Advocacy and Influence TL3

a. Provide one example, with supporting evidence, of an assistant vice president’s (AVP’s)/nurse director’s advocacy for resources to support an organizational goal.

AND

b. Provide one example, with supporting evidence, of a nurse managers’ advocacy for resources to support a unit goal.

Example b: Nurse Manager Advocacy to Support Unit Goal
In 2010, The Journal of the Association for Vascular Access (AVA) published results from a trial in which radiological confirmation of the peripherally inserted central catheter (PICC) tip was replaced with electrocardiogram (EKG)-guided technology. The results of this study demonstrated accuracy in consistently guiding the PICC line terminal tip to the superior vena cava (SVC). As a result of this research, multiple vascular access companies began investigating and then developing monitoring systems to assist in using this technique and technology. Susan Rhodes, BSN, RN, C-RN, Imaging Nurse Manager, monitored the progress of the technology to ensure it was a best practice and community standard.

Unit Goal
The Imaging Nursing Team, consisting of clinical nurses who are responsible for inserting PICC lines at bedside, met in December 2015 to discuss unit goals for the coming year. Since EKG technology is now best practice and recognized by the AVA for use in the proper placement of the PICC line tip in the SVC, one of the team’s unit goals was to decrease the time from insertion of a PICC line to initiation of therapy. The December Imaging Nurses Newsletter describing the unit goals was emailed to the 22 nurses on December 8, 2015. (Evidence TL3b-1, Updates for Imaging Nursing Newsletter) The time from PICC insertion to use was 90 to 120 minutes. The use of the new technique could decrease time to therapy, decrease length of stay, reduce radiation exposure (Sentinel Event Alert, Issue 47: Radiation risks of diagnostic imaging) and eliminate the additional cost of supplies when repositioning of a PICC line is indicated.

Manager Advocacy
Rhodes met with three companies that offered this technology and presented the rationale and the estimated additional cost to the hospital to the Non-labor Steering Committee (NLSC) in January 2016. (Evidence TL3b-2, NLSC January 2016) The NLSC immediately approved a 60-day trial of the EKG technology from the PICC company WakeMed used at the time. Rhodes selected four nurses from the Imaging Nursing Team who had national certification in vascular access to evaluate the products
and provide feedback. The team developed an evaluation tool that included ease of use, setup and accuracy of the tip placement compared to the chest x-ray radiograph (CXR) read. Interventional radiologists were also engaged in the process to consult on any discrepancies between the EKG and CXR results. The company provided education on the technology and equipment, and the 60-day trial of this first product began in March 2016. (Evidence TL3b-3, Non-labor Initiative Workbook)

The evaluations of the first product showed it was unsuccessful, with only a 27% success rate in the EKG waveforms and CXR results agreeing that the tip was in the proper position in the SVC. Rhodes worked extensively with the company’s educators to ensure a proper evaluation of the product, including a thorough review of each PICC line placement. Rhodes decided in June 2016, based on feedback from her clinical nurses, that the product would not meet WakeMed’s needs.

After the unsuccessful trial of the first product, Rhodes turned to the next company. Using this product meant changing the brand of catheters being used at WakeMed, which would cost more and require extensive education. Rhodes presented to the NLSC the results of the trial of the first product and requested a trial of the second company’s product on August 1, 2016. The committee approved the trial. (Evidence TL3b-4, NLSC August 2016)

The second company arrived with educators and products on August 15, 2016 and the evaluations began. The evaluations were extremely positive, and within a week of placing the catheters the nurses were ready to move forward with a change to this company. By week four, there was 100% accuracy in tip location, a reduction in supplies on field and an average of 52 minutes from time of insertion to use. This was an improvement over the baseline of 90 to 120 minutes.

Rhodes returned to the NLSC on September 26, 2016 to request approval to move forward with this product. Rhodes presented the results and the committee gave unanimous approval. By the end of December 2016, all Imaging nurses were competent in placing PICC lines using EKG technology. Contracts for custom kits were signed on January 27, 2017.

Approval for the use of an EKG strip to be scanned into the medical record for verification of tip location was also required. Rhodes presented the new practice change to the Nursing Policy and Procedure Committee for approval. The policy was changed system-wide to include EKG technology for proper positioning of the PICC line tip, along with the documentation element.

**Acquisition of Resources**
The positive outcomes that Rhodes brought about for this significant project was made possible through the use of multiple resources within and outside of WakeMed. The Imaging Nursing Team’s nationally certified nurses evaluated each product, and vendors from each company were instrumental in providing education and bedside support throughout the evaluation process and then with the integration of the product.
The use of EKG technology, a best practice supported by the AVA, aligns with the unit’s goal of decreasing the time from insertion to use, from 90 to 120 minutes down to 52 minutes.

The cost increase associated with the move to this product was calculated as $68,500 annually. (Evidence TL3b-5, BARD Customized Kit Sales Agreement)

The successful implementation of this technology has decreased the time from PICC line insertion to use and eliminated 85% of post-PICC line placement CXRs. Another positive outcome of the EKG technology is a decrease in the number of catheters needing to be repositioned, which saves on supplies and decreases the chance of infection for the patient.