

BACKGROUND

This DNP scholarly project takes place in a Mid-western hospital system that:

- Serves eight local counties with a population of 447,896
- Within four hospitals houses 1,153 patient beds.
- Employs 7,300 associates.

This Hospital system is deemed an Ebola assessment hospital by the Federal Emergency Management Agency, (FEMA.)

Ebola assessment hospitals:

- Are prepared to provide care for a patient under investigation (PUI) of exposure to highly infectious diseases.
- Are prepared to care for patients with a high level of clinical suspicion for Ebola for up to 96 hours.

PURPOSE

The purpose of this project is to revise the current standard operating procedures (SOPs) for this hospital-based infectious disease response team (IDRT) and involves the review and update of current standards of procedure and the addition of any missing recommendations. This IDRT has been in existence since 2014 and this project is the first review of SOP's.

Several gaps that were identified in December 2017 during the IDRT statewide transport disaster drill include:

- Challenges in communication amongst the team members while in full personal protective equipment. (PPE)
- Challenges associated with moving patients from the site of exposure to the de-contamination zone.
- Difficulty for the team observer to see in the patient room to monitor the staff for ill effects of prolonged PPE wear.
- Lack of checklists and standard operating procedures for specific team roles and procedures.

SUPPORTING LITERATURE

- According to the U.S Department of Health and Human Services, National Guidance for Healthcare System Preparedness,(2012) many of the same identified gaps have been noted by other healthcare organizations and include lack of communication, issues with transportation, and lack of equipment and supplies.
- According to Schultz, Koenig, Whiteside, & Murray of the National Standardized All Hazard Disaster Core Competencies Task Force (2012),creating disaster curricula and training based on core competencies and performance objectives will confirm that medical personnel are prepared to treat patients and avert catastrophe.
- According to Centers for Disease Control (CDC) (2015) SOP's should be developed for all members of the response team and for inter-facility transport of persons under investigation (PUI) for highly infectious diseases.

COST ASSOCIATED WITH IDRT TRAINING AND CARE OF A PATIENT WITH EBOLA

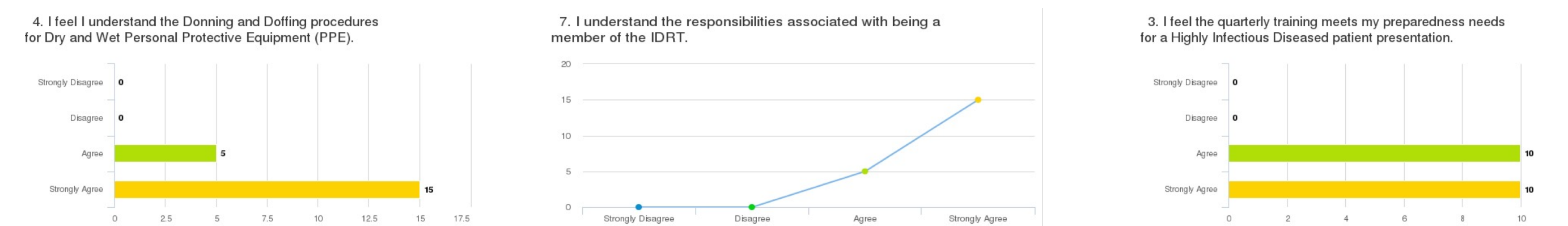
Operational Costs	
Electricity	}
Heat/Cooling	
Room Usage	
Inclusive of Staff for the Simulation Training Center Cost per Day	
\$16,600.00/ 8 Hour Day Trainings x 4 Trainings per year	
\$3,600.00 x12 Council meetings per year 2 hours each.	
Total Training Expenses	\$402,371.30
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Revenue Generation	
Potential revenue	
Caring for patients with Ebola is equivalent to a stay in the ICU.	
Cost per patient per day (ICU comparison.)	*\$12,000.00/day
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Program Benefit	
Total Revenue- *based on 10 day stay of an Ebola patient at \$50,000.00/day-	\$500,000.00
Less Expenses-	\$402,371.30
Total Program Benefit-	\$97,628.70

PERSONAL PROTECTIVE EQUIPMENT (PPE)



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FIRST QUARTER SURVEY RESULTS



Methods:

Survey results are used to update the Standard Operating Procedures (SOP's) for the IDRT:

- The survey includes eight Likert scale questions and one open-ended question.
- Twenty team members were surveyed in the fourth quarter training of 2018.
- Results indicate that IDRT members feel competent with the current SOP's related to Donning and Doffing of Personal Protective Equipment (PPE.)
- Open ended question result responses indicate they are not as competent with other procedures.
- SOP's are updated based on fourth quarter 2018 survey results.
- The IDRT members will be re-surveyed during first quarter 2019 training.
- Data from first quarter 2019 will be used for further updates of SOP's

RECOMMENDATIONS/CONCLUSIONS

The results of the surveys along with review of the accepted standards from the Center for Disease Control (CDC) will inform the final revisions of the SOPs. The improved SOPs will advance the quality and safety of care provided to patients in the event of an infectious disease outbreak.



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For References please scan QR Code.

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