69 IMPROVING STARTING TIME FOR FIRST OPERATING ROOM (OR) CASES IN THE MAIN OR

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Background According to the Safety Reporting System (SRS), there is 54% compliance for the first OR cases to start on time. An analysis from the OR Benchmarks Collaborative (ORBC) shows the median for the on-time start for first cases is 64.3%. This study was conducted by a multidisciplinary team involving the Surgery Department and Nursing Services. The study includes patients admitted to the surgical unit for an elective procedure inside the main OR. The aim of the study is to increase the compliance rate for the start time of the first OR cases in the main OR from 54% to 80% by the end of April 2019, by adhering accurately to the OR start time of 0800 h for all cases coming from the surgical ward.

Methods A 5-month retrospective study was done by analyzing the generated SRS for the delayed cases. Upon analysis, six reasons were identified. After which, we utilized a Pareto chart to look at the frequency of occurrence for each reason. The outcome measure is the percentage of compliance to the start time of the first case in the main OR at 0800 h. Process measures include the average time needed for preparing patients for surgery in the surgical unit, average time of bringing the patient to the main OR, average time of nursing hand-over and sign-in of the patient in the holding area, completion of consent, and the average time of on-site arrival of surgeons and anesthesiologists. The balancing measure is OR staff average time working hours. A PDSA (plan-do-study-act) cycle was formulated which focused on the pre-operative team and preparing the patient a day prior to the procedure. The PDSA was tested and implemented for a pilot study of 2 weeks and is currently running on its third month of implementation.

Results After implementation of PDSA, the 2-week pilot study achieved a compliance rate of 89%. The compliance rate for February 2019 is at 97%.

Conclusion The project is largely successful due to continuous and effective monitoring. In the future, we seek to organize a Perioperative Committee that will evaluate the patient flow from ward to OR. Furthermore, we aim to expand the project to other units such as Day Surgery and the Endoscopy Unit, and areas that are sending patients to the OR. Ultimately, the overall conclusions are preventing delays of other scheduled cases, improving patient satisfaction, and improving the utilization of OR time.

70 OPTIMIZING APPROPRIATE DOCUMENTATION OF VENOUS THROMBOEMBOLISM (VTE) RISK STRATIFICATION AND ASSESSING CURRENT VTE PROPHYLAXIS PRESCRIPTION

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Background The aim of the study was to examine the gaps in documentation of VTE risk stratification scoring according to the Padua score in the electronic medical record (BestCare system) for medically admitted patients, and to identify the current practice of VTE prophylaxis according to any guidelines in use.

Methods A concurrent cohort of all patients admitted to the Internal Medicine Department was studied from 1 September to 30 November 2018 for the compliance of VTE prophylaxis documentation and VTE prophylaxis prescription. Data were analyzed in December 2018, a PDSA (plan-do-study-act) model was applied, and educational intervention through presentations and WhatsApp group notifications to the whole medicine team conducted. Monthly data collection was started from January 2019 onwards to identify the improvement after implementation of interventions in our practice. VTE prescription according to National Institute of Health and Care Excellence (NICE) clinical guidelines 2010 was added in BestCare as none existed.

Results A total of 405 patients were studied from 1 September to 30 November 2018. Compliance to Padua score documentation was 94% (n=382). 67% (n=142) patients were at risk of VTE. Among these patients, VTE prophylaxis prescription was not done in 33%. After implementing interventions in our practice, prospective data collected in January-February 2019 showed significant improvement in complete and appropriate documentation of VTE prophylaxis to 99% and 98% VTE prescription according to NICE clinical guidelines 2010. Monthly data will be collected on a regular basis to ensure compliance.

Conclusion The VTE risk stratification documentation and VTE prophylaxis prescription showed promising results after PDSA implementation, introduction of NICE clinical guidelines 2010, and educational interventions. This change has shown an improvement in patient quality of care and safety outcomes.

71 ADHERENCE TO SCREENING GUIDELINES FOR HEPATITIS AND TUBERCULOSIS AMONG HIV PATIENTS

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Background HIV is an infectious disease transmitted through blood or body fluids. The main cause of death for patients with HIV are opportunistic infections (OIs), since patients have a weakened immune system, leaving them susceptible to any infectious agent. OIs are becoming less frequent because of better immunity of HIV patients and earlier screening for OIs for treatment and prevention. As per international guidelines, it is recommended that patients with HIV are screened for hepatitis B, hepatitis C, and tuberculosis upon HIV diagnosis because of their frequent co-infection with HIV and similar route of transmission. However, gaps in screening for common co-infections still occur.

The aim of this study was to estimate the prevalence of hepatitis B, hepatitis C, and tuberculosis among HIV-positive patients, and to assess the adherence of healthcare workers to the screening guidelines of common HIV co-infections.

Methods This was a retrospective analysis of all HIV-positive patients diagnosed at KAMC-Riyadh from 2000 to 2018. Data regarding results of infectious diseases were extracted from each patient's medical file.

Results A total of 126 patients tested positive for HIV in KAMC-Riyadh during the study period. 53 of these patients were screened for hepatitis B, of whom four were positive; 55 were screened for hepatitis C, of whom four were also positive, and 72 patients were screened for tuberculosis, of whom seven were positive. The remainder of the patients were never screened for any of the diseases.

Conclusion More than 40% of patients with HIV were not screened for either hepatitis B, hepatitis C, or tuberculosis, which are the most common co-infections with HIV. These diseases may progress quickly and could be managed if discovered early or prevented. These results demonstrate the need for a comprehensive HIV program that involves early screening and protection against all infectious diseases.

72 PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HEPATITIS B IN KING ABDULAZIZ MEDICAL CITY, RIYADH

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Background Hepatitis B continues to affect many people in Saudi Arabia, causing a huge burden on the healthcare system for treating patients and preventing spread of the disease. Because hepatitis B is not curable, transmission of infection can only be prevented by vaccinating those susceptible, paying special attention to children of positive mothers. Guidelines suggest that all infants born to positive mothers should receive both the hepatitis B vaccine and immune globulin within 12 hours of birth. In addition to the remaining two doses of the hepatitis vaccine, infants should also be tested for hepatitis B 3 to 6 months following the last dose of vaccine. The aim of this study was to identify if international guidelines were followed after delivery in hepatitis B-positive mothers at KAMC-Riyadh.

Methods This was a retrospective analysis of pregnant mother's positive to hepatitis B who gave birth in KAMC-Riyadh during 2016–2017. Data regarding administration of vaccine and immune globulin, completion of vaccine series, and follow-up testing were extracted from the child's medical record.

Results During the 2-year study period, a total of 105 hepatitis B-positive mothers gave birth, and all infants were administered the birth dose of the hepatitis B vaccine; however, only 55 children were documented to have completed the three-dose series of the vaccine. Only 101 infants were administered immune globulin after birth, and only two children were tested for the virus.

Conclusion Infants born to hepatitis B-positive mothers do not receive special attention or follow-up. It is not known why four infants did not receive immune globulin; however, unclear documentation of the virus in the mother's file during pregnancy or delivery may be a reason. Many of these children did not receive their full vaccine series and almost all were not tested for the virus. These numbers demonstrate the need for a strategic plan for the management and follow-up of infants born to hepatitis B-positive mothers.

73 JOURNEY TO CBAHI ACCREDITATION AT NATIONAL GUARD HEALTH AFFAIRS

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Background MNGHA facilities have been accredited by the Joint Commission International (JCI) since 2006. Leaders in MNGHA believe that the accreditation process is a tool to improve the quality and patient safety in the hospital, applying evidence-based standards in performance with focus on the outcomes. A decision was made by the leadership to attain a national accreditation certificate (Central Board for Accreditation of Healthcare Institutions, CBAHI). In 2016, MNGHA facilities had the first experience with CBAHI through the ESR program. All facilities were visited by two surveyors to evaluate the compliance of MNGHA hospitals with 20 Essential Safety Requirements, as this was a national project to improve patient safety in all healthcare facilities in the Kingdom of Saudi Arabia. After this experience, MNGHA leaders were interested to submit all MNGHA facilities for a national accreditation represented by CBAHI in addition to international accreditation represented by JCI. All MNGHA facilities were scheduled for CBAHI accreditation in 2018, the Central Region in April 2018, Western Region in May, Al Ahsa in July, Dammam in August, and Madina in October, which was postponed to February 2019.

Methods A team consisting of 18 certified CBAHI surveyors was scheduled to conduct the mock survey for all regions at least 3 months prior to the real survey. MNGHA leadership fully supported the project by providing the required resources to achieve the desired outcome from the project.

Results All MNGHA facilities had their mock survey by the MNGHA's surveyors with excellent feedback with the following outcomes: tremendous learning opportunities were created during the mock survey, improve the intraregional interaction by sharing experiences, create a resource team in the system from different specialties for CBAHI accreditation. Common findings were identified among all MNGHA Regions, which led to some changes at the corporate level of MNGHA. Moreover, the impact of the project on the real survey of all hospitals was remarkable; the MNGHA's hospital scores were considered as extraordinary results:

Facility Score
KAMC - Central Region 96.40%
KAMC - Western Region 92.27%
KAH- Al Ahsa 94.66%
IABFH Dammam 96.75%.

Conclusion Building capacity is crucial in improving the system and process, utilizing local resources and appreciating staff skills and knowledge is the way to achieve the culture of a learning organization, connecting people from different systems and settings will create a culture of learning, sharing successful experiences of overcoming challenges standard with the same resources will highly impact a positive outcome in the real survey.