

11th WORLD HEMATOLOGY AND ONCOLOGY CONGRESS

&

47th WORLD CONGRESS ON NURSING CARE

July 24-25, 2019 | Rome, Italy

Digital transformation: Blood transfusion procedure

Nabiha Tashkandi

King Abdulaziz National Guard Hospital, KSA

Blood and blood products transfusion is a common procedure in modern medicine yet is potentially one of the most hazardous therapeutic measures in hospitals. Evidence stated that in the last 20 years, adverse outcomes following blood transfusion have been increasing due to increased patient and healthcare complexity.

In 2016, King Abdul-Aziz Medical City for National Guards in Riyadh, which is one of the largest modern and state of the art hospital with 1200 bed capacity, experienced a major blood transfusion error where a patient received a blood of another patient. Fortunately, it was of the same blood group. Although there was no harm to the patient, the organization decided to implement a more strict, robust and vigilant automated system to ensure patient safety and reduce the risk of human errors.

To implement this system and maintain high standards of practice focusing on quality and patient safety, the hospital implemented a close loop transfusion workflow. This system is a fully automated system that starts from the physician order till administration and documentation. The workflow consisted of 6.

Steps:

1. Automated physician order
2. Automated sampling process
3. Automated product preparation and issuing
4. Automated patient verification and order validation
5. Automated administration process
6. Automated documentation process

To support this workflow, the hospital introduced a bar-code system to help nurses and health care providers reduce error throughout this process, thus ensuring patient safety. The system includes bar-coded wristbands, bar-coded labels for blood tubes and bags, and bedside scanners. In addition, all systems including lab system, infusion pumps and computers were all integrated. These systems integration was the key to our success in decreasing the risk of wrong blood to wrong patient. All stakeholders of this projects including blood bank/lab, health information technology, quality department, and nursing services worked collaboratively to ensure the success of this project. Recently the compliance to this process is 99% with zero error since the implementation of this process.

Biography

Nabiha Tashkandi is the Associate Executive Director Nursing Services at King Abdul-Aziz Medical City, Ministry of National Guard, Riyadh since October 2016. She received her BSN from King Abdul Aziz University in Jeddah in 1993 and her Master of Science in Nursing in 2004 from the University of British Columbia, School of Nursing in Vancouver, B.C. Canada. She joined King Abdul-Aziz Medical City in 1997 and has more than twenty-five years of clinical experience in nursing and healthcare system as she advanced from staff nurse to supervisor to Director of Clinical Nursing prior to the current position she holds. She successfully launched a Nursing Strategic Plan with Vision 2020 in February 2017. In May 2017, she was appointed as President of Nursing Professional Council at the Saudi Commission for Health Specialties.

tashkann@ngha.med.sa