

Caring for Patients with Ebola in U.S. Hospitals: A Nursing Perspective

**Clinician Outreach and
Communication Activity
(COCA)**

Conference Call

November 24, 2014



TODAY'S MODERATOR



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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention

**University of Nebraska
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Medicine**

The Focus

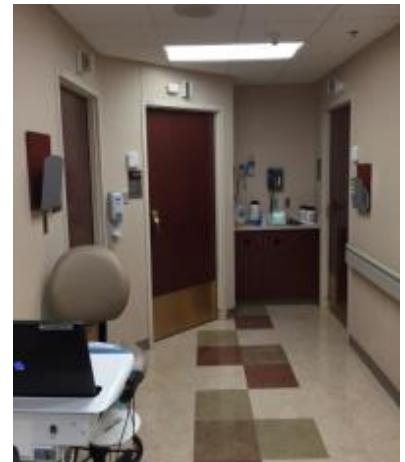
100% ED Screening



- ❑ All EDs are a little different
- ❑ Identify the strategies that work for your ED and hospital

Where will they go?

- ❑ Separate location area, move out of main thoroughfare
- ❑ Bathroom adjacency is important
- ❑ Extra room located in zone for trash staging or family needs
- ❑ Ability to close off- egress option?
- ❑ Run through the “what if’s”...
- ❑ What will your process/workflow look like?
 - ❑ **Nebraska Medicine Example:**
ED Ebola Protocol



The ED Tools

☐ PPE

- ☐ Slow Down...
- ☐ Practice like you play....
- ☐ Roles (must have donning and doffing partner)!
- ☐ PPE Kit

☐ Go Kit

- -Laminated CDC case definition and risk algorithm
- -IV Start Kits X 2
- -Appropriate lab tubes
- -Bleach wipes
- -Disposable stethoscope

☐ Lab

- ☐ See Health Alert Network Advisory Oct. 24, 2014

☐ Nebraska Medicine ED Algorithm example

☐ Nebraska Medicine ED Protocol example



ED Ebola Go Kit

NBU Staff Selection Process

The NBU Team includes: Nurses, Respiratory Therapists and Patient Care Techs who hold primary positions within Nebraska Medicine and **volunteer** to become members of our team

- Each individual undergoes a selection and training process that involves:
 - A formal interview
 - Validation process with home unit manager
 - Employee health screening
 - NBU specific orientation
- During the interview, individuals are evaluated for:
 - Passion for new knowledge
 - Self directed mindset
 - Critical thinking skills
 - Teamwork capabilities

Team members are selected from all clinical backgrounds to provide diversity and a high level of clinical skill mix.

The NBU staff comprises clinicians from intensive care, emergency department, medical/surgical, operating room, labor and delivery, infusion center etc...

This diversity of knowledge and skills stimulates the team to problem solve and challenge each other on unique strategies to consider.

Staff Roles within the NBU

Each staff member is trained to perform all tasks within the NBU with the exception of patient care activities that only registered nurses may perform.

- **Primary RN**

- Coordinates all patient care activities with the other RN's and provides a nursing report to oncoming staff

- **RN's**

- Support the primary RN and rotates within the other roles

- **Doffing Partner** (RN, RT or PCT):

- An active participant who assists with the doffing of PPE following specific guidelines
- Performs tasks in the designated dirty zone

- **Autoclaver** (RN, RT or PCT)

- Responsible for processing trash and linens

- **Tasker** (RN, RT or PCT)

- Performs tasks (stocking, cleaning, donning partner...). Stays in the clean zone



The Nursing Care of a patient in the NBU is not significantly different than caring for a patient in any other unit

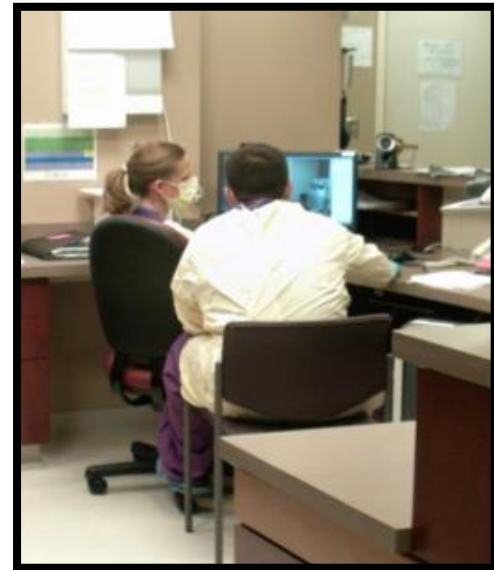
Nurses in the NBU continue to:

- Chart in the EHR
- Complete the nursing care plan
- Provide patient education
- Coordinate all care needs
- Bar-code scan Medications
- Process and complete medical orders
- Count the Narcotics in the Automated Dispensing System
- Consult and communicate with the medical team
- Provide support to the patient's family etc...

**The difference is performing our duties while
adhering to strict
Infection Control Procedures**

Infection Control Procedures

- Donning and Doffing PPE procedures
- Designated donning and doffing PPE areas
- Designated clean and dirty zones
- Designated zones in which staff performing their roles can enter
- Daily cleaning checklists with dedicated cleaning equipment for each zone
- Designated areas to keep 'clean' equipment vs equipment that has been in the patient care area i.e. x-ray machine
- Designated pathways for removing waste and used linen
- A method for transferring equipment, medications and other supplies from 'clean to dirty' and 'dirty to clean'
- A method for communication 'Provider to Provider' 'Provider to Patient' 'Patient to Family or SO'



Standard Operating Procedures:

- Intravenous access; peripheral vs central line
- Obtaining and processing laboratory tests
- Obtaining and processing diagnostic services
- Protocols and agreements in place for specialized care i.e. dialysis, mechanical ventilation
- Protocols and agreements with public utilities i.e. waste management
- Plans for care of the deceased i.e. crematorium, transport to the crematorium

**Plan, Practice, Learn and Adapt
for your unique situation**

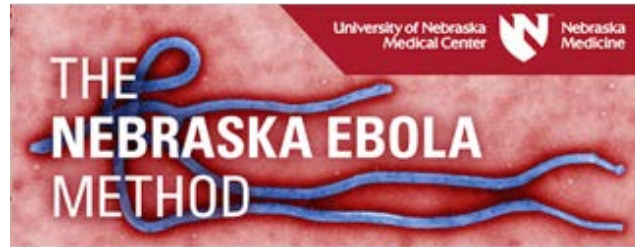


NBU Team Self Care



- Shared Governance: Staff involved in decision making. Builds team confidence .
- Hydration and nutrition
 - Meals, Drinks and Snacks available in the staff lounge
- Clothing
 - Scrubs, Underwear, Socks, Shoes
- A place to shower
 - With quality hygiene products
- A place to rest
- Coaching and support as needed
- Self-scheduling is used. Leadership assists in balancing the schedule
- Schedules are set-up in advance of activation
- Daily communications/huddle information shared and emailed each day
- Leadership connects with day and night shift every day during activation
- Team email address used for updates, interesting information sharing, etc.

Nebraska Ebola Method App



- The two courses, The Nebraska Ebola Method for Clinicians and The Nebraska Ebola Method for General Public, provide instruction and information through videos and printable documents.
- The clinicians course is available now via the iTunes U app for iPad and iPhone, through this direct link -- <https://itunesu.itunes.apple.com/enroll/FDL-BXP-WTF> -- or by searching in iTunes U. The course also is available through Moodle at <http://phtc.unmc.edu/moodle> for viewing on a desktop, laptop or other mobile devices.

True heroism is remarkably sober, very undramatic. It is not the urge to surpass all others at whatever cost, but the urge to serve others at whatever cost. ~Arthur Ash

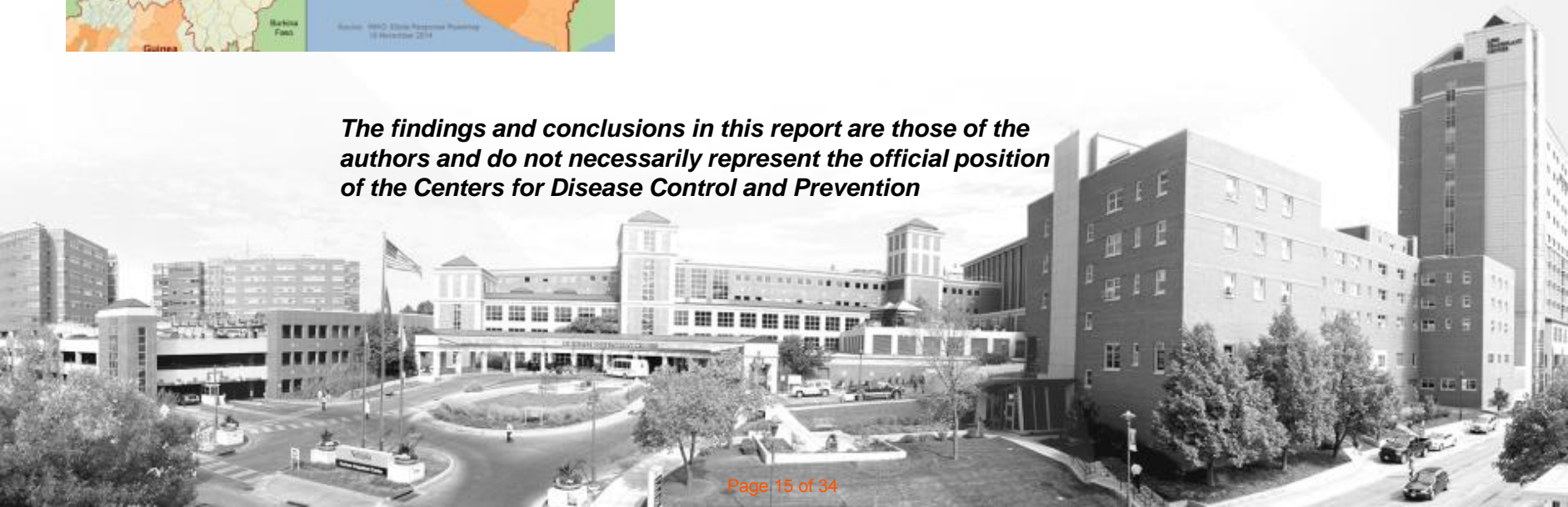


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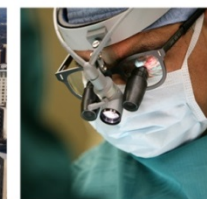
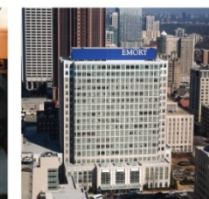
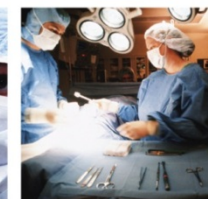
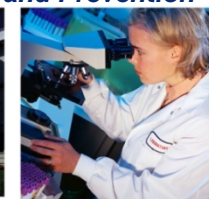
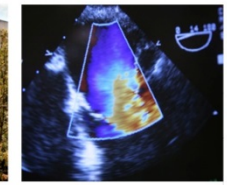
TODAY'S PRESENTERS (3)



Nancye R. Feistritzer, DNP, RN
Vice President of Patient Care
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Chief Nursing Officer
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Sharon Vanairsdale, MS, APRN
Clinical Nurse Specialist
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EMORY HEALTHCARE

Care of the Patient with Ebola Virus Disease

NANCYE R. FEISTRITZER, DNP, RN

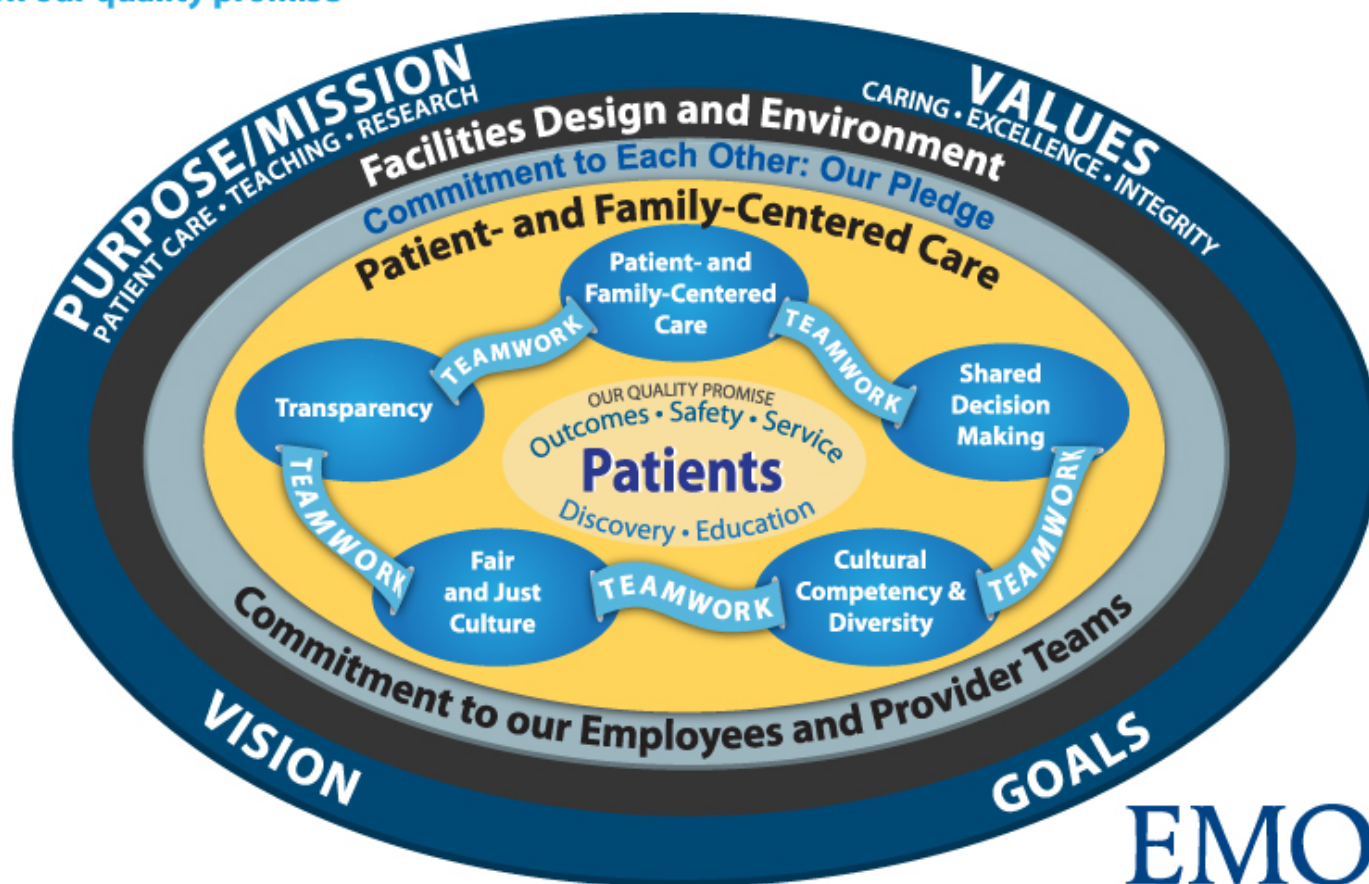
SHARON VANAIIRSDALE, MS, APRN, ACNS-BC, NP-C, CEN

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EHC Care Transformation

To Serve Humanity by Improving Health
Delivering on our quality promise



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Clinical Care:

Serious Communicable Diseases Unit



This type of facility is NOT necessary for the care of patients with Ebola



SCDU Team

- Nineteen EHC critical care nurses
- Five Infectious Diseases (ID) physicians
- EU Biosafety Office
- Laboratory personnel
- Spiritual Health
- Designated EVS personnel
- Occupational Health

Assumptions

- Only direct care providers in patient room
- No person enters room without mandatory training and demonstrated competence
- Autonomous practice (supported by experts)
 - Ventilator management
 - Continuous renal replacement therapy (CRRT)
 - Physical and occupational therapy
 - Environmental decontamination

Culture of Safety

- Shared accountability for safety
- Effective and assertive communication is central to the safety of the team
- Communication is so important, the team uses rules to govern
 - Direct patient care communication
 - Daily team huddles

Family Rules

- Follow all standard operating procedures to the best of their ability
- Ensure that others follow the standard operating procedures
- Report all accidents and/or near misses
- Report any symptoms that match the pathogen
- Report any new medical conditions



Standard Operating Procedures in the SCDU

- Provide consistency in how procedures are performed in the unit
- Allows staff to identify possible deviations when performing the procedure
- Gave staff confidence knowing they were performing procedures consistently

SCDU SOPs

- The care team train and validate competency in the following areas:
 - Donning and doffing of personal protective equipment (PPE)
 - Utilization of “Buddy System”
 - Waste management protocols
 - Decontamination and containment protocols
 - Specimen handling for diagnostic testing



Standard Operating Procedures

- Donning—patient room and anteroom
- Doffing—patient room and anteroom
- Toileting—ambulatory and non-ambulatory patients
- Waste management
- Spill clean up
- Needle stick
- Creating chemical mats
- Obtaining and handling lab specimens
- X-ray process
- Transferring equipment between patient rooms
- Cleaning durable medical equipment



Protecting Health Care Workers From Ebola: Personal Protective Equipment Is Critical but Is Not Enough

William A. Fischer II, MD; Noreen A. Hynes, MD, MPH; and Trish M. Perl, MD, MSc

- “Although PPE is effective at decreasing exposure to infected bodily fluids among health care workers, its presence is simply not enough”
- PPE itself can introduce risk
 - Proper training and competency in donning and doffing of PPE
 - Monitoring of activities by other team members
- Evaluate for and mitigate fatigue, exhaustion and complacency



Considerations for PPE

- All staff undergo training and refresher training from qualified instructors (EHSO + Key Nursing Staff)
 - Including all levels of possible PPE needed
- ALL EHS related SOPs are reviewed and approved by Biosafety, Infection Control, Nursing, and Infectious Disease Physicians.
- Removing PPE properly key to preventing contamination
- All donning and doffing of PPE was observed by another team member
 - Placed visual clues to remind staff of proper protocols
 - Noticed some complacency after several days
- Staff must be comfortable and assured with these procedures to ensure adequate patient care

PPE Risk Assessment – PPE Algorithm – PPE Matrix

Ebola Positive - Symptomatic Patient

Personnel	Activities/Jobs/Tasks	Clinical Conditions of patients	Potential Exposures/Contamination	PPE requirements	Unexpected events	Additional PPE/Changes
Nurses	Directly in contact with patients (clinical care)	<ul style="list-style-type: none"> Nausea/Vomiting Droplets Diarrhea Bleeding Rash 	<ul style="list-style-type: none"> Mucous membrane-Eyes/nose/mouth Feet Hands Whole body 	<ul style="list-style-type: none"> Full PAPR Booties Double Gloves Tyvek Suit 	<ul style="list-style-type: none"> Explosive diarrhea Projectile vomitus 	
Physicians	Directly in contact with patients	<ul style="list-style-type: none"> Nausea/Vomiting Droplets Diarrhea Bleeding Rash 	<ul style="list-style-type: none"> Mucous membrane-Eyes/nose/mouth Feet Hands Whole body 	<ul style="list-style-type: none"> Full PAPR Booties Double Gloves Tyvek Suit 	<ul style="list-style-type: none"> Explosive diarrhea Projectile vomitus 	
Lab techs	Directly in contact with patient samples	<ul style="list-style-type: none"> Nausea/Vomiting Droplets Diarrhea Bleeding Rash 	<ul style="list-style-type: none"> Mucous membrane-Eyes/nose/mouth Feet Hands Whole body 	<ul style="list-style-type: none"> Full PAPR Booties Double Gloves Tyvek Suit 	<ul style="list-style-type: none"> Sample spill BSC failure 	
Waste techs	Directly in contact with waste generated from patient rooms	<ul style="list-style-type: none"> Nausea/Vomiting Droplets Diarrhea Bleeding Rash 	<ul style="list-style-type: none"> Mucous membrane-Eyes/nose/mouth Feet Hands Whole body 	<ul style="list-style-type: none"> Procedure Mask with extended shield Booties Double Gloves Tyvek Suit 	<ul style="list-style-type: none"> Leaky bag Autoclave Validation failure 	



PPE Risk Assessment –PPE Matrix

Ebola Positive - Symptomatic Patient

	Staff Outside patient room (nurse station/resource nurse)	Staff assisting with waste management (SCDU only)	EVS Staff Managing Waste	Patient room staff (RN/MD/NT/Phlebotomist)	EVD Diagnostic Lab Staff (SCDU only)
Suspected-asymptomatic	Standard precautions	<ul style="list-style-type: none"> Standard precautions 	<ul style="list-style-type: none"> Standard precautions 	<ul style="list-style-type: none"> Impervious gown Booties Surgical mask Double gloves 	<ul style="list-style-type: none"> Coverall Double gloves Booties PAPR hood
Suspected-symptomatic (SCDU staff will handle the waste stream and room decontamination)	Standard precautions	<ul style="list-style-type: none"> Impervious gown Booties Surgical mask Face shield (goggles if face shield is not available) Double gloves 	n/a	<ul style="list-style-type: none"> Impervious gown Impervious hair cover Booties Surgical mask Face shield (goggles if face shield is not available) Double gloves *See reference below 	<ul style="list-style-type: none"> Coverall Double gloves Booties PAPR hood
Positive-asymptomatic (SCDU staff will handle the waste stream and room decontamination)	Standard precautions	<ul style="list-style-type: none"> Coverall Apron Surgical mask Face shield (goggles if face shield is not available) Double gloves 	<ul style="list-style-type: none"> Coverall Apron Booties Double gloves Face shield (goggles if face shield is not available) Double gloves 	<ul style="list-style-type: none"> Coverall Apron Booties Double gloves Face shield (goggles if face shield is not available) Surgical mask 	<ul style="list-style-type: none"> Coverall Double gloves Booties PAPR hood

EHC Ebola Preparedness Protocols

<http://emoryhealthcare.org/ebola-protocol/ehc-message.html>

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To Ask a Question

■ On the Phone

- Press Star (*) 1 to enter in the queue to ask a question
- State your name
- Listen for the operator to call your name
- State your organization and then ask your question

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