The “nursing cheat sheet,” a guide to aid nursing in management of patient care

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ABSTRACT

The aim of this study was to promote nursing and practitioner satisfaction by improving communication and reducing rapid response team (RRT) activations and code blues hospitalwide by implementing the nursing cheat sheet, a list of key steps to be done before calling the primary provider. This prospective observational study took place over a year at a 636-bed teaching hospital in Central Texas. Education regarding the nursing cheat sheet was provided to nurses at monthly meetings, unit huddles, and interdisciplinary rounds. Units received monthly follow-up education and reminders, and the nursing cheat sheet was posted at nursing work areas. RRT activations and code blues were counted daily. After implementing the nursing cheat sheet, RRT activations were lower than the pre-intervention average and were outside the control band for July, August, and November. The number of code blues did not deviate from the control bands. The authors did not see a reduction in code blues after implementation of the nursing cheat sheet, but the average number of RRT activations decreased, indicating a significant difference in the number of RRT activations. It is not clear that this decrease was due to the intervention.

KEYWORDS Nursing; patient care; rapid response team

The nursing cheat sheet was developed by a multidisciplinary team composed of nurses, physician assistants, advanced practice nurses, and physicians through the House Staff Quality Council. The nursing cheat sheet covers many aspects of patient care, including key steps pertaining to pain, blood pressure abnormalities, critical lab abnormalities, insomnia, and agitation/delirium that need to be done before calling the primary provider. The aim of this study was to promote nursing and practitioner satisfaction through improvement of communication as well as reduce rapid response team (RRT) activations and code blues hospitalwide through implementation of the nursing cheat sheet.

METHODS

Education pertaining to the nursing cheat sheet was provided to nursing personnel at monthly meetings and discussed at interdisciplinary rounds. The actual nursing cheat

sheet was posted at nursing work areas throughout the hospital. RRT activations and code blues were counted from January 2017 through December 2017. The nursing cheat sheet was implemented at the beginning of May 2017. The data were represented with control charts seen in the Results section.

The nursing cheat sheet was created through the aid of the hospital's House Staff Quality Council. It was then taken to the Nursing Practice Council, which is a shared governance created to improve nursing practice and quality of care. Project goals were shared with this group. The opportunity to improve communications between physicians and nurses while decreasing the amount of time it takes to improve a patient's outcome through use of the nursing cheat sheet was self-evident. Because the Nursing Practice Council includes one staff nurse from most units in the hospital, the authors could disseminate education on the cheat sheet, the cheat sheet itself, and its overall purpose in a timely manner. Council members presented to their own units during staff

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meetings and unit huddles. The unit huddles took place at shift change and were a time when nursing transfers care of patients and reviews the assessment and plan of patients with the nurses beginning the shift. Using these same avenues, follow-up education and reminders were provided to each unit monthly. The nursing cheat sheet was posted at nursing work areas throughout the hospital for accessibility and ease of use.

Because only RRT activations and code blues were counted, no statistical analysis could be performed. Instead, control charts were created for each. The control bands for the RRT activation control chart and for the code blue control chart were created using pre-intervention data from January 2017 through April 2017. The intervention was implemented in May, so that month's data were not included. The middle band on the chart represents the average number of activations for January through April, and the two control bands are three standard deviations above or below the mean.

RESULTS

Figure 1a shows the control chart for the counts of code blues. June, November, and December had a higher than average number of code blues compared to the data for January to April, and July, August, September, and October had fewer than average code blues. However, no month was outside the control bands.

Figure 1b shows the control chart for the counts of RRT activation. RRT activations in June and October were higher than the average number before the intervention but were still within the control bands. For July, August, and November, the number of RRT activations was lower than the pre-intervention average and was outside the control band, leading us to believe that there was a significant difference in the number of RRT activations. September and December were below average but within the control band.

DISCUSSION

An abundance of literature supports the use of evidence-based interventions and checklists in the medical community. One evidence-based intervention (i.e., the Michigan Health and Hospital Association Keystone Center ICU Collaborative) reduced catheter-related bloodstream infection rates in an intensive care unit setting.¹ In Dr. Atul Gawande's study, use of a surgical checklist was associated with a reduction in death and complication rates in patients undergoing noncardiac surgeries.² To the authors' knowledge, the nursing cheat sheet is the first hybrid between evidence-based intervention and a checklist. The nursing cheat sheet, as previously described, guides nursing staff in patient care management by covering key steps that need to be done prior to calling the primary provider. The primary aim of this study was to promote nursing and practitioner satisfaction through improvement of communication as well as

Figure 1. Control charts for (a) code blues and (b) rapid response team activation. The control bands were created using data from January to April because the intervention was in May.

reduce RRT activations and code blues hospitalwide through implementation of the nursing cheat sheet.

The authors did not see a reduction in code blues after implementation of the nursing cheat sheet. However, the number of RRT activations was lower than the pre-intervention average and was outside the control band for three of the measured months (July, August, and November), leading to the belief that there was a significant difference in the number of RRT activations. It is not clear that this decrease resulted from the intervention, but it is an interesting observation.

Several limitations of this study need to be considered when interpreting the data. First, the number of beds changes from month to month hospitalwide, which has the potential to impact the number of RRT activations. Future studies will attempt to compare the number of beds each month to the number of RRT activations to account for this possible discrepancy. Second, nursing staff also has turnover on a shift-by-shift basis, with each nurse having a threshold

for activating the rapid response system that depends upon comfort level and experience. These individual thresholds could affect the number of RRT activations each month. Finally, the acuity of patients hospitalized at any given time has a high degree of variability that could affect the number of RRT activations and code blues.

The authors plan to continue with monthly education of nursing staff and data collection with the aim of potentially reducing RRT activations. It is hypothesized that this type of study is translatable to other institutions and has the potential to positively impact communications between nursing staff and practitioners as well as improve the overall care of our patients.

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Avocations

Nursing elephant and charging elephant in Zimbabwe. Copyright © Jed Rosenthal, MD. Dr. Rosenthal is a cardiologist in Dallas, Texas (e-mail: jedcardio@gmail.com).