Dashboard Metrics Evaluation Example

Note: The dashboards and data presented in this example assignment are made up. Do not use them in developing your own report. They're provided only as examples of how data could be formatted and referred to when you create your report.

The first section of this example shows two dashboards containing metrics that the evaluation is based upon. **Be sure to reference the data from the Dashboard and Health Care Benchmark Evaluation simulation in your evaluation.**

The second section is the evaluation of the data presented in the metrics and represents proficient-level work for all of the criteria in the scoring guide.

Sepsis Dashboards from Eagle Creek Hospital

(Learners: You do not have to include charts like these in your report.)

**Third Quarter Sepsis Intervention Compliance
at Eagle Creek Hospital for Adults Presenting with Sepsis**

Intervention	Needed	Completed	Compliance Percentage
Initial lactate within 3 hours	27	27	100%
Blood cultures drawn prior to antibiotics	27	19	70%
Antibiotics administered within 3 hours	27	24	89%
Fluid resuscitation if in septic shock within 3 hours	17	15	88%
Vasopressors if hypotension persists after fluid resuscitation or lactate > 4mmoL/L within 6 hours	10	6	60%
Overall	108	91	84%

**Third Quarter Sepsis Intervention
Compliance and Inpatient Mortality (Sample)**

Patient ID	# of Interventions Needed	# of Interventions Completed	Inpatient Mortality
1000	3	2	0
1009	4	4	1
1014	5	5	0
1017	5	5	0
1060	3	1	1
1074	5	4	1
1084	4	2	1
1087	5	5	0
1094	3	3	0
1106	4	4	0

Note: The staffing benchmark for nurse staffing in this unit is 2 patients per nurse. Monthly average staffing for the unit is 2 nurse workload units. The average number of patients in the unit per month in the third quarter was 6.75.

To the Director of Safety Compliance:

I have reviewed the data that you sent my way regarding our compliance with sepsis measures and intervention compliance, plus the sample of our third quarter inpatient mortality. The following contains my evaluation of the data, which shows that there are definitely areas that the organization needs to improve, as well as a proposal for a specific area and target for improvement.

Evaluation of dashboard metrics

There are numerous underperformances in the metrics regarding compliance for sepsis measures at Eagle Creek Hospital. From the dashboard regarding compliance of performing the prescribed measures and procedures, the two that stand out are the 70% compliance rate on drawing blood cultures prior to administering antibiotics, and the 60% compliance rate on administering vasopressors for those patients that require them. According to Medicare.Gov (n.d.) the national average for meeting the Sepsis bundle guidelines is 60% and the state of Minnesota is 57% thus indicating Eagle Creek is performing well at 84% total testing. But higher percentages are needed to help ensure an improved quality of life for residents of the facility.

In the case of failing to complete blood draws for cultures prior to administering broad-spectrum antibiotics, this creates a risk that there will be an inability to confirm infection and the responsible pathogen (Dellinger et al., 2013). This could result in inefficient or ineffective interventions for helping a patient. Further, by failing to confirm infection from the start, unnecessary and wasteful care interventions could be performed or ordered for patients.

In the case of the failure to administer vasopressors, we are truly gambling with the lives of our patients. As the Surviving Sepsis Campaign reinforces, "vasopressor therapy is required to sustain life and maintain perfusion in the face of life-threatening hypertensions" (Dellinger et al., 2013). The essential nature of compliance with regard to administering this intervention can be seen in our sample of data regarding compliance and inpatient mortality. Of

the four patients that required vasopressors to be administered, three received them and one did not. The one that did not passed away. A benchmarking study that included patient data from 2004 to 2009 found that the in-hospital mortality ranged from 14.7% to 29.9% (Gaieski et al., 2013). Based on our sample data, Eagle Creek Hospital has a 40% mortality rate. This is unacceptable, even in a small data sample.

Analysis of challenges in achieving acceptable performance

There are two main challenges facing the organization and the care unit primarily responsible for care of adult patients presenting with sepsis. The first issue is that the unit was understaffed throughout the third quarter. On a per-month average basis during the third quarter, the unit was understaffed by 1.375 nurse workload units. This is problematic from the standpoint that interventions may not have been performed because of the lack of appropriate staffing. Additionally, from an ACA compliance standpoint, we have not been staffing at the mandated benchmark for the unit. I understand that hiring additional staff poses its own logistical and financial challenges. However, it appears that additional staffing is required for this care unit. It is either that or we will need to start diverting patients to other care facilities, which could compound any financial challenges already faced by our organization.

The second challenge, which is also a potential cause of sepsis interventions not being appropriately administered, is that Eagle Creek Hospital does not have currently have a formalized policy or practice guidelines for any of our care providers at any level of the organization. There is an understanding that the Society of Critical Care Medicine has produced the definitive guidelines for practice around treating adult sepsis (Society of Critical Care Medicine, n.d.). However, there are no policies or procedures for how people within Eagle Creek should be applying these resources to their practice. Guidelines to ensure proper ordering of needed tests needs to be developed and enforced.

Specific target for improvement

Looking at the data in the two dashboards, it would seem that creating a plan to ensure compliance with the five recommended sepsis interventions that we are currently tracking is the

best course of action with an emphasis on the administration of Vasopressors and blood culture draws as these are the lowest areas noted on the available dashboard metrics and have the greatest room for improvement. This recommendation is coming from both a patient safety improvement and ethical care standpoint. Seventy-five percent of the inpatient mortality in the sample data from the third quarter was seen in patients that did not receive the full suite of interventions that they should have. This is unacceptable. Guidelines need to be put into place for our care teams to follow.

Ethical and Sustainable Recommended Actions

To address this issue a training program should be designed to introduce our nurses and doctors to the new practice guidelines. This program also needs to emphasize the importance of compliance with performing all necessary interventions from a patient safety standpoint. The addition of automated order protocols could help ensure timely responses to needed testing when a diagnosis of Sepsis or suspected sepsis is entered into the system.

The facility should involve key stakeholders including the ordering providers, nurses, laboratory personal and the I.T. department. Each department is needed to ensure the timely ordering and completion of the core bundle testing for Sepsis. As noted by Medicaid.Gov (n.d.) the state of MN has a 57% rate for obtaining the needed tests within the specified time frame and Eagle Creek is currently reporting 84%, but there is still room for improvement to help ensure the quality care and outcomes of the patients served.

Admittedly, this approach does not address our nurse staffing shortage. However, by formalizing training and educating the staff that we do have along with having automated ordering prompts, hopefully we can mitigate some of the staffing challenges while a solution for them is worked out with human resources and finance.

Thank you for your time. I hope this report has addressed all of the questions you had in mind when you sent me this data. If there needs to be further work regarding this issue, please come see me. I would be interested in helping to shape the direction that the organization will

take in developing the policy and practice guidelines for ensuring proper care of patients who

are presenting sepsis symptoms.

References

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