Evidence You Can Use

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Purpose: This quality improvement (QI) project aims to integrate the use of interactive team chat technology among multidisciplinary healthcare team members into the discharge process thereby enhancing communication and efficiency of patient discharges.

Target audience: All nursing staff, discharge coordinators (physicians, nurse practitioners (NPs), physician assistants (PAs) nurse managers, case managers (CM), social workers (SW), registered nurses (RNs), licensed practical nurses (LPNs) and house medical staff.

Background

In an acute care medical-telemetry unit, medically complex patients are admitted and discharged rapidly. These patients often have significant medical and social needs to be addressed and coordinated in an effective, timely, and accurate manner to ensure safe discharge (Pinelli et al., 2017). For this reason, the discharge process typically involves a team of multidisciplinary healthcare team members. Social workers (SW), case managers (CM), registered nurses (RNs), healthcare providers, physical and occupational therapists, are all team members who play vital and distinct roles in the discharge process. They make recommendations and ensure that patients go home with the correct follow-up, medications, and coordination of care. With so many team members involved in the process, unsurprisingly, literature shows that miscommunications during the discharge process are common and can lead to post-hospital adverse events (Patel et al., 2019). Pinelli et al. (2019) found that 19% of multidisciplinary team members identify information communication breakdown, and 10% identify poor collaboration as a major discharge barrier. Efficient but safe hospital discharges are a challenge to most healthcare organizations.

On our medicine-telemetry unit, we identified an opportunity to improve timely discharges as well as gaps in coordination of care. Our unit's average discharge order to exit time (DOTE) was below the hospital-set benchmark for efficient discharges. Our discharges two hours post-discharge order was at 16.2%, below the hospital's target goal of >22.7%. Discharges by 1 pm were 12.3%, also below the hospital's benchmark of >20%.

As we drilled down into the process, we found that multidisciplinary team members identified communication as a major area for improvement. Discharge orders were placed in the system on the day of anticipated discharge rather than when the patient was actually ready to leave the hospital. This made it unclear to the bedside nurses whether patients' family dynamics, post-discharge placements and other issues and circumstances were resolved. There was not a clearly identified communication channel for all team members involved in a patient's discharge. A one-way paging system was utilized. This made it necessary for nurses to contact multiple healthcare team members to ensure that all of the discharge elements were complete before discharging the patient. This also contributed to the possibility that gaps could occur. Clearly, this was not an efficient discharge process.

Purpose

This quality improvement (QI) project aims to integrate the use of interactive team chat technology among multidisciplinary healthcare team members into the discharge process, thereby enhancing communication and efficiency of patient discharges.

Methods

We reviewed literatures on interventions for improving communication during the inpatient discharge process. Jones et al. (2022) launched a multidisciplinary communications program and set a standard workflow of communication between physician to RN, RN to RN, Case Manager (CM) to RN and RN to patient and their families. Results showed that nurses who underwent multidisciplinary communications training programs succeeded in lowering DOTE compared to untrained staff. In addition, the study also cited that most RNs preferred to be notified of a confirmed discharge directly rather than seeing it in the system (Jones et., al 2022). Lenhard et al. (2024) implemented a SWAT (solutions, wins, actions, and tactics) virtual team meeting centered around overcoming challenges with discharging individual patients. This project, implemented during COVID, found that length of stay remained stable and that inpatient care transitions were positively impacted. Opper et al. (2019), implemented a redesigned workflow with team bedside rounding and checklists and utilized the TeamSTEPPS communication tools. They found that hospital readmissions and emergency department visits decreased. This evidence points to the need for a standardized communication process which involves all key stakeholders.

Based on this evidence we decided to implement an intervention aimed at leveraging available technology (Microsoft Teams chat application) to improve com-

munication. Microsoft Teams chat group application promoted a two-way process of communication and reinforced real-time conversations. The workflow started with the list of patient discharges that were identified during the morning multidisciplinary rounds. A discharge group chat consisting of a medical team (physicians, NP, PA), unit leadership, charge/discharge nurse, social workers (SW), CMs and unit clerks was created for each provider and members were reviewed and updated daily by the nursing team. Newly-identified discharge issues, follow ups, additional patients to be discharged, and discharge cancellations were discussed in the chat group.

We rolled out this new process by educating the staff individually and through continuous reminders by nursing leadership. Nursing staff was informed of this trial workflow through emails sent by the leadership. Multidisciplinary team members, especially physicians, were informed during daily huddles and were reminded of this new interactive means of communication personally and via the paging system. Continuous reminders to other multidisciplinary teams such as NP, PA, CM and SW on the presence of the discharge group chat was done daily by the nursing team. Unit clerks were provided one-on-one education on updating the group chat members and relaying discharge information to bedside nurses.

During the trial, conversations were fluid, informal and interactive. Discussion and clarifications regarding specific patient matters occurred within the chat group and were encouraged. Details were then relayed by either charge nurse or unit clerk to the bedside nurse assigned. In addition, the unit discharge board that was visible to all the healthcare providers in the unit was updated with the recent discharge information by either charge/discharge nurse or unit clerk. This ensured that all the multidisciplinary team members were in complete accord. As we tracked the discharge outcomes during the trial, we identified that not all multidisciplinary team members were using the process, so increased reminders were given throughout the trial. In addition, feedback and surveys on how to improve the process were gathered by the champions of the project. The project's outcome was measured through a staff survey that was completed six months after implementation and through hospital discharge metrics.

Results

We started the new communication workflow for discharges beginning in March of 2024. To evaluate the workflow's effectiveness a unit survey was completed in October 2024, six months after implementation. There was a total of 21 respondents from different multidisciplinary teams: ten from the medical team, eight from the nurses and three from CM/SW. Results indicates that most multidisciplinary team members perceived the Microsoft Teams chat group useful. Survey showed that 100% of healthcare provider respondents viewed that the chat group bridged communication gaps; 95% of respondents mentioned that it facilitated smooth discharges and that it was convenient to use while 95% expressed their willingness to continue using it. Qualitative feedback from respondents included: "everybody is on the same page", "Good way to communicate with social worker and case manager on discharge updates", "very helpful for communication, smooth discharges", and "I like it because I do not need to look for people".

After the implementation of the Microsoft Teams discharge chat group, DOTE 2 hours after the order was placed initially increased from 16.2% in February 2024 to 22.7% in April 2024. However, a decline to 14.5% was seen in May and June. The team identified the need to continue providing constant reminders of new workflow process. This increased healthcare providers' familiarity with the communication process. In July and August, DOTE 2 hours after order was placed increased to 17.3% and up to 22% for the month of September 2024. Performance for discharges by 1 pm fluctuated. Pre-intervention discharges were at 12.3% in the month of February 2024. During the trial, discharges by 1 pm dropped to 7.1% in March and increased to 14.3% for the month of April. The pattern of fluctuations remained similar in the following month. A notable improvement in unit discharges by 1 pm was seen last September 2024, to 15.7%, the closest to the 20% benchmark.

Discussion/Implications

This project successfully integrated the use of the Microsoft Teams group chat application into the multidisciplinary discharge process. The chat bridges communication gaps and enhances collaboration within the healthcare team. Effective and timely communication that exists in a sole group chat keeps every member of the healthcare team on the same page. Leveraging this existing technology, which is easily accessed by all healthcare team members helps to address newly-identified discharge issues promptly and provide conversation history for future guidance.

The multidisciplinary team perceived the intervention as successful in bridging communication gaps and improving efficiency of discharges. It is more difficult to correlate the project with improvements to DOTE. While improvement was noted with more frequent reminders to multidisciplinary team members to use the new workflow, fluctuations with DOTE were noted throughout the project implementation. While strengthening the method of communication improved discharge process, a number of additional factors such as transport delays, availability of community beds, families and patients' preparedness and paperwork required by other facilities impact discharge efficiency. Additional process improvement is needed to address these factors impacting hospital discharges.

Despite the challenges in the beginning, the accessibility, convenience, and positive outcome to patients and healthcare providers in using the new communication workflow was outstanding. The presence of a strong leadership team in implementing, reinforcing, and collaborating this new process was instrumental to its success.

Take Home Message

We found great success and professional fulfillment utilizing the already existing communications systems in our hospital. This practice improves collaboration, provides clarity and safety to healthcare providers, patients, and their family members. ◼

References:

Jones, W et al., (2022). Influencing discharge efficiency addressing interdisciplinary communication, transportation, and COVID- 19 Barriers. *Professional Care Management, 27* (4) 169-180. *https://doi.org/10.1097/NCM.0000000000000549*

Lenhard, A., Daoud, M., Donahue, L., Jones, S., Kip, P. L., Zapf, R. L., & Minnier, T. E. (2024). How SWAT changed the conversation: Implementation of a discharge SWAT team improves morale and facilitates communication during the COVID-19 Pandemic. *Professional Case Management, 29*(6), 254–262. *https://doi.org/10.1097/NCM.0000000000000712*

Opper, K., Beiler, J., Yakusheva, O., & Weiss, M. (2019). Effects of implementing a health team communication redesign on hospital readmissions within 30 days. *Worldviews on Evidence-Based Nursing, 16*(2), 121–130. *https://doi.org/10.1111/wvn.12350*

Patel, Hemali et al., (2019). Improving Early Discharge Using a Team-Based Structure for Discharge Multidisciplinary Rounds. *Professional Case Management, 24*(2), 83-88. *https://doi.org/10.1097/NCM.0000000000000318*

Pinelli, V. et al., (2017), Exploring challenges in the patient's discharge process from the internal medicine service: A qualitative study of patient's and providers' perceptions. *Journal of Interprofessional Care, 31* (5), 566-574. *https://doi.org/10.1080/13561820.2017.1322562*