

Improving Care Transitions from Hospital to Home: Best Practice

Jerilyn W. Bumpas
Wilma Powell Stuart

Care transitions from hospital to home are a vulnerable exchange point for patients, contributing to high rates of patient safety adverse events that endanger the lives of patients and waste resources. Implementing a quality improvement project using proven Project RED (Re-engineered Discharge) components and the Always Use Teach-back Toolkit resulted in increased patient satisfaction scores in the transition-of-care domain.

Discharge from the hospital is an important transition point in a patient's care. However, some patients may not be prepared to care for themselves after discharge to home. Systematic problems in care transitions at discharge can lead to adverse events (AEs) and have been found to cause hospitalization that could have been prevented (Agency for Healthcare Research and Quality [AHRQ], 2019; Earl et al., 2020). An estimated 20% of patients experience AEs within 3 weeks after discharge secondary to miscommunication among patients, family, and healthcare providers; 75% of AEs are preventable (AHRQ, 2019). One in five Medicare patients returns to the hospital within 30 days of discharge, at a cost of \$17 billion annually (Krames Patient Education, 2017). To improve care transitions, the Centers for Medicare &

Literature Summary

- Systematic problems in care transitions at discharge can lead to adverse events and contribute to preventable hospital readmissions (Agency for Healthcare Research and Quality [AHRQ], 2019; Alqenae et al., 2020; Earl et al., 2020).
- Several common problems leading to poor care transitions are related to communication, patient education, and accountability (Centers for Medicare & Medicaid Services, 2019; The Joint Commission, 2022).
- Use of the Project RED Toolkit for patient discharge has been found to reduce 30-day readmission rates, improve patient experience, and lower healthcare costs (Bernard et al., 2021).

CQI Model

Plan-Do-Study-Act (PDSA) (AHRQ, 2015)

Quality Indicator with Operational Definitions & Data Collection Methods

- The term *transitions of care* encompasses clinical handoff as well as clinical aspects of care transfer and other factors, such as the views, experiences, and needs of the patient (AHRQ, 2018; Earl et al., 2020).
- A short, informal, anonymous survey was given 2 weeks after project launch via text and the SurveyMonkey app to perform an in-progress assessment of learner (nursing staff) perceptions.

Clinical Setting

Two medical-surgical units (16 and 24 beds) within a 75-bed acute care facility in southwestern United States; average combined daily census 30 patients

Program Objective

Increase discharge care transition scores on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey by 10% in the care transitions domain for patients age 18 and older within 3 months.

Jerilyn W. Bumpas, DNP, MSN, RN, is Assistant Professor, School of Nursing, Tarleton State University, Stephenville, TX.

Wilma Powell Stuart, PhD, RN, NEA-BC, is Associate Professor, College of Nursing, University of South Alabama, Mobile, AL.

Acknowledgement: The authors would like to acknowledge Abigail Kendall, MSN, RN, CNO, Lake Granbury Medical Center, Granbury, TX.

Medicaid Services (CMS, 2019) revised the hospital discharge planning requirements. Revisions increase expectations of organizations to confirm patients understand discharge goals of care and participate in treatment decisions, and ensure optimal inter-agency communication occurs.

Patient satisfaction in relation to poor care transitions is a problem in many healthcare facilities (CMS, 2021). Poor patient satisfaction scores in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) domain *good understanding of managing health* may suggest patients are not getting the information they need or do not understand the instructions they are receiving. When patients do not understand how to manage their healthcare needs after hospital discharge, they are at risk for poor care transitions (AHRQ, 2019; Yen & Leasure, 2019). Members of the healthcare team are responsible to ensure patients understand their discharge instructions. Hospital leaders are working to make needed improvements when patients are discharged from the acute care setting to home (AHRQ, 2018; CMS, 2019; Zwart et al., 2021).

Project Site and Reason for Change

Patient satisfaction scores in the *transition of care* domain for the 4th quarter 2019 at the project site were lower (48%) than state (54%) and national (53%) benchmarks (CMS, 2022). A gap analysis identified areas needing focused resources for improvement, exposing the need to address the quality of care transition from hospital to home through improved discharge and education of patients and their caregivers. An evidence-based structured program was developed to improve discharge care transitions for patients age 18 and over in the hospital's two medical-surgical units.

Program

As part of the *plan* step of the identified quality improvement

(QI) model (AHRQ, 2015), a discharge QI team was formed that included the chief nursing officer (CNO), the project leader (assigned by the CNO), the two medical-surgical directors, and the informatics nurse. Because systematic problems in care transitions at discharge can lead to AEs and have been found to contribute to preventable hospital admissions (AHRQ, 2019; Earl et al, 2020), QI efforts focused on identifying gaps in the current discharge process, developing standardized best evidence-based interventions for improvement, and re-evaluating new processes continuously (AHRQ, 2019; The Joint Commission, 2022; Klingbeil & Gibson, 2018; Krames Patient Education, 2017).

The QI team members selected implementation based on the best evidence regarding a standardized discharge transition program. According to AHRQ (2019), ensuring safe care transitions requires a systematic approach and involves three areas that must be addressed before discharge: medication reconciliation, structured discharge communication, and patient education. There is also power in a checklist to standardize the discharge process.

The team conducted an assessment of organizational readiness for change using the related theory as a guide (Weiner, 2009). Team members established an aim statement to guide the project success. During the literature review, specific elements were identified for best practice in improving the discharge process. The Project Re-engineered Discharge (RED) Toolkit included specific evidence-based guidelines (e.g., using teach-back and a discharge checklist, conducting a post-discharge follow-up telephone call). Project RED has been shown to be a reliable discharge tool in improving patient outcomes and patient safety while decreasing overall healthcare cost (Bernard et al., 2021; Krames Patient Education, 2017; Patel & Dickerson, 2018).

Inclusion criteria for the project were defined to include patients age 18 and older of all payer types who were discharged home after at least one overnight stay in the hospital;

patients had a non-psychiatric MS-DRG principal diagnosis at discharge. Excluded were patients discharged from the hospital to hospice care, nursing home, or skilled nursing facility, or transferred to another level of care. The QI project was reviewed by a university institutional review board and identified as an exempt project, and administrative support was obtained.

Current discharge instructions were reviewed, and a front-page checklist was developed and added to the electronic health record discharge instructions with the patient's discharge checklist (see Figure 1). A teach-back badge attachment for nursing staff was designed by the team, printed, and laminated as a strategy to encourage effective use of teach-back (AHRQ, 2020) (see Figure 2). One month before the new process was launched, staff education by the team addressed use of the teach-back method, the teach-back badge attachment, and the addition of the front-page checklist to the discharge instructions. The team leader performed a nurse knowledge assessment survey using the *Coaching to Always Use Teach-back* tools (Institute for Healthcare Advancement, n.d.). The survey was implemented via mobile telephone during medical-surgical unit staff meetings 2 weeks after project implementation.

As part of the *do* step of the identified QI model (AHRQ, 2015), an evidence-based structured process was implemented in summer 2020 using the teach-back methodology for patient instruction materials and all teaching opportunities. The discharge checklist summary report was added to the front page of the discharge paperwork with a concise summary of the *patient's next actions*, including the patient's admission and discharge information, diagnosis, attending physician information, and all instructions for care at home (e.g., medications, diet, therapy, specific follow-up appointments) (see Figure 1).

Teach-back topics, including topics in need of reinforcement, also were reported in the bedside

FIGURE 1.
Discharge Checklist (Front Page)

Transition of Care Note / TEACH-BACK
Lake Granbury Medical Center
Date of Service: _____
Admitted: _____
Discharged: _____

Name: _____ DOB: _____
Attending: _____ Encounter: _____
Primary: _____ MRN: _____
Created by: _____

Your Next Steps “TO DO”

Your medications have been called in to: _____
Pick up these medications from CVS pharmacy #7292 – Granbury, TX – 1101 E. Highway 377

- Carvedilol
- Lisinopril

📞 Call for Follow-Up Appointment


A follow-up appointment was unable to be made for you. This may be related to the time of day or week.
Follow up with Dr. _____ in 5-7 days phone # _____
Your physician’s office may be contacting you prior to your scheduled appointment. Please answer the phone call if at all possible.

OR

Follow-up appointment was made for you with Dr. _____
Date: _____ Time: _____
Address: _____ Phone #: _____

Follow up with Encompass Home Health of Granbury on date _____
2901 Glen Rose Hwy, Granbury TX 76048, 817-279-1665
Home health provider will admit tomorrow date _____
You will receive a call to schedule an appointment. If you do not receive a call, please call and schedule an appointment.

Instructions

 **Please take these Discharge Instructions and ALL of your medication bottles with you to your follow-up appointment.**

Your medication has changed.

START taking: Lisinopril (Zestril) Start taking on: _____

CHANGE how you take: Carvedilol (COREG)

STOP taking: Lisinopril-hydrochlorothiazide 20-25 mg tablets (Zestoretic)

REVIEW your updated medication list on next page

Diet instruction

- Diabetic and cardiac 2 gm sodium low-fat diet

Physician Discharge Instructions

- Activity as tolerated

Call your doctor if you have:

- _____

Case Manager Contact Information: _____

© Lake Granbury Medical Center. Reprinted with permission.

FIGURE 2.
Teach-Back Checklist – Badge Attachment

Teach-Back Checklist	
1.	Explain concept or demonstrate process to patient/caregiver (provide KRAMES handouts/videos).
2.	<u>Most important thing</u> I want to be sure the patient understands
3.	Simple lay language / Speak clearly and slowly / Do not act rushed / Sit eye-to-eye / Avoid technical terms / Least amount of information possible / Interpreter as needed
4.	Encourage questions from patient and family.
5.	Review, clarify, and reteach if needed.
Examples	
•	I want to make sure I explained your medications correctly. Can you tell me how you are going to take this medication?
•	We covered a lot today. I want to make sure I explained things clearly. So, tell me 3 strategies that will help you control your blood sugar.
•	Can you tell me your main problem (i.e., heart failure)?
•	What do you need to do to prevent heart failure symptoms?
•	Why is it important to do this?
•	What does following a low sodium diet entail?
•	Why is it important to take water pill every day?
•	How will you remember to check for symptoms of heart failure?
Win-Win with Clear Concise Education!	

© Lake Granbury Medical Center. Reprinted with permission.

hand-off during nursing shift change. The follow-up telephone call was added to the process 2 weeks after its implementation. The Project Leader met with the charge nurse on both medical-surgical units three mornings a week for 3 months to receive a list of patients who would be discharged to home in the next few days. The Project Leader then met with these patients to notify them of the expected telephone call a few days after discharge, and to verify contact information and best time to contact. Scripted telephone calls included five components described in the Project RED Toolkit (AHRQ, 2013): assessment of health status, medication check, clarification of clinician appointments and laboratory tests, coordination of post-discharge home services, and review of what to do if a health or medical problem arises.

Evaluation and Action Plan

As part of the *study* step of the identified QI model (AHRQ, 2015), the effectiveness of the standard-

ized evidence-based discharge transition program was assessed by team members during QI team meetings through monthly and quarterly collection of HCAHPS data. These data were compared to baseline data, and this information was shared by the CNO at the Safety Huddle meetings with managers. As part of the *act* step of the identified QI model, opportunities for continuous improvement in the process were evaluated by the QI team.

Results and Limitations

The Project Leader met with 140 patients July-September 2020. Of 140 eligible discharged patients, 107 had a full-scripted follow-up telephone call. Those reached only by voicemail had a message-scripted encounter. Those not reached despite three attempts were identified as a missed encounter. The average call was 15 minutes long.

Among 107 patients with full-scripted encounters, 29 had at least one problem. Patients had questions or concerns regarding follow-up appointments ($n=5$), medica-

tions ($n=11$), laboratory testing ($n=2$), discharge home services ($n=6$), or follow up for health or medical problems ($n=5$). The Project Leader identified, cataloged, and addressed post-discharge problems weekly and reported to the CNO. The leader met informally with staff and charge nurses weekly to assess specific aspects of the process and any needed changes.

Patient satisfaction scores (*Transition of Care* domain) increased from the baseline 4th quarter 2019 of 48% to September 2020 of 78%. During the active period of the intervention, a text survey was used to assess current nursing staff needs and confidence with using teach-back in all learning opportunities, as well as using the new discharge front-page concise checklist and the teach-back badge ($n=21$). This informal survey on mobile telephones was completed 2 weeks after project implementation as an in-progress assessment of nursing staff perceptions. The anonymous seven-question Likert-style survey could be completed in less than 3 minutes (10=*Very Confident/Very helpful*). Positive feedback was received, with 90% as the lowest score.

This organizational structure may have influenced departmental accountability for discharge care. The project was conducted during a unique period of the worldwide COVID-19 pandemic, which impacted all aspects of patient care delivery.

Lessons Learned/Nursing Implications

Project implementation during the peak summer months of the COVID-19 pandemic resulted in lack of family presence during discharge. Although efforts were made to contact family members by telephone each shift, the gap in communication was concerning. The absence of family due to changes in visitation policies created an opportunity for interprofessional virtual discharge follow-up communication. The pandemic also created shorter lengths of stay and an urgency for beds. The importance of

effective discharge communication is not limited to patient satisfaction and an understanding of after-hospital care, but also potentially impacts the availability of inpatient beds by reducing readmissions and supporting shorter lengths of stay.

The involvement of leaders in the discharge process resulted in additional interprofessional collaboration with case management. The problems identified from discharge follow-up telephone calls presented an opportunity for leaders to assist in clarity of interdepartmental accountability for discharge follow-up.

Conclusion

Occurrence of poor care transitions can be reduced with a coordinated, standardized approach to managing patients from hospital to home. A discharge transition program was implemented with a QI team leading the interventions, including the addition of teach-back training for all nursing staff, use of a discharge checklist, and completion of a follow-up telephone call. This program was successful in addressing communication gaps and enabling patients to care better for themselves after discharge. [MSN](#)

REFERENCES

- Agency for Healthcare Research and Quality (AHRQ). (2013). *Re-engineered discharge (RED) toolkit*. <https://www.ahrq.gov/patient-safety/settings/hospital/red/toolkit/index.html>
- Agency for Healthcare Research and Quality (AHRQ). (2015). *Plan-Do-Study-Act (PDSA) directions and examples*. <https://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2-tool2b.html>
- Agency for Healthcare Research and Quality (AHRQ). (2018). *Chartbook on care coordination: Transitions of care*. <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/carecoordination/measure1.html>
- Agency for Healthcare Research and Quality (AHRQ). (2019). *Patient safety primer. Readmissions and adverse events after discharge*. <https://psnet.ahrq.gov/primer/readmissions-and-adverse-events-after-discharge>.
- Agency for Healthcare Research and Quality (AHRQ). (2020). The SHARE Approach – Using the teach-back technique: A reference guide for health care providers. <https://www.ahrq.gov/health-literacy/professional-training/shared-decision/tool/resource-6.html>
- Alqenae, F.A., Steinke, D., & Keers, R.N. (2020). Prevalence and nature of medication errors and medication-related harm following discharge from hospital to community settings: A systematic review. *Drug Safety*, 43(6), 517-537. <https://doi.org/10.1007/s40264-020-00918-3>
- Bernard, J.R., Creel, E.L., & Pecoraro, R.K. (2021). Care transition from rehabilitation to home: A QI-project using the RED Toolkit to decrease readmission rates. *Journal of Hospital Administration*, 10(1), 46-56. <https://doi.org/10.5430/jha.v10n1p46>
- Centers for Medicare & Medicaid Services (CMS). (2019, September 26). *CMS' discharge planning rule supports interoperability and patient preferences* [Fact sheet]. <https://www.cms.gov/newsroom/fact-sheets/cms-discharge-planning-rule-supports-interoperability-and-patient-preferences>
- Centers for Medicare & Medicaid Services (CMS). (2021). *HCAHPS: Patients' perspectives of care survey*. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalHCAHPS>
- Centers for Medicare & Medicaid Services (CMS). (2022). *Hospital datasets*. <https://data.cms.gov/provider-data/search?theme=Hospitals>
- Earl, T., Katapodis, N., & Schneiderman, S. (2020). Care transitions. In K.K. Hall, S. Shoemaker-Hunt, L. Hoffman, S. Richard, E. Gall, E. Schoyer, ... Lim, A. (Eds.). *Making healthcare safer III: A critical analysis of existing and emerging patient safety practices*. Agency for Healthcare Research and Quality.
- Institute for Healthcare Advancement. (n.d.). *Coaching to always use teach-back*. <http://www.teachbacktraining.org/coaching-to-always-use-teach-back>
- The Joint Commission. (2022). *Transitions of care: Managing medications*. <https://www.jointcommission.org/resources/news-and-multimedia/newsletters/newsletters/quick-safety/quick-safety-issue-26-transitions-of-care-managing-medications/>
- Klingbeil, C., & Gibson, C. (2018). The teach back project: A system-wide evidence based practice implementation. *Journal of Pediatric Nursing*, 42, 81-85. <https://doi.org/10.1016/j.pedn.2018.06.002>
- Krames Patient Education. (2017). *Reducing hospital readmissions with enhanced patient education*. https://www.bu.edu/fammed/projectred/publications/news/krames_dec_final.pdf
- Patel, P.H., & Dickerson, K.W. (2018). Impact of the implementation of Project Re-Engineered Discharge for heart failure patients at a Veterans Affairs Hospital at the Central Arkansas Veterans Healthcare System. *Hospital Pharmacy*, 53(4), 266-271. <https://doi.org/10.1177/0018578717749925>
- Weiner, B.J. (2009). A theory of organizational readiness for change. *Implementation Science*, 4(67). <https://doi.org/10.1186/1748-5908-4-67>
- Yen, P.H., & Leasure, A.R. (2019). Use and effectiveness of the teach-back method in patient education and health outcomes. *Federal Practitioner*, 36(6), 284-289. <https://pubmed.ncbi.nlm.nih.gov/31258322/>
- Zwart, D.L.M., Schnipper, J.L., Vermond, D., & Bates, D.W. (2021). How do care transitions work? Unraveling the working mechanisms of care transition interventions. *Medical Care*, 59, S387-S397. <https://doi.org/10.1097/MLR.0000000000001581>