

# Improving nursing staff and house staff communication within a technology platform (iMobile)

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## Background

Interprofessional communication among physicians and nursing remains an integral part of patient care with lapses in communication resulting in subsequent patient safety errors, adverse patient outcomes, and inadequate resident training. The proposal is to revitalize the current technology platform used for nurse-physician communication at this facility, iMobile, to attenuate these communication gaps and more efficiently manage patient care while minimizing frustration and optimizing cooperation amongst providers and nursing staff, and allowing new residents to manage their own patients.

## Objective

To implement a system to mitigate communication gaps between nursing staff and house staff to improve efficiency in patient care and aid in resident training on the progressive care unit and medical-surgical floors.

## Methods

Pre-intervention surveys were disseminated to house staff and nursing to identify areas of improvement (Images A and B).

Intervention/Surveillance: Working with iMobile administrators to establish dynamic roles on iMobile for residents to identify their roles and assign themselves to appropriate patients; educating house staff on the importance of assigning dynamic roles; providing education to nursing staff regarding communication algorithm/hierarchy (intern, senior, and then attending), and outfitting each nursing station with resident rosters with pictures and names to aid with identification; coordinating with nursing leadership to provide communication algorithm/resident rosters as part of onboarding for new nurses (see images below)

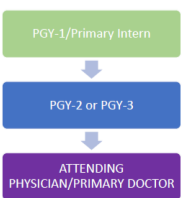
Post-intervention surveys for nursing and house staff to evaluate the success of interventions implemented and identify further areas of improvement (Images C and D)



### PGY (Post-Graduate Year) resident and Attending Physician roles

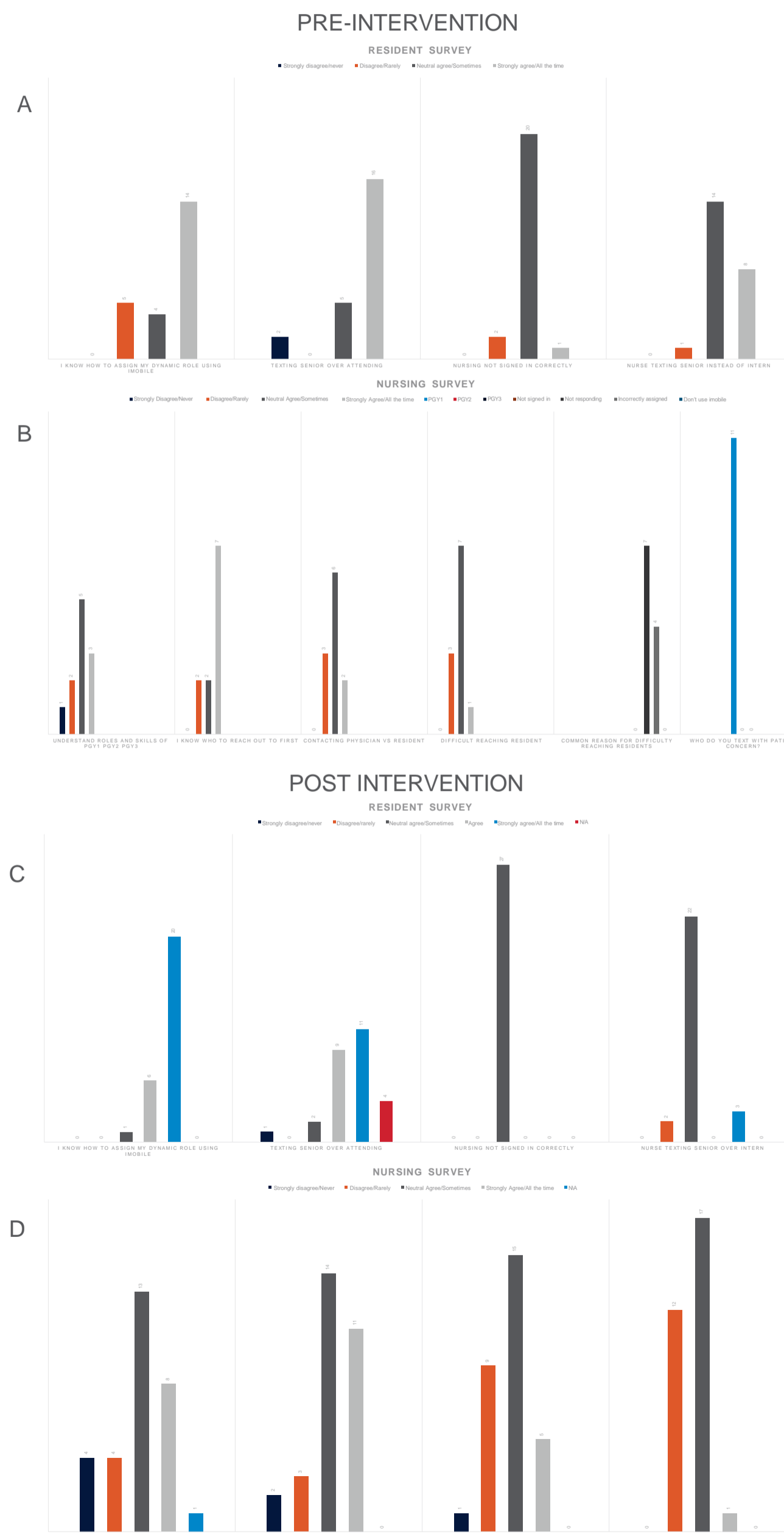
**PGY-1 Intern:** first year resident physician, with primary patient responsibility; responsible for initial patient assessment, patient care, patient orders, and discussions with family.  
**PGY-2 Resident:** second year resident physician, supervising PGY-1/Interns, works with attending to oversee patient care.  
**PGY-3 Senior:** third year resident physician (about to graduate), supervising PGY-1/Intern/PGY-2, also works with attending to oversee patient care.  
**Attending physician:** Primary doctor of patient, under whom patient is admitted

### WHO TO CONTACT IN ORDER OF TEAM HIERARCHY ON IMOBILE



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## Results



## Discussion

- The most prominent lapse identified was the deficiency in utilizing iMobile and correctly identifying roles/assigning the correct care team
- More accurate roles were created in iMobile for residents to use along with the creation of communication algorithms and resident rosters for nursing staff at each nursing station.
- Education of this intervention was given during resident didactics and in nursing huddles. During nursing education, it was noted that the high nursing staff turnover was a barrier to carrying out this undertaking successfully (staffing was low during pre-intervention vs to post-intervention). As such, it was coordinated with nursing leadership to add this education as part of the new nursing orientation.
- As demonstrated, post-intervention results showed improvement in the communication gap on the side of both nurses and house staff.
- Overall results were affected by a few factors such as, hold patients in the ER as ER nurses do not use iMobile. Additionally, the overlap between nursing and resident work hours (i.e. nursing shifts are 7 AM-7 PM and house staff hours are 6 AM-6 PM) and mandatory once-weekly half-day resident didactics led to confusion amongst nurses regarding whom to contact during those times.
- Nurse staffing shortage also meant some nurses were floating from their routine ICU/ED posts and since these entities were not a part of the original intervention, they were unfamiliar with the communication algorithm.
- Despite house staff noting there was an improvement in communication, many still felt the need to direct communication to the appropriate resident, either via text or under their name heading in iMobile.

## Conclusion

There was noted improvement in efficient communication between nursing and house staff based on the interventions provided. Confounding factors identified that were a barrier to the optimization of this project included ED nursing, nursing staff turnover/shortage, overlap in shift hours, and mandatory resident didactics. Future steps to further ensure the success of this quality improvement undertaking would be to include the ICU, ED, and case management staff as part of the intervention groups. There was a noted need for constant re-education of both nursing and house staff and this would need to be repeated annually along with the availability of new resident rosters at the commencement of each resident year (i.e. July).

## References

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