July 15, 2022

Quest for Excellence Award Submission for Nebraska Hospital Association
York General Sepsis Improvement Project

York General
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Introduction:

York General is a 25 bed Critical Access Hospital located in York, Nebraska and is a member of the Nebraska Hospital Association. Mission Statement: "Regional excellence through enhancing health and providing accessible care." The Vision Statement of York General is "To be our region's trusted choice for the improvement of health and delivery of quality care throughout life." As we strive to meet our mission and vision statements with continual quality improvement, we identified the need to focus on the care of the sepsis patient. The following award application describes our path to improving sepsis care.

Leadership and Planning:

One of our quality strategic plan goals is to assure quality across the continuum. Improvement in the identification, care and treatment of patients presenting to York General Hospital is congruent with our strategic plan for quality. The development of the strategic plan is spearheaded by our Chief Executive Officer and Senior Leadership Team in collaboration with the Medical Staff, Board of Directors and organization- wide Directors. In addition, we utilize the pillars of excellence (People, Service, Quality, Finance, Growth and Community) in which each department has goals that align with these pillars that support the strategic plan goals.

York General Hospital utilizes the Patient Care Quality Improvement Committee to identify and plan quality improvement activities throughout the hospital. The Patient Care Quality Improvement Committee is a medical staff committee with members of medical staff, clinical leaders as well as administrative representation. This committee is responsible for the provision of high quality care at York General and reports to the Medical Staff and Board of Directors on quality activities and initiatives. Quality patient care is everyone's responsibility,

yet it takes oversight and guidance from our strategic plan, medical staff and Board of Directors to ensure we deliver the highest quality care.

York General's goal is to provide safe, effective, patient centered, timely, efficient and equitable care to those who are under our care. To achieve this goal, all employees of York General Hospital will participate in ongoing and systematic quality improvement efforts. Our quality improvement efforts will focus on direct patient care delivery processes and support processes that promote optimal patient outcomes.

Process of Identifying Need:

Hospital and Medical staff leadership identify quality improvement projects based on either State or National patient quality improvement initiatives, identified areas for improvement in patient care, and through our strategic planning process.

When the Nebraska Hospital Association 2020 Sepsis Toolkit was received, our Chief Operating Officer/Chief Nursing Officer presented the information to the Patient Care Quality Improvement Committee and sought approval and support for proceeding with a focus on improvement of sepsis care. It was identified that York General needed to have a consistent process in place for the identification, care and treatment of the sepsis patient. In October 2020 we started on our journey and Commitment to Creating an Effective and Efficient Sepsis Program at York General (see supporting documents) was adopted utilizing the following goals for the program and team:

1. Designating a multidisciplinary team that will address sepsis as a whole and allow collaborative care from all caregivers. This team will coordinate the program and address successes and barriers. This team will also be responsible for

communicating results of the program to quality leaders, York General employees and Medical Staff.

2. Implementing evidence-based protocols and algorithms that will drive consistent, high-quality care in all areas.

3. Assessing the effectiveness and gaps in care given in order to continuously improve the care that is given.

4. York General commits to improving sepsis care for the patients and residents we serve.

Resources utilized for this project include; Surviving Sepsis Campaign from the Society of Critical Care Medicine, Sepsis 911, NHA Sepsis toolkit, Centers for Disease Control, and the Sepsis Alliance.

Process Improvement Methods:

The Nebraska Hospital Association sepsis toolkit was key to our development and progress. A diverse team was put together to create a sepsis committee which included representatives from leadership, quality improvement, nursing, lab, pharmacy, case management, clinical analyst, and a Physician.

Initially, we used the Nebraska Hospital Association gap analysis, with minor modifications to determine where we needed to start. For the first year, we had an overall goal for the hospital to complete the gap analysis and implement actions to change 50 of the 58 possible "no" responses to "yes" responses. After completion of our baseline gap analysis in October 2020, we only had five yes responses, so we knew we had a lot of processes to put into place. A timeline was assembled for implementation of each task and team member assignments

were made. By the end of the first year, we had taken actions to turn 100% of the "no" responses to a "yes" response. One of the supporting documents is the first page of our gap analysis. This illustrates all of the items we needed to ensure we had put processes in place to change our response from "no" to "yes".

Utilizing data and resources from the Nebraska Hospital Association sepsis toolkit, our team developed several tools for staff and medical staff to use; such as staff and medical staff education materials, a sepsis team communication tool, a chart abstraction tool, order sets for adults, pediatric and newborns, a sepsis screening tool, improved documentation in the electronic medical record, a sepsis dashboard for reporting, letters to providers when they met criteria and when their care did not meet criteria, an education event for EMS providers, public education tools, patient education resources, nurse driven protocols, and set timeframe expectations for lab, pharmacy and nursing.

Meetings were held regularly to facilitate meeting our goals and members reported back to the committee on their assignments. Minutes from the sepsis committee, team activities and new forms were placed on the monthly Patient Care Quality Improvement committee agenda for discussion, review and approval. Medical staff adopted and approved the newly created order sets. The tools (see supporting documents) that we find most helpful in meeting our goals include the York General Sepsis algorithm and checklists.

Algorithms and nurse initiated order sets were created to give the nursing staff more autonomy to order appropriate labs and interventions when sepsis is first identified. Once labs are complete, the nurse is able to inform the provider of lab results and interventions implemented, and the provider can implement medications and further intervention as indicated. This nurse driven order set was approved by all medical staff, and has given our nurses the

autonomy to kick-start the sepsis identification process, get critical results quickly, and improve patient care. An order set was also created for pediatrics and approved by medical staff if needed.

Results

Prior to October 2020, we had no data related to the care of the sepsis patient and we didn't have any idea how many patients we were seeing with potential sepsis. After the process improvement activities, results are entered on our sepsis dashboard (enclosure 4), and any case with a potential "fallout" is reviewed in detail at our monthly Patient Care Quality Improvement Committee meeting. The staff and providers involved are provided written feedback in regards to the care and treatment provided. This may involve re-education, documentation improvement, discussion of antibiotic selection, or seeking clarification for the decisions regarding the care and treatment provided.

Our sepsis dashboard was developed in March of 2021 and we began collecting baseline data. As you can see on the dashboard the majority of fallouts center around antibiotic administration and/or selection and timely initial identification of sepsis. In our second year, we set a hospital goal to have all care measures met in 70% of patients identified to meet sepsis criteria. We will continue to review care provided and care measures met for this next year, and ultimately would like to have 100% of all care measures met with this patient population. Ongoing focus and education will need to be provided as well as the Patient Care Quality Improvement Committee review of the care provided with feedback to staff and medical staff.

Lessons Learned, Replicability, Sustainability

We learned that communication was a key element to implementation. We implemented a monthly sepsis newsletter which included information for staff, sepsis statistics, and an update

on what our committee was working on. First, we created a checklist for nursing and physicians to utilize for screening patients as well as making sure we were meeting all of the sepsis treatment criteria. We learned that our new forms needed to be easily accessible by all nursing departments, so the checklist was added to our intranet for easy access. We also found that updating our documentation could help remind staff of what needed to be assessed, and to complete their assessment routinely. The electronic medical record system was updated for easy documentation of sepsis screenings on admission and every shift, as well as documentation of sepsis patients. Our next goal was to get policies and procedures in place. We updated our old policies and procedures to meet our current criteria, which were approved by medical staff.

As we began our journey to improving sepsis care we understood that gaining medical staff buy in and patient education would be two of our biggest challenges. The medical staff didn't believe we had very many septic patients. Early on we learned that we have to discuss them as pre-sepsis, meaning, they are exhibiting signs and symptoms but are not necessarily in full blown sepsis. Once we could all change our way of thinking about sepsis and identifying early indications, intervening before the patient became septic, we were able to create better buy in.

We provide every patient with education, but we had never provided education on sepsis, so we needed to start providing this without creating an overwhelming fear in our patient. Gaining patient compliance can be difficult, but we created tools and resources for when to seek help and treatment or simply call their medical provider.

We also know the value of education and giving staff the "why" is important in our organization. Clinicians want to know the "why" and how does this help my patient. A power point educational presentation with voice over was created and uploaded to our learning

management system and assigned to all nursing staff. We have enclosed the first page of the power point as one of the supporting documents. Education included nursing staff from each of the hospital nursing departments, Home Health, Dialysis, Long Term Care, and Assisted Living. Our final step in our education process was working with our local EMS. We held an educational workshop at the hospital for local first responders and paramedics last fall.

During this process we learned that it has been difficult to determine time zero. If the patients vital signs did not flag them for sepsis alone we needed to also look at the time the labs were reported. We had to first define what we would call time zero, and this is when they are admitted to Emergency Department or to the Inpatient unit if they are a direct admit from a clinic or other setting.

To sustain our sepsis goals and outcomes we will to provide education, monitor outcomes and follow up on any care not meeting the care measures. Patient Care Quality Improvement Committee will review patient outcomes and make changes as needed to ensure patients receive timely care with appropriate interventions.

In summary, our process was effective and took some time to implement. Other facilities can replicate our process by starting with a gap analysis to determine where their greatest needs are and set their goals for implementation. Education for staff, patients, and the community is necessary to bring awareness to sepsis. Creating forms and updating the electronic medical record have helped staff with documentation and meeting our sepsis goals. We have created sepsis screening and treatment as a standard of care. Nursing staff and medical staff have adapted well to the new guidelines and standards of care. We will continue to monitor for missed care opportunities and educate staff annually to continue to meet our goals and provide the highest quality of care to our patients.

Supporting Documentation:

Commitment to Creating an Effective and Efficient Sepsis Program

YORK GENERAL

October 19, 2020

Commitment to Creating an Effective and Efficient Sepsis Program at York General

YORK GENERAL HOSPITAL, Board of Directors, CEO, Senior Leadership Team, Patient Care Quality Improvement Committee and Medical Staff commit to creating a sepsis program within our organization that will provide high-quality, evidence-based sepsis care for all patients. This program will be supported with necessary resources to create an effective and efficient program that will best serve our patients.

Goals of the Sepsis Program will include, but are not limited to:

Designating a multidisciplinary team that will address sepsis as a whole and allow collaborative care from all caregivers. This team will coordinate the program and address successes and barriers. This person will also be responsible for communicating results of the program to quality leaders, York General employees and medical staff.

Implementing evidence-based protocols and algorithms that will drive consistent, high-quality care in all areas.

Assessing the effectiveness and gaps in care given in order to continuously improve the care that is given.

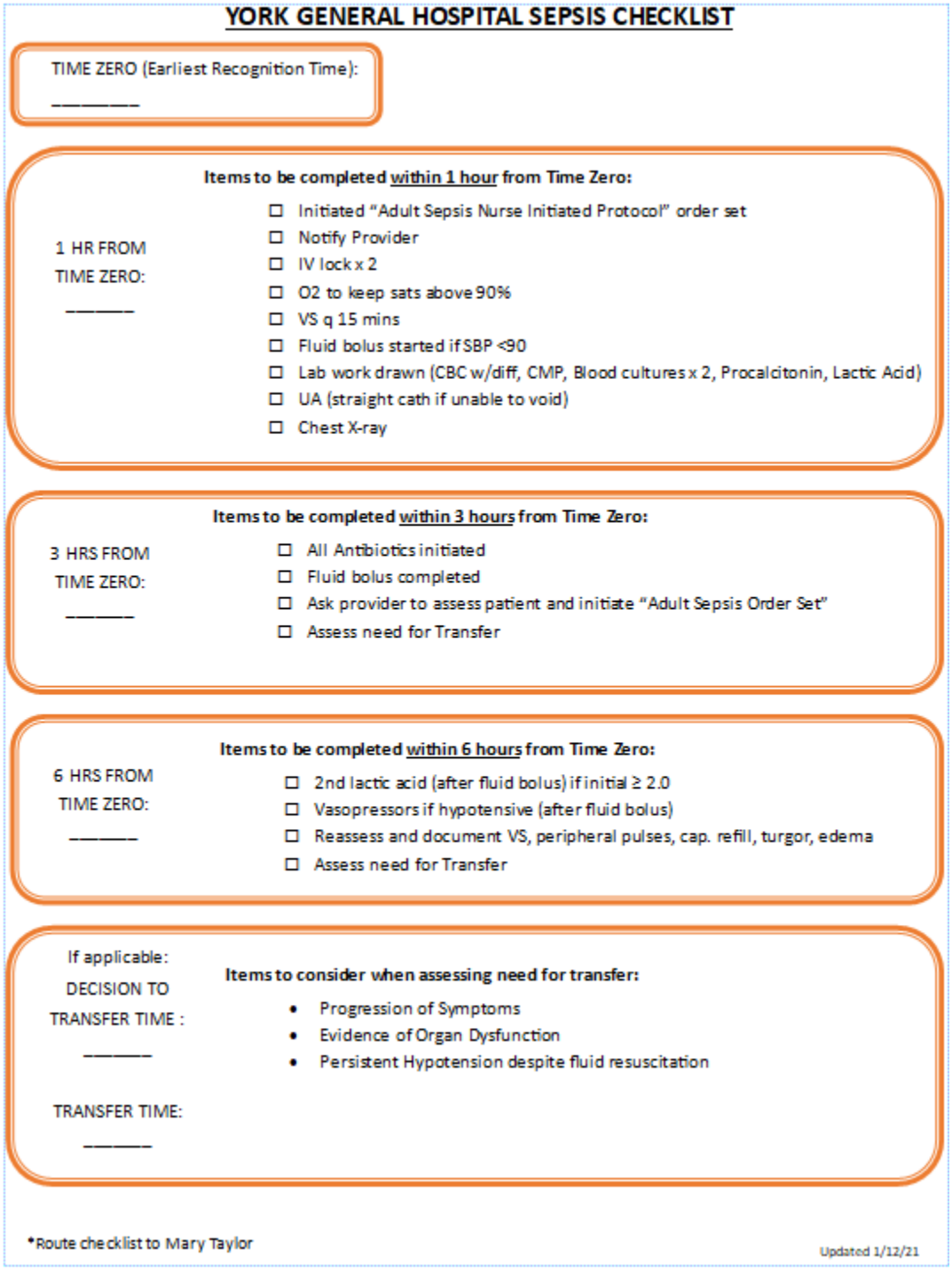
YORK GENERAL, commits to improving sepsis care for the patients and residents we serve.

Chief Executive Officer	Date 10/26/2020
Patient Care Quality Improvement Committee Chairman	Date 11/11/2020
Chief of Staff on Behalf of Medical Staff	Date 11/16/2020
Board of Directors, Chairman	Date 11-23-2020

Gap Analysis

York General Hospital 2020 – 2021 Sepsis Gap Analysis Implemented October 2020 – completed September 2021 Organization Commitment/Team			
Organization Commitment/Team			
	Completion date = Yes	Not completed = no	
Physician / Provider and nursing leadership participate in action planning for sepsis initiatives	11/2020		Dr. Hotovy on the team.
Multidisciplinary team in place and regularly occurring meetings from various care areas: ED, ICU, med/surg, perinatal, pediatrics, clinic	11/2020		Put into place October 2020/November 2020
Executive sponsor receives regular data reports and provides feedback	11/2020		COO/CNO team lead
Sepsis team is part of/reports to quality structure in hospital	11/2020		All minutes and activities will go to Patient Care Quality Imp
Managing sepsis is aligned with hospital's quality, safety or organizational goals	10/2020		Yes, hospital goal for quality and several departmental goals with focus on quality
Baseline data collection completed for process and outcome data	12/2020		yes
Dedicated Sepsis Resources / Sepsis Coordinator / Lead			
Dedicated sepsis resource in place (in action steps identify the title) – who is going to take responsibility for outcomes? FTE allocation/time commitment to sepsis role.	11/2020		FTE not dedicated to this, but will be a team approach with multidisciplinary responsibility
Scope of the Sepsis Program – are all units included?	11/2020		Yes, focus on hospital first, then Dialysis, Home Health and long term care
Identification/Screening			
Early alert or warning system/process in place in the ED or describe triggers for sepsis screening:	2/2021		Yes, screening tool in place
ED	2/2021		Yes, screening tool in place
Oncology	2/2021		Yes, screening tool in place
Medsurg/ICU	2/2021		Yes, screening tool in place

Sepsis Algorithm and checklists – Adult



YORK GENERAL HOSPITAL SEPSIS CHECKLIST

TIME ZERO (Earliest Recognition Time):
_____

Items to be completed within 1 hour from Time Zero:

1 HR FROM TIME ZERO:
_____

- ☐ Initiated "Adult Sepsis Nurse Initiated Protocol" order set
- ☐ Notify Provider
- ☐ IV lock x 2
- ☐ O2 to keep sats above 90%
- ☐ VS q 15 mins
- ☐ Fluid bolus started if SBP <90
- ☐ Lab work drawn (CBC w/diff, CMP, Blood cultures x 2, Procalcitonin, Lactic Acid)
- ☐ UA (straight cath if unable to void)
- ☐ Chest X-ray

Items to be completed within 3 hours from Time Zero:

3 HRS FROM TIME ZERO:
_____

- ☐ All Antibiotics initiated
- ☐ Fluid bolus completed
- ☐ Ask provider to assess patient and initiate "Adult Sepsis Order Set"
- ☐ Assess need for Transfer

Items to be completed within 6 hours from Time Zero:

6 HRS FROM TIME ZERO:
_____

- ☐ 2nd lactic acid (after fluid bolus) if initial ≥ 2.0
- ☐ Vasopressors if hypotensive (after fluid bolus)
- ☐ Reassess and document VS, peripheral pulses, cap. refill, turgor, edema
- ☐ Assess need for Transfer

If applicable:
DECISION TO TRANSFER TIME :
_____

TRANSFER TIME:
_____

Items to consider when assessing need for transfer:

- Progression of Symptoms
- Evidence of Organ Dysfunction
- Persistent Hypotension despite fluid resuscitation

*Route checklist to Mary Taylor

Updated 1/12/21

Sepsis dashboard

YORK GENERAL SEPSIS DASHBOARD FY '21 & FY 22																		
	March	April	May	June	July	August	Sep.	Y 21YTD	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	YTD
Indicators to be completed w/in 3hrs:																		
Serum Lactate Drawn	4/4	3/3	6/6	7/7	5/5	3/3	NA	28/28	1/1	NA	3/3	5/6	3/3	2/2	1/1	2/2	3/4	20/22
Blood Cultures drawn b/f antibiotic admin.	4/4	3/3	6/6	6/7	5/5	3/3	NA	27/28	1/1	NA	3/3	5/5	3/3	2/2	1/1	2/2	2/4	19/21
Broad Spectrum Antibiotics Initiated	2/4	1/3	4/6	6/7	4/5	3/3	NA	20/28	1/1	NA	3/3	4/6	2/3	2/2	1/1	2/2	3/4	18/22
30mL/kg IVF Bolus Initiated	4/4	3/3	6/6	7/7	5/5	3/3	NA	28/28	1/1	NA	NA	4/4	2/2	2/2	1/1	2/2	4/4	16/16
Indicators to be completed w/in 6hrs:																		
Repeat Lactate completed	2/2	3/3	4/4	3/3	3/3	2/2	NA	17/17	1/1	NA	NA	4/4	2/2	2/2	NA	2/2	NA	11/11
Vasopressors Started (<90 SBP)	0/0	0/0	0/0	0/0	0/0	0/0	NA	0/0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Repeat Volume Status & Tissue Prefusion Assess.	4/4	3/3	4/4	4/4	4/4	2/2	NA	21/21	1/1	NA	1/1	5/5	2/2	2/2	1/1	2/2	1/1	15/15
Number of patient cases reviewed	4	3	6	7	5	3	0	28	1	NA	3	6	3	2	1	2	4	22
Cases Referred to PCQI	2	2	2	2	1	0	0	9	0	NA	2	1	1	0	0	0	3	8
All Care Measures Met	2/4	1/3	4/6	5/7	4/5	3/3	NA	19/28	1/1	NA	2/3	4/6	2/3	2/2	1/1	2/2	1/4	15/22

Sepsis Education