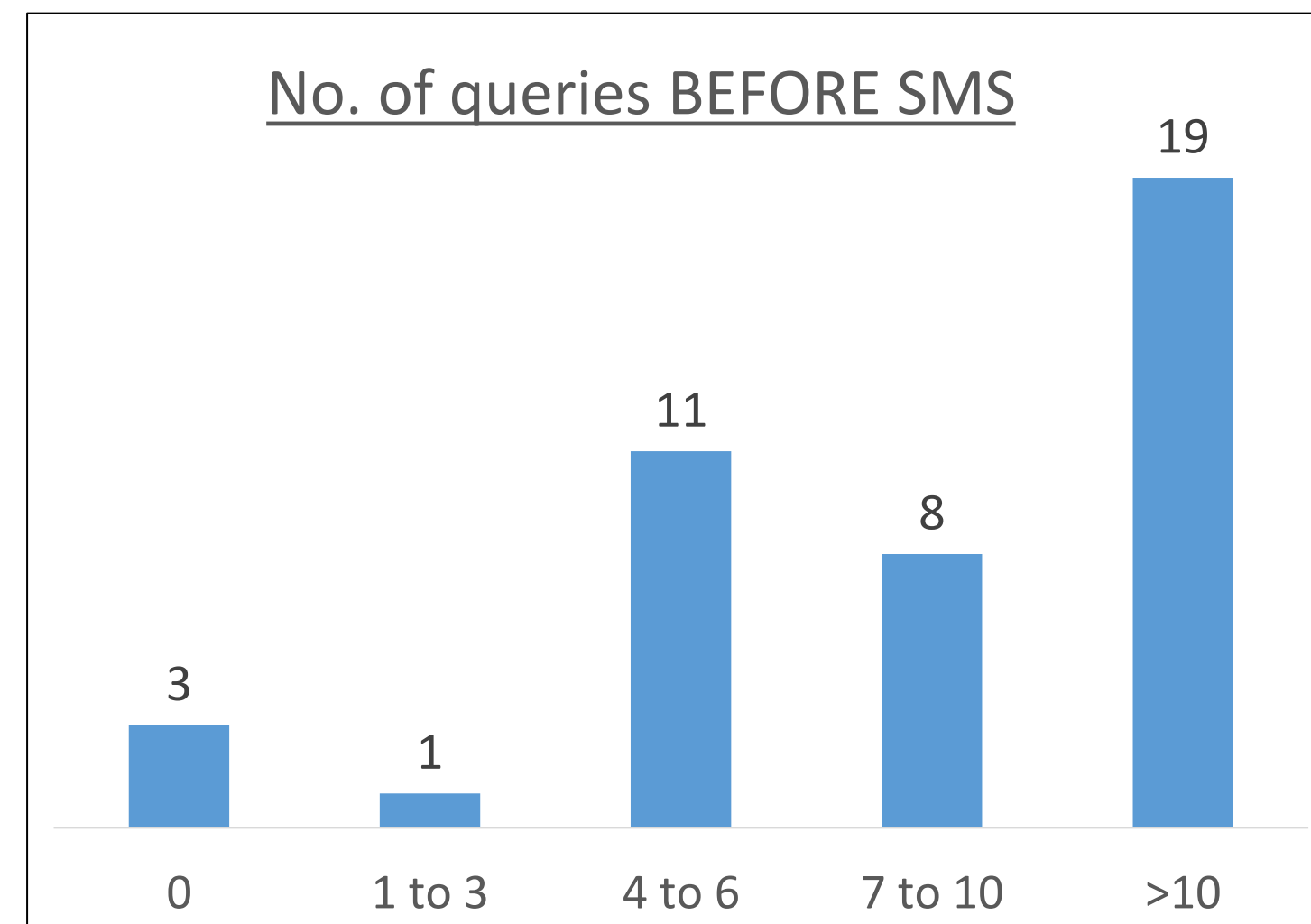
Looking to quantify the outcome, a survey was done to assess the effectiveness of this upgrade.



- Survey was done using FormSG and link was circulated for staff to fill up
- Survey ran from 27th October 2023 to 14th November 2023
- A total of **42 responses** were recorded during this three weeks, and respondents range across Patient Service Associates, Doctors and Nurses.

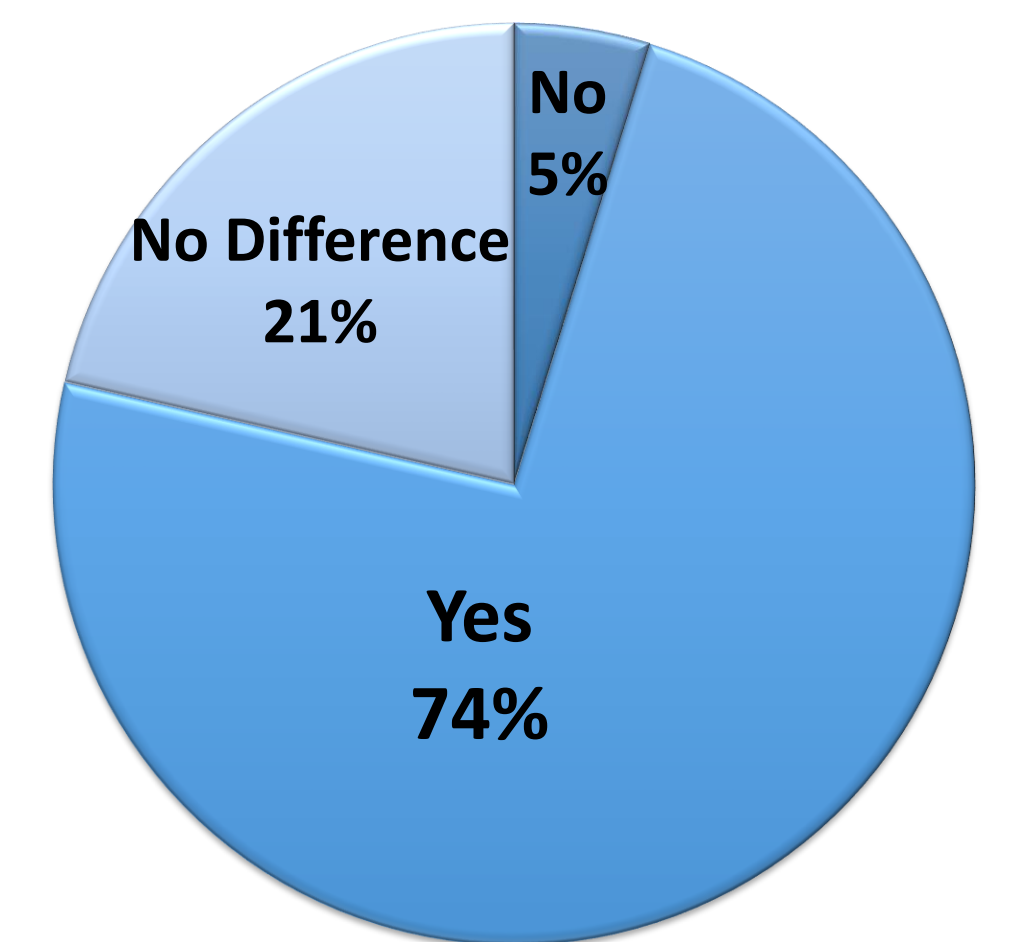
Results

Questions in the survey aimed to establish if staff received lesser queries from NOKs about bed status with the new system enhancement in place:



- 28%** respondents experienced a significant decrease in enquiries about bed status by almost half, from previously receiving more than 10 enquiries a week to manageable number of 4-6 queries a week.
- Average number of queries received per staff dropped from **7.5** queries a week to **5.25** queries a week

Survey also asked participants if they felt if this SMS update benefited them in anyway, and a significant **74% of participants felt that they benefited** from this SMS enhancement indirectly.



Some feedback from staff includes:

- "Keep continuing" –Nurse Y
- "Somewhat, SMS update to patient and family is very helpful. I hope even ward staff and doctors have knowledge about that." –Nurse X
- "Less queries on bed availability." –Doctor X
- "Actually many of us are unaware this SMS system has been in place" –Doctor Y
- "They are updated every now & then. They get the message directly from CGH." – Patient Service Associate X

Generally, sentiments among staff about this system enhancement are largely positive although some are unaware that this system is in place.

In addition, since the system promptly updates NOKs regarding the status of their loved one's admission process, they are encouraged to return home and wait for an SMS notification when their loved one is assigned a bed. This consequentially minimizes instances of NOKs interrupting our ED staff to inquire about updates of their loved ones, improving workplace efficiency and minimising excessive queries about bed statuses.

Conclusion

As a result of this system enhancement, we have observed a significant decrease in feedback from NOKs regarding inadequate communication between ED staff and themselves about patient's bed status.

However, a challenge faced by the team was ensuring the correct phone number being input upon admission. If a wrong number was input, NOK's would not be able to receive any of the SMS. A wrong number also opens up the possibility of bed status information reaching the wrong intended party.

- To counter this, workflows were tweaked so that PSAs will click on the trigger SMS "Send SMS" button in SAP upon confirmation of NOK's number during admission process, and NOK's would check if they received the first message. This verification on the spot will ensure that the correct number was input at the get go.

In conclusion, this system enhancement has successfully improved patients and NOKs experience in the ED by alleviating the anxiety experienced by NOKs since there are timely updates about patient's bed status, putting their minds at ease that the patient is in good care. More importantly, this system enhancement helped mitigate the fatigue that ED staff experience from continuously having to address countless inquiries from NOKs, improving staff's Joy@Work and alleviating unnecessary pressure staff experienced from inquiries.