HPP Ebola Preparedness and Response Activities

Part B Project Narrative for Washington State

Background:

Washington State Department of Health (DOH) has demonstrated a longstanding commitment to working with the 102 hospitals across the state on emergency preparedness activities through the 8 Regional Healthcare Coalitions established with the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) grant funds. When Ebola Virus Disease (EVD) presented in the United States and preparedness efforts began across the country we reached out to our coalitions and the hospitals to solicit volunteer facilities to prepare for a possible Ebola patient in our state. Sacred Heart Medical Center and Children's Hospital in Spokane, part of the Providence Health Services system, was one of the first hospitals to come forward in this effort. Under contract with Sacred Heart, DOH will work to establish a regional network for Ebola patient care.

More than 126 years ago the Sisters of Providence made a commitment to providing affordable and accessible health care and as their mission states "as a people of Providence, we reveal God's love for all, especially the poor and vulnerable". With this calling, Providence Health and Services has built an integrated health system throughout the western United States of which Sacred Heart Medical Center and Children's Hospital in Spokane, WA is its largest quaternary level facility. Spokane, WA is located on the eastern border and is easily accessed through its excellent airport facilities. The flight time from Seatac International Airport to Spokane International Airport is less than one hour by commercial air.

With 644 licensed beds, Providence Sacred Heart Medical Center and Children's Hospital is the largest hospital between Seattle and Minneapolis. The Medical Center is part of the Providence Health Care Region in Eastern WA (regional Statistics noted below). The Medical Center offers many services

including kidney and heart transplant, level II trauma, robotic surgery, telemedicine, high risk maternity, level IV neonatal care, a certified stroke center and inpatient psychiatry. Its full service children's hospital has nationally renowned specialists on site for everything from congenital heart defects to cancer. In addition to these services, the Medical Center has the only comprehensive medical research center in the region where patients have access to the latest medical research via Providence affiliated clinical and physician investigators for many disease specialties.

Providence Sacred Heart Medical Center and Children's Hospital is affiliated with the University of WA Medical School and the Washington State University Medical School partnering with the clinical experiences for medical students and residents in specialties including primary care, family practice, psychiatry and transitional experiences.

Providence Sacred Heart Medical Center participated in the State of Washington's Ebola readiness activities, participated in a REP visit last fall by the CDC and HHS team, and was designated as an Ebola treatment facility for the state. There was never a question at the Medical Center about "whether to participate" in the readiness efforts as they believe their Mission is to care for anyone. The REP team was very complimentary of how they prepared to receive an Ebola virus infected patient and particularly called out how impressed they were with the laboratory services available. Providence Sacred Heart Medical Center has a doctoral-level board certified microbiologist on staff and the lab serves as a reference lab for many large organizations, routinely handles highly pathogenic organisms and select agents, and has a biosafety level-3 (BSL-3) laboratory.

Providence Sacred Heart Medical Center has actively continued structures and processes necessary to train, improve, learn, and adjust as they continue to practice and drill to their procedures. Staff members have continued to participate in the Emory training calls offered this year. They have demonstrated a commitment to readiness and will continue to perform the actions necessary provide safe care for patients, their health care workers, and the community.

In addition, through their ethicist services and unique Center for Faith and Healing, they exemplify the caring and services necessary to address concerns for the well- being of their staff and patients during

controversial situations that might arise related to dealing with a high risk pathogen within the Medical Center and community.

Providence Sacred Heart Medical Center has an excellent working relationship with local, regional and state EMS services and positioned through preparedness efforts to manage transport readiness cross county and state lines. The Washington State Department of Health is confident Providence Sacred Heart Medical Center can meet the criteria for regional planning for the development of a regional network for Ebola patient care. They provide an extraordinary spectrum of services for neonatal through geriatric patient populations, and with support from their System and community, they are well positioned to support Region X as a Special Pathogens Unit.

Licensed Beds- 996; 644 at Sacred Heart

Providence Employees (FTE's)- 6,186

Employed Physicians- 472

Employed Advance Practice Clinicians- 221

Inpatient Admissions- 38,970

Emergency/Trauma Visits- 149,312

Births- 4,441

Inpatient Surgeries- 12,640

Primary Care Visits- 598,650

Outpatient Surgeries- 18,168

Home Health Visits- 5,414

Housing/Assisted Living Days- 11,824

Long-term Care Patient Days- 13,777

ACO (Accountable Care) Lives Served- 70,000

Current Capacity:

In September of 2014, Providence Sacred Heart Medical Center in partnership with local and state officials rapidly assessed what additional structures and processes were needed to care for patients who could have Ebola Virus Disease (EVD). They are committed to providing a safe environment for their patients, our visitors and our staff. They have always taken care of sick patients who come to their hospital and will continue to do so as part of their Mission.

Immediately and on a continued basis, all patients in their clinics and hospitals were screened and routine notification processes were put in place notifying the hospital of patients who were at any level of risk for developing EVD in their region. Policies and procedures were adapted to their location using the published documents from Emory University in Atlanta. Structures and processes were put into place to address arrival of a patient from any location or designated treatment area in partnership with their local regional health district and ambulance service (EMS). The process with which a patient would arrive and be delivered to their designated Ebola treatment area were mapped out and drilled. Supply acquisition, which at the time was the most difficult gap to fill, was attained and logistics put into place. Staff and physicians in the arrival area, designated Ebola treatment area, and pertinent clinical support staff to the treatment area were all trained using a competency checklist approach on donning and doffing personal protective equipment (PPE).

Regarding staffing, all Emergency Department staff were initially trained with the structures and processes articulated in the policies. Those included managing the patient upon arrival, doffing observation and decontamination of the EMS arriving staff as appropriate, patient placement, donning and doffing and health district notifications. Intensive Care Unit RN Staffing has been managed through an "on-call" system that is activated if there are patients in the region at a moderate risk level or above. ICU RN's are the drivers of patient care and a core team along with the assistant nurse manager leaders have been thoroughly trained to received and care for patients. The adult and pediatric intensivists and anesthesiologists have trained a core group of physicians who would be on point in the event that a patient

would be admitted. Other associated staff contact would be very limited. Pediatric ICU RN's would serve as consultants to the core group of ICU nurses trained in the care of critical care level patients. Pediatric nurses are being trained at this time for donning and doffing and care for the non-critical care patient. Currently, they have 2 Adult Intensive Care (ICU) rooms identified for care for patients who may have EVD. The rooms are well contained in an area that can be secured (locked down). This particular area is adjacent to other ICU patients. Our proposed area for a Special Pathogens Unit (SPU) is currently in an unoccupied, secure, private patient unit space that will provide 2 critical care rooms and up to 9 additional med-surge rooms all with negative air flow. Operational and care delivery protocols were written and RN staff educated to them. Their current lab service department routinely handles highly pathogenic organisms and select agents, and has a biosafety level-3 (BSL-3) laboratory. Equipment cleaning processes are in place as is an agreement with a vendor named Safety Plus who are approved/authorized to manage the contaminated waste and cleaning processes that cannot be handled by current hospital practices. Waste is secured (locked) in a private location on the premises prior to pick up. They do not have an autoclave on site at this time to manage the waste, but are proposing the acquisition of one as part of the grant.

They have their own research department and IRB. Providence Health Care (PHC) has positioned itself as a regional leader in clinical research through creation and support of Providence Medical Research Center (PMRC). PMRC is located at Providence Sacred Heart Medical Center and Children's hospital and is the only physician-led comprehensive medical research center in the inland Northwest. It supports and advances the mission of PHC by advancing knowledge essential to improving care of the poor and the vulnerable. The Providence Medical Research Center (PMRC) performs "bench-to-bedside-to-community" translational/clinical research, participating in multicenter trials and also originating its own clinical trials. With approximately over 200 research studies, via federally-funded programs and industry-sponsored drug and device trials, residents of eastern Washington and northern Idaho gain access to latest advances in research via PMRC affiliated clinicians and physician investigators, in disease specialties including, but not limited to, heart and vascular diseases, nephrology, pediatric oncology,

gastroenterology and many more. A structure is currently in place for addressing the investigational therapeutics emergency request procedure that guides the implementation of experimental or investigational medications.

Their employee health department has processes to monitor and manage Ebola exposure in partnership with the local health district as appropriate. Transportation processes of virus specimens to the WA State Department of Health (DOH) have been designed and approved. Waste water management approvals have been handled by the local health district. Room cleaning procedures are in place and have been drilled. Sacred Heart has put a separate "incident command" structure in place for the oversight of successful operations and associated logistics in the event that we might receive a patient. Media training for administrators has occurred and a media management plan is in place. Management of the deceased processes and procedures are in place and through their local health district, a very reputable funeral home has accepted the responsibility of handling bodies after death.

Approach for Work Plan:

We believe this grant provides an excellent opportunity to build upon our current status to develop and create a highly specialized, continuously ready Special Pathogens Center to serve the northwest region of the United States.

Facilities and Patient Flow

Within the medical center is an overflow patient care unit that is somewhat isolated from the overall hospital operations and in close proximity to exterior access (elevator). When there are census peaks in the medical center, patients are placed within this unit. There is existing office and training space actively in use in this area that would be readily available for simulation or practices. Non-direct patient care activities in the area may be displaced in the event an Ebola patient is admitted to the area if appropriate. This space is uniquely set up to serve a special

pathogens patient population with less disruption or concern to overall hospital critical services for our community due to its location and proximity to an external access elevator. In the event that a patient would need to arrive through the Emergency Department, the pathway to go from ambulance bay to this particular patient care area is still easily accessible. The area offers the ability to convert two existing patent rooms into critical care rooms plus provide for 8 additional medical surgical beds with negative airflow in contiguous space. There are showers available for staff in the immediate area as well as support space for both health care workers and family members.

The approach is to remodel parts of the area and update equipment to meet the specifications identified in the grant. Some of the more major needs in the area include the installation of a new air handling system that will accommodate the airflow needs, required wall changes to address donning and doffing activities as well as holding areas for contaminated equipment, addition of a high-volume autoclave, communication equipment, equipment used for patient care and information technologies to interface with existing hospital systems.

Outcomes:

1. Infrastructure retrofitted to meet patient care requirements on lower 2nd floor, east wing. (L2E)
    a. Donning, doffing, equipment decontamination areas provided for
2. 2 beds critical care and 9 beds medical surgical (all negative airflow) available in same area (total 11 beds)
3. Critical patients will flow through emergency department using existing procedure if necessary. If not necessary, patients will arrive through a more private corridor and be admitted to (L2E)
4. Space will be utilized for other patient populations or health care related work/training if needed during times where there are no special pathogen patients in the unit

5. Dedicated laboratory space and equipment will be established in the unit

Staffing

Adult Intensive Care RN's are the core to the direct patient care staffing plan. The plan requires at least 3 RN's to one Ebola patient to provide care, safety and observation. For the patient who is actively bleeding and/or on dialysis we would provide up to 4 RN's per patient for additional safety precautions. Pediatric ICU nurses are also trained and in the event of a pediatric patient, would serve as part of the 3 to 4, but be supported by the Adult nurses for the remainder of the staffing. To meet the requirement of an 8 hour response time, one trained RN will be on call 24-7 to initiate care as the remainder of the staff is assembled. These core RN's will be accountable for room cleaning while a patient is occupying the room. ICU trained respiratory therapists (who only work ICU) have been trained similarly to the RN, but will have limited to no direct contact if possible.

The Emergency Department staff members are all trained on first response for care with positively screened or identified patients including donning and doffing. Very quickly the patient is handed off to the trained ICU RN and transported to the appropriate isolation room.

The Medical Center's intensivists (pediatric or adult) will assume care for the patient upon admission and are trained in the same fashion as the ICU RN's. However, we plan to utilize technology as much as possible to limit direct contact through robotic and other technology where assessments and examination may be done with remote technology. The physicians will partner with the Medical Director of Epidemiology to be certain to address all aspects of medical care requirements.

A core group of anesthesiologists are trained and would assume a call rotation upon notification of patient admission.

The laboratory staff is 24-7 and well positioned to assume care within an 8 hour notification period.

Environmental services staff supervisors have all been trained and are present on staff 24-7 ensuring availability of trained team members.

Routine, frequent debriefs with staff and leadership are planned during and after shifts to discuss quality control, identify and address concerns.

Outcomes:

1. Able to accept patient within 8 hours of notification
2. Able to care for 2 Ebola patients at one time
3. Pediatric and Adult trained RN's and MD's available to patient
4. Consider labor and delivery care at a later date
5. Staff rosters meet requirements for coverage

Training, Education and Patient Care/ Health Care Worker Readiness and Safety

The approach to training and education will be an inclusive one. They are willing to accept training, peer review and assessment by the National Training and Education center to evaluate readiness and develop an improvement plan to address gaps. They plan to routinely attend key national conferences and updates provided by centers like Emory or Nebraska Medical Center to stay current and excel in our readiness efforts. The training approach that has been used has been one of return demonstration of competencies learned. They believe the approach to "doing" provides the safest assurance that one has clearly understood and adopted correct practices. Quarterly exercises will be held and include donning, doffing, rapid identification and isolation of a patient, treatment protocols, behavioral health considerations, patient tracer drills (announced and unannounced), exposure drills, debriefing practices. Drills will include after action reviews and corrective action plans. Drills will be staffed with observers who are accountable to identify any practices outside our standards, and record identified timeline standards as identified in the

requirements. Biannual (twice a year) reports will be made to the Quality Leadership Council of the Medical Center on progress, process and effort to keep our health care workers safe.

Patient care practices and protocols will be under annual review (minimally) by the appropriate in house medical committees who address infectious disease and the special pathogens center of the Medical Center. Published updates provided by the National Training and Education Center will be incorporated as soon as received.

Outcomes:

1. Participate in training, peer review and assessment by the National Training and Education Center
2. Address gaps and improve based on the NTEC report recommendations
3. Exercise policies and procedures through quarterly drills and education including:
    i. Donning/doffing
    ii. Rapid identification
    iii. Isolation of a patient
    iv. Safe treatment protocols
    v. Behavior health considerations
    vi. Activation of Ebola plan
4. Conduct after action reviews and corrective actions plans post drill
    i. Includes unannounced first patient encounter drills, patient transport exercises, patient care simulations
5. Continue Electronic Health Care Record screening and update as indicated with new/different pathogens
6. Front line nurses (including nursing union members) will participate in patient care planning and safety procedure planning activities.

Research and Trials

Conducting research and trials is a strength of this organization as noted above. They would continue to support and administer every opportunity for patients to access investigational trials to facilitate health outcomes.

Outcomes:

1. Patients will continue to have access to investigational trials, research and protocols

Ethics and Support

Through the Sacred Heart Staff Ethicist, and the Providence Health Care Center for Health and Well-Being, we are well positioned to develop and implement care and support that aligns with the care of patients with special pathogens. Since October, the Ethics committee has met and discussed ethical considerations and approaches. They will look to strengthen the approaches on an ongoing basis.

Outcomes

1. Care plans for patients include behavioral health considerations
    i. Cultural, Spiritual, Palliative, Linguistically minded
2. Routine debriefings held with staff at least once in each shift when direct care is being provided
3. Ethical and Well-being offerings to core staff offered twice yearly to address any concerns
4. Family management structures and processes will be identified, developed and implemented

Waste Handling/ Management of Deceased

They will continue to assess, address and improve upon their current structures and processes to manage contaminated equipment, safely and securely handle waste, and examine room cleaning processes consistent with our policies and current recommendations.

Outcomes:

1. Continue contract for waste removal with current vendor
2. Contract with funeral home to assure readiness to deal with deceased
3. Acquire high volume autoclave

Supervision, Management, Supplies and Finance

The Medical Director of Epidemiology and the ICU Nurse Manager will supervise and operate the unit and lead the special pathogens unit and steering committee work.

Outcomes:

1. Develop, maintain policies and procedures at least annually
2. Program Coordinator hired and oversees program in partnership with Medical Director of Epidemiology.
3. PPE inventory maintained at level commensurate with care needs
4. Identify and maintain budget and expense oversight and management process
5. Weekly calibration of laboratory instrumentation on dedicated special pathogens equipment will be completed.

Public Relations, Communications and Security

The Chief Executive of Providence Sacred Heart Medical Center or his/her designee serves as the incident command leader in the event of admission of a potential patient. They will practice and

improve upon the approaches and management of this special situation as per the other patient care drill processes. A media ready plan is in existence at this time.

Outcomes:

1. Critical services will not be disrupted for community in the event of special pathogens admission
2. Communication plan/media management plan drilled and ready
3. Initiate Electronic Health Record confidentiality monitoring procedure with each admission
4. Incident Command process drill occurs twice a year with action reviews, corrective action plans completed to continually prepare and improve our process.

Administrative Preparedness Plan Execution:

DOH has developed an Administrative Preparedness Plan as outlined in the requirements for the HPP-PHEP base preparedness grant. We executed this plan in late 2014 when we began our Ebola preparedness activities.

DOH currently has the ability to expedite the receiving, allocating, and spending of emergency funds. Receipt and allocation of emergency funding is done at the agency level, and at the discretion of the Secretary of Health.

In the case of officially declared emergencies, certain allowances are made for the spending of funds and letting of contracts outside the normally required competitive process. In the absence of officially declared emergencies, state law allows for emergency purchasing when emergency

situations exist that threaten life and property and when existing resources are overwhelmed, yet still reporting to our oversight agency within three days of the purchase. This allows us to act quickly to mitigate the emergency while still maintaining proper oversight and accountability of the funds.

For moving funds to local governments, our agency enters into a "consolidated contract" with each local health jurisdiction to more efficiently move funds into local health across a broad spectrum of agency programs that include state and federal funds. All of our contracts with local health jurisdictions follow this after the fact model, which means that once the statements of work are negotiated and agreed upon, work can begin right away with the paperwork following up later without any additional processing by the program. The consolidated contract is on a bi-monthly amendment schedule. This makes it very convenient for moving funds quickly. In addition, special amendments between the bi-monthly cycles can be made available in urgent situations.

Budget Narrative and Justification:

See attached documents.

Performance Measurement and Evaluation Strategy:

DOH is accustomed to gathering performance measure data from our local public health agencies, healthcare coalitions, and medical system partners as part of the work done under our base HPP-PHEP preparedness grants. We include an activity in each sub-awardee contract to respond to requests for data reporting as required by program priorities and funder requests.

We have several venues for sharing performance measure data with all of our emergency response partners. We hold a monthly program update conference call with all of our contracted partners, we hold quarterly meetings with our healthcare coalition leadership and regional public health coordinators, and we share data at state conferences for cross-discipline and cross-jurisdictional emergency response partners.