

Methods, Intervention, & Analysis: We decided to implement a journaling program with our new graduate nurses as a way to develop critical thinking and provide methods of self-care during stressful situations. New graduate RNs were given a journal along with the following guidelines:

What went well?

What struggles/conflicts/concerns did you experience?

Describe a specific patient scenario and how you applied critical thinking

End your entry with at least ONE positive thought from the week

They were then asked to share two entries with their preceptor each week.

Findings & Interpretation: The RNs that participated in the journaling project were surveyed 1 year after implementation. Five of the seven found it extremely helpful, stating it was a way to “de-stress, organize their thoughts, reflect, and begin to see patterns in their own behaviors.” The other two listed factors such as “not being good writers” and “being too busy to journal” as barriers. None of the RNs surveyed verbalized any discomfort with being asked to journal. All seven recommended continuing this practice with the new graduate RNs.

Discussion & Implications: Due to the positive feedback from our new graduate staff, we now provide journals to ALL RNs orienting to our HCST program and encourage them to journal as well.

592

Non-Medical Readiness in Pediatric Bone Marrow Transplant: Improving the Discharge Process Using a Multidisciplinary Team Approach

Nancy Tena¹, **Debra Southworth**². ¹ Center for Cancer and Blood Disorders, Children's Hospital Colorado, Aurora, CO; ² Center for Cancer and Blood Disorders, Children's Hospital Colorado, Aurora, CO

Topic Significance & Study Purpose/Background/Rationale:

Pediatric patients who have undergone bone marrow transplant (BMT) are not consistently prepared (non-medical readiness) for hospital discharge at the same time they meet physiologic criteria (medical readiness). Several factors contribute to an inadequate discharge, including time constraints for education focused on complex care needs/medication management, and communication challenges among the multidisciplinary team. To improve the discharge process and increase preparedness in young BMT patients, a multidisciplinary team was created to conduct a quality improvement (QI) project.

The aim of the project was to increase the percentage of BMT patients who are prepared for discharge by standardizing the time sequence of essential nonmedical/educational discharge process tasks prior to meeting criteria medical readiness.

Methods, Intervention, & Analysis: “Lean,” a QI strategy focused on customers and what they value, was implemented to collect baseline data describing key process measures, and to address gaps through “Plan-Do-Study-Act” cycles.

Data from a chart review across a subset of BMT patients and a staff survey supported that pediatric BMT patients had a high degree of non-medical readiness.

Team members created standard assessment tools and education plans and scheduled these activities to decrease

the last minute rush at time of discharge. Weekly team meetings and real-time audits allowed for individualization of the process to each patient's status, enabling the team to stay on schedule. Completed tasks were categorized according to the scheduled time sequence and were reviewed for timeliness and completion. Every three months a quarterly report was shared with staff.

Findings & Interpretation: In the first quarter of 2014, 17% of patients met criteria for discharge preparedness and by second quarter, 30% met criteria. As real-time audits reveal tasks that fall out of the scheduled time, the process is refined to improve its efficiency.

Discussion & Implications: The percentage of discharge preparedness in young BMT patients continues to rise. The discharge process is continually refined and improved each quarter. In the future, the process will include follow-up with patients/families to assess their ability to care for the child outpatient.

593

Prediction of Skin Trouble in Patients Undergoing Allogeneic Hematopoietic Stem Cell Transplantation Using Generalized Additive Model

Satoko Ueki¹, **Masaaki Tsujitani**², **Yumiko Teranishi**¹, **Junko Miyamoto**¹, **Reiko Mori**³, **Hiroyasu Ogawa**⁴, **Kazuhiro Ikegame**⁴. ¹ Division of Nursing, Hyogo College of Medicine, Nishinomiya, Japan; ² Graduate School of Engineering, Division of Information and Computer Sciences, Osaka Electro-Communication University, Osaka, Japan; ³ Department of Clinical Psychology, Hyogo College of Medicine, Nishinomiya, Japan; ⁴ Division of Hematology, Department of Internal Medicine, Hyogo College of Medicine, Nishinomiya, Japan

Topic Significance & Study Purpose/Background/Rationale:

Although skin trouble (ST) is a major problem in patients undergoing stem cell transplantation (SCT), there are few reports on the prediction of ST development in SCT units. One of the difficulties in conducting a study of the SCT setting is that variables are highly dependent on the post-transplant day (time-dependent variables), and that the post-transplant day does not always behave as a linear function. In this study, we aimed to predict ST development in SCT patients using a generalized additive model (GAM), an extended model originally used in social science.

Methods, Intervention, & Analysis: This retrospective study involved 81 consecutive patients undergoing SCT at Hyogo College of Medicine between April 2012 and March 2013. Among them, 28 patients developed ST (ST group), and 53 patients did not (Control group). On applying GAM, a multistate model was used for data collection in order to avoid overlearning. We determined the following events as states in our multistate model, and collected the time-dependent variables on the day of each event, consisting of diarrhea, need for oxygen supply, hemorrhagic cystitis, skin GVHD, encephalitis, and disease relapse. The time-dependent variables consisted of the serum level of albumin, ALT, CRP, blood glucose, creatinine, hemoglobin, WBC, body temperature, blood pressure, body weight, daily activity score (DAS), and the Functional Independence Measure score.

Findings & Interpretation: The age, gender, underlying disease, and donor type were almost identically distributed between the ST group and control groups. Among the