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December 1st, 2016

Quality Improvement

Floor Coverage at Saint Francis Hospital

Quality improvement in healthcare is defined as making changes that will improve professional development, healthcare performance, and ultimately better patient outcomes.1 Quality improvement is an important tool, which requires an indicator and a threshold to identify and propose an effective solution to a problem. An indicator is what is used to prove the trend, level, or state of something. In other words, in terms of quality improvement, an indicator is data that can be used to support that a problem exists.2 A threshold refers to the severity, or magnitude of the problem beyond the expectations or standards put in place.3

At Saint Francis Medical Center, the Registered Dietitian (RD) must utilize a nutrition screening protocol known as the Standards of Care. The Standards of Care are essential, as they provide definitive guidelines to assess the nutritional risk of each patient, while allowing enough flexibility for the RDs to utilize their own clinical judgement. The Standards of Care encompass a number of factors including disease state, malnutrition score, number of days of nothing by mouth (NPO), body mass index (BMI), and a number of other determinants. In addition, the protocol also helps to guide the dietitian on when their nutritional assessment and follow up visits are due by ranking the nutritional severity of each patient on a scale of low, moderate, and high.

However, while the Standards of Care is an essential tool, it often ranks patients at higher risk than other clinicians may consider them. As a result of this, the RD’s have found themselves with an overwhelming workload, and cannot keep up with the high number of patient assessments due on a given workday. This is a serious concern for the hospital, as patients are often seen late by the RD, or may be discharged without being seen although they are past their assessment due date. In the past, when Amy was the assistant clinical manager, a portion of her responsibilities consisted of auditing the food and nutrition department. In doing so, she was able to identify how many patients were due on a given day, how many were being seen, and how many patients were *late* on a given day. This data collection was very time intensive, but she found it to be very helpful to see the statistics of the dietitians as a whole. For Amy, these audits created baseline data to then create goals for her staff that as a manager she would be able to eventually meet. Amy provided us encouragement that we could complete a similar audit within the department that had not been looked at before. For this reasons, our overall goal for our Quality Improvement project was to find a way to decrease the number of late patients on three particular floors of concern on any given workday. For our project, the indicator will be similar to the baseline data collected by Amy in the past, however on these three particular floors, the threshold will be any nutrition assessments that are past their due date by the end of each workday. We chose these floors as Sarah, the full time dietitian on these floors, is on maternity leave, and there was concern over how well her floors were being covered without a per diem replacement for her.

Originally, before the intervention was started, the RD’s had taken Sarah’s floors and divided them into blocks of rooms in order to assign the remaining 6 RD’s specific coverage. While we were interning over the first few weeks, we noticed it was nearly impossible to see all of the patients that were due and also many times the blocks of floor coverage would be neglected. We discussed the importance of deciding on a useful quality improvement project that would benefit the dietitians and lessen the number of patients that were due or overdue on any given day. We decided it would be helpful to come up with a way that would allow for Sarah’s floors to be covered without adding additional stress for the RD’s. To be able to see the change in the statistics we needed to collect baseline data. Our two weeks of data collection started on October 3rd and continued until October 14th. These two weeks consisted of screening Sarah’s floors at the end of each day, after most patients had been seen. Once the floors were screened it was easy to determine the number of patients that were late on any given day and if the patient was rated as a high, moderate or low risk.

With Amy as the new clinical manager, she was ready to make changes so there would be less overdue patients. Amy was proactive with changes in her new position that involved updating the old Standards of Care. This set forth more realistic guidelines on when nutrition assessments were due, and also came in good timing in the middle of our data collection period which allowed us to assess the effectiveness of her intervention as well. These new standards of care went into effect on October 17th, and changed factors that influence nutritional risk such as specific disease states and BMI. Many of the dietitians felt many of the disease states that were originally considered high risk were more appropriate to be a moderate risk in terms of nutritional concern. Therefore, our data collection period was extended into two phases, which were before and after changes were made to the Standards of Care. These phases will be referred to as Intervention 1 and Intervention 2.

Now with the new standards of care, we collected data for two weeks from October 17th to October 28th. In this time period again at the end of each day the patients on the floors were screened and rated as a high, moderate or low. From here we were able to accurately determine how many patients were late on each floor.

Once all of the data was collected, we had to present this information to the entire team of clinical dietitians. With all of our four weeks of data for three different floors we computed averages of late patients and compared them using the baseline data and intervention one data. We also looked at the number of high, moderate and low patients that were due on the floors along with the trend in the number of patients due from Monday to Friday. (The attached PowerPoint was used to present the information to the team). The goal of this presentation was to show the team the huge difference that the standards of care had made. Although we all felt our workload to become more manageable, it was important for them to recognize the impact that the one change, being the standards of care, made to the department as a whole. Since there was a large decrease in the number of late patients, we wanted to take this even further.

We proposed the idea of changing the way in which Sarah’s floor coverage would be distributed. Originally we wanted the second phase of our intervention to be two weeks long. And during this two-week period we would screen the patients on the three floors and based on the specific patients that were due that day, they would be evenly divided up between the dietitians. This plan was to base the floor coverage on the patients that were assigned. An email would be sent out by 8:30 AM each morning by us. However, to our surprise, when the idea was proposed to the team, there was a lot of resistance to the new idea. The dietitians did not feel it would be effective for seeing and then following up with patients. Also the dietitians felt they were each assigned a particular block of patients for a reason, and did not feel it was necessary to change that as it was appropriately paired with the difficulty of their normal assigned floors.

We had two specific goals for each intervention stage of the project. Goal one was to decrease the total number of late patients on baseline data by 25% and intervention data by 5% in the two-week intervention period. The second goal was to decrease the total number of late/high patients from baseline data by 25% and intervention data by 5% in the two-week intervention period. Based on the meeting with the dietitians and the input they provided we had to decrease intervention 2 from two full weeks to 3 days. The statistics for goal one were calculated per floor. On floor 4-2 the goal was not met because we had a slight increase from intervention 1 to intervention 2 data. On floor 7-7East and 7-7West both portions of the goal were met. There was an overall decrease of 25% in the total number of late patient and there was an overall decrease of 5% from intervention 1 to intervention 2 data. Now focusing on the second goal which focused on late/high patients. It was found that all three floors 4-2, 7-7East and 7-7West met the goal. We were very surprised that all but one goal was met and although there may have been external factors that contributed to this, overall our intervention was successful.

One of the greatest barriers we identified that contributed to patients being seen late were understaffing on any given day. Given that the department was short staffed as a whole, we recognize that our figures may have been improved if not for an above average workload. Additionally, we neglected to track the number of RDs staffed on each particular day as result of personal and/or sick days which may have helped to track trends in our research. Scheduling barriers were another barrier to seeing patients on time, as the RDs are expected to be at certain meetings such as daily rounds and weekly huddle meetings which decreases the amount of time the RD is able to spend seeing patients. Saint Francis Hospital is also a teaching hospital, so it is expected that the RDs will be assigned students or interns on a regular basis. This does take some time away from the RDs workday, as that they must spend reviewing charts and nutrition assessments with their assigned students. Additionally, toward the end of our intervention, the dietetic interns were able to see more patients independently, which could have affected data in a positive way near the end of the intervention and prevented more accurate data.

There were also some limitations to our research. In the screening process, we followed the Standards of Care protocol for assessing the nutritional risk of patients and the timeline in which they must be seen. However, in the instances that a patient’s disease state did not quite fit into the Standards of Care screening protocol, we found differences each dietitian’s clinical judgement in the risk level assigned to patients, as well as our own developing clinical judgement. This was another limitation to our research, because the risk level we assigned to some patients may have differed from what another dietitian may have assigned the patient. Although both judgements are correct, it may have affected our data in the circumstance that we ranked a patient higher risk than another dietitian would have. In addition, this could have led us to potentially marking some patients as late, that may have been according the risk level that another dietitian assigned. Again, by not accounting for staffing day to day we were unable to track certain progressions we otherwise would have been able. Finally, throughout our five weeks of data collection, we did have one day of missing data. This data was Friday data (the day that the least number of patients tended to be late) so the percentage of late patients on this week may have appeared more elevated than it otherwise was.

Overall we found our intervention to be effective, as it decreased the number of total late patients on each floor, and met the target goal that we set for ourselves. Additionally, when the baseline data after intervention one and intervention two are combined, the results are overwhelming, as they represented a 69.5% decrease in the total number of patients late from our baseline data to the end of intervention two. Although we felt our data was significant, perhaps the greatest lesson we took from our experience were the challenges that arose when trying to facilitate changes as a whole team. For example, when we first proposed our intervention to the team, we were excited to present the information we found and to initiate a plan that could potentially lighten the workload for the RDs and prove ourselves valuable members of the team. However, when the RDs resisted the change we had proposed we were taken aback and surprised, as we considered ourselves a set of new eyes with a plan the RDs would be excited to try. Despite our efforts this was not exactly the case, but we did take away a couple of key lessons. Compromise. Although hesitant to try our intervention at first, through open discussion we were able to come to an agreement with the RDs for three days that they would be willing to try our idea. Flexibility. We were able to demonstrate this as we altered our nutrition intervention with the input of the RDs, by considering their previous assigned block when assigning them patients during our action phase. Creativity. After our presentation, it was essential for us to demonstrate willingness to change, and find new alternatives to our intervention strategy we hadn’t otherwise considered before. Teamwork. In summary, our greatest gain in our quality improvement project was the importance of implementing an intervention as a team, and understanding that the differences in opinions that may evolve and finding a middle ground that satisfies everyone.

References

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