



# Translational Simulation: Enhancing Patient Outcomes by Improving Workflow Processes

Derek Sanchez MSN, RN, NI-BC, CHSE, CHSOS Monique Wilson MSN, RN, CEN, CPEN, NPD-BC  
Lynda Sanchez DNP, RN, NPD-BC, CHSE, CNML



## BACKGROUND

- Discharge education is paramount to increasing treatment compliance and decreasing readmission rates.
- Unclear discharge instructions can lead to an increase in patient mortality and readmission rates<sup>1</sup>.
- Redesigning discharge instructions to a more patient friendly experience can improve the quality of the discharge instructions<sup>3</sup>.

## PURPOSE

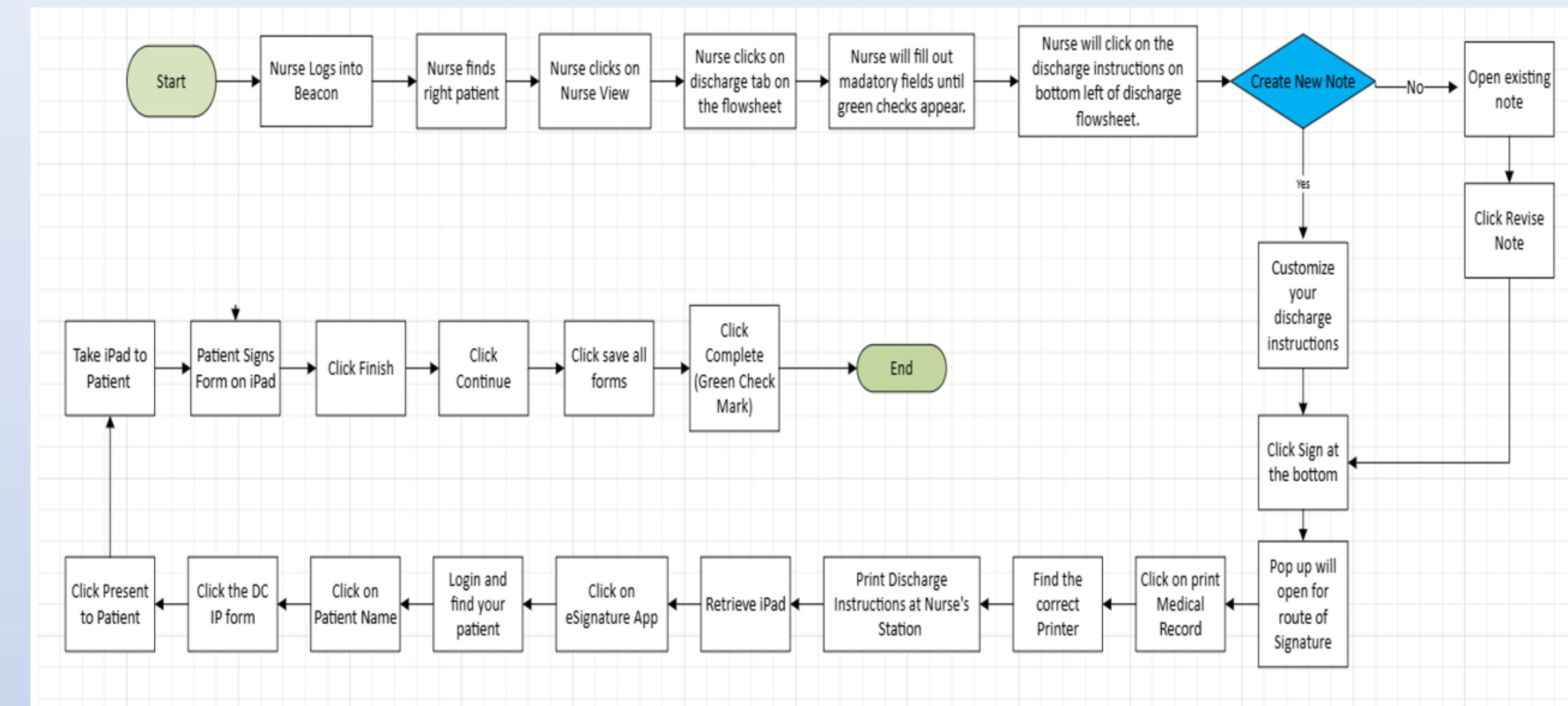
- Translational simulation can identify latent safety threats and help improve workflow processes<sup>2</sup>.

## PROCESS

- A translational simulation was conducted on a Post-Surgical Unit to identify gaps in communication, education, and design of the discharge instructions.
- A simulation facilitator, unit educator, clinical informatics manager, charge nurse, and bedside nurse were present for the simulation.
- A simulated patient was built in the electronic healthcare record train environment, and the translational simulation was conducted within the unit to mirror exactly what happens in practice.
- The stakeholders analyzed how the charge nurse discharged the simulated patient from start to finish.
- An after-action report to diagnose the issues identified within the discharge process.

## EVALUATION/OUTCOME

- The findings showed 5 key issues.
  - 3 of the issues were system issues and due to an unclear or ineffective process.
  - 2 were an individual issue.
- The stakeholders went through the discharge paperwork and marked out all the redundancies.
- The paperwork was then sent to the Health Information System's team so they could adjust it in the electric medical record.



**After Action Report**

1. System factors:  Process/Structure  Environment/Supplies/Equipment  Culture  
 2. Individual factors:  Knowledge or unfamiliar skills/habit  Teamwork and Communication  Critical thinking/consciousness  Compliance  
 3. Medications:  Route related  Timing related  Dose related  Preparation related

**Causes**

AHA specific guidelines  Other guidelines  Cognitive aid missing, ineffective, or not used  Decision making/prioritization related  
 Delays  Ineffective communication  Missing/malfunctioning supplies/equipment  Other  Resources  Unclear or ineffective process  
 Unfamiliarity with supplies/equipment  Unsafe workarounds  Unclear, undefined, or no roles delineated  Unfamiliarity with policy, procedure, protocol issue

Issue	Factors (System, Individual, or Medication)	Cause (See above)	Rationale (Why is this a problem?)
The biggest issue was the lengthy list of discharge papers that each patient was receiving upon discharge.	System (Process/Structure)	Unclear or ineffective process	This was an issue when printing off the DC instructions. Most of the Discharge paperwork was repetitive and the nurses wanted a more concise process.  The Informatics Team received the staff's feedback and made the discharge instructions more concise and customizable. The amount of paperwork has decreased from over 15 pages of discharge instructions to about 6-8 pages.
The staff said that the blue and yellow folder process was confusing because of the repetitive nature of the discharge instructions.	Individual (Compliance/knowledge)	Unfamiliarity with policy, procedure, and protocol issue	Some of the discharged patients were only receiving one folder with both sets of information in it.  The Informatics Team addressed this issue by creating a page break.

Issue	Factors (System, Individual, or Medication)	Cause (See above)	Rationale (Why is this a problem?)
The discharge paperwork has a signature line for the patient. However, a signed copy is not required for the hospital.	System (Process/Structure)	Unfamiliarity with process, procedure, and protocol	When a nurse clicks sign on the discharge paperwork it affirms that the discharge instructions were printed and given to the patient.  The Informatics Team allowed the discharge form to be sent to the iPad for the patient to physically sign. This ensures that the hospital receives an electronic signed copy of the patient receiving discharge instructions.
iPad inventory and new use of this device for patient signature.	System (Process/Structure)	Unfamiliarity with supplies and equipment.	Right now, the staff know how to use the iPads for the Blood Consent Process. However, the staff need to know that the iPads are going to be used for Discharge Instruction Signatures as well. HIS is working to determine if there are enough iPads on the units.  The HIS team is going to ensure that PSU and ED have the right hardware to facilitate this change. The HIS team also plans on doing a phased implementation throughout the hospital. PSU and ED have agreed to be the testing units to trial this process change.

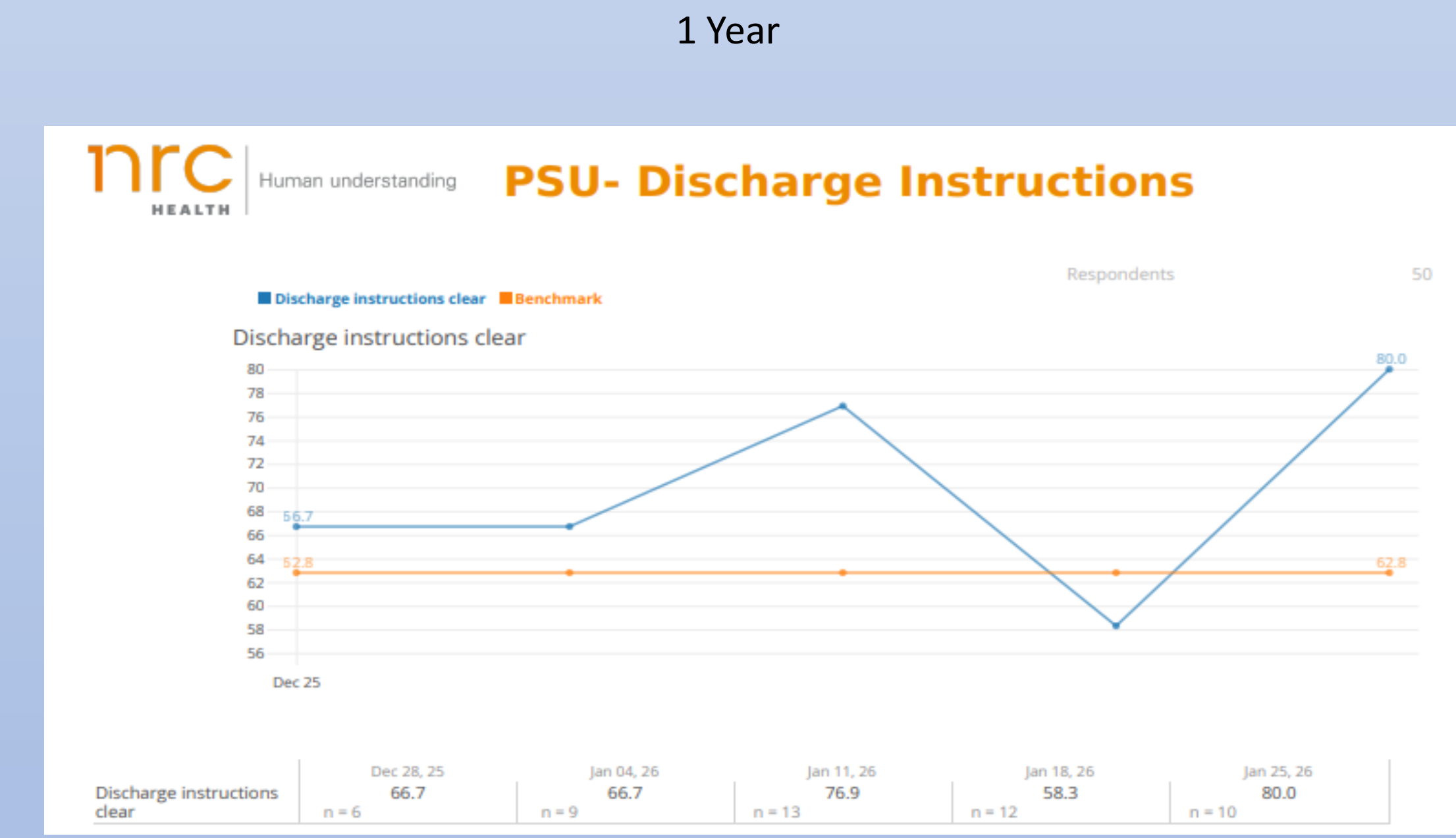
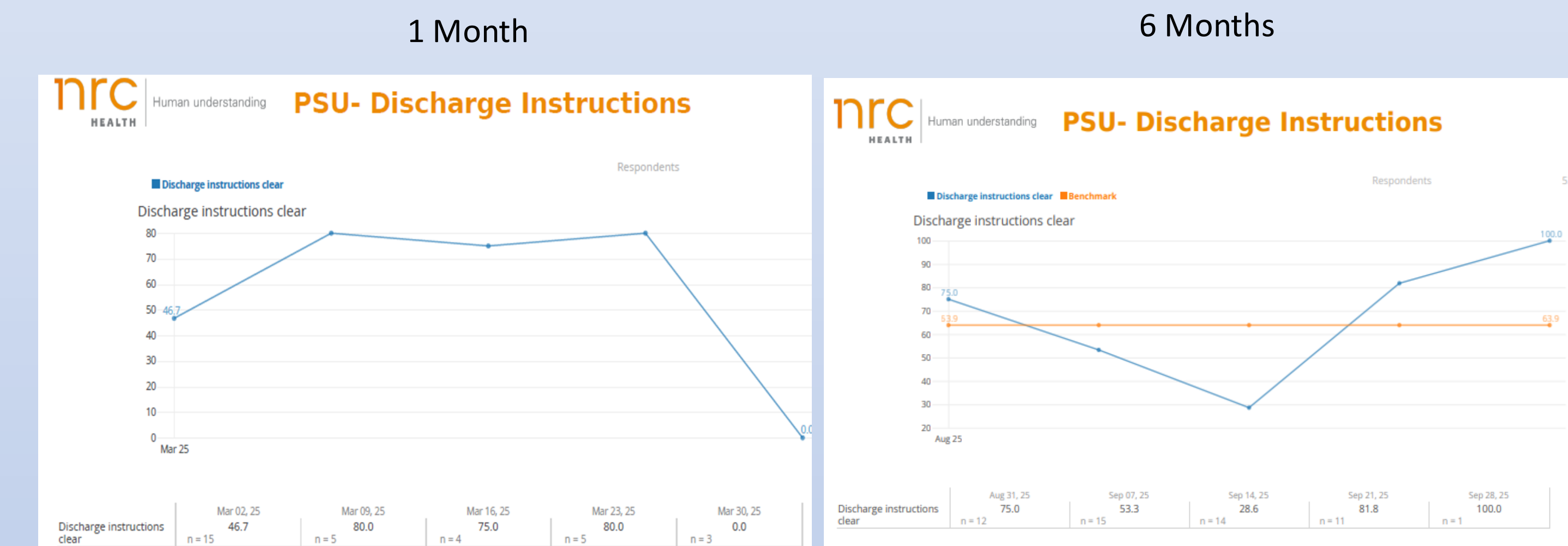
Issue	Factors (System, Individual, or Medication)	Cause (See above)	Rationale (Why is this a problem?)
The Flow Coordinator and the Charge Nurse both asked about how scheduled follow up exams/procedures and appointments were going to be displayed in the discharge paperwork. They also asked if the medications that were newly prescribed and discharged were going to show up on the pharmacy (medication table) on the discharge paperwork.	Individual (knowledge or uninformed skill/habit)	New Process	Dani Dunn ensured that these questions were answered and addressed these concerns. She showed the end users how the procedures would automatically populate in the discharge paperwork, and she also demonstrated how the medication table would look if some home medications were discontinued or newly prescribed. (See pics below)

## IMPACT AND IMPLICATION

- The interdisciplinary team was able to reduce redundancies in the discharge paperwork and ensure that patients understood their discharge instructions.
- Communication between the interdisciplinary team increased and the discussion regarding the use of translational simulation as a standardized way to test new processes was considered.
- The new discharge process was implemented throughout the rest of hospital after this process.

## DATA COLLECTION

- The team decided to use the NRC survey question, "Were your discharge instructions clear?" on a dichotomous scale "Yes or 1" being 100% clear and "No or 0" being not clear at all
- Overall Discharge Instructions being clear went from an average of 46.7% to 62.59%



## CONTACT INFO



## REFERENCES

