was US$ 5.4–6.3 billion per year. For the countries in the Arabian Peninsula including Jordan, Kuwait, Qatar, Saudi Arabia, Egypt, and Lebanon, the prevalence rates range from 4.6% to 23.6% for CDI isolates. Saudi Arabia has the lowest rate (4.6%) among these countries. A remarkable increase in nosocomial CDI cases in the adult ICU at King Abdulaziz Medical City was observed between 18 January and 11 March 2018. The aim of our study was to decrease the incidence of CDI in adult ICUs by implementing evidence-based interventions.

Methods Cluster investigations were done; a time, place, and person table created, brain storming to identify the possible risk factors was evoked by the investigative team, a root cause analysis/fishbone diagram was pulled, and corrective actions were formulated.

Clinicians: hand hygiene (soap and water), use of gloves, barrier precautions, prompt identification and early treatment of CDI cases were applied.

Environmental: proper cleaning, housekeeping protocol review, and types of disinfectants used were highlighted.

Surveillance: outcome surveillance of CDI cases was added to the patient safety annual report plan.

Administration: antibiotic stewardship program (ASP), managing staff shortage, and reinforcement of the guidelines were essential.

Results In the first quarter, the rate of CDI was 2.1 per 1000 patient-days, which dropped to 0.9, 0.4, and 0.4 per 1000 patient-days, respectively, in the second, third, and fourth quarters of 2018.

Conclusion There was a significant reduction in the number of CDI cases after timely and appropriate actions were taken. However, maintaining a zero rate was challenging. Continuous monitoring, ongoing data collection, and education were considered key to reducing CDI.

**29 IMPLEMENTATION OF AN ONCOLOGY ELECTRONIC REFERRAL SYSTEM TO IMPROVE ACCESS TO CARE FOR CHILDREN WITH CANCER (IMPACT): A QUALITY IMPROVEMENT INITIATIVE FROM A SINGLE CENTER**

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Background Delayed access to cancer care has been associated with early childhood cancer death. Improving timely access to cancer care is the first important step in the cancer treatment journey. We implemented an electronic referral system (e-RS) at the Princess Noorah Oncology Center (PNOC) to improve timely access to cancer care. This study aimed to assess the impact of implementing an e-RS on timely access to cancer care.

Methods This was an observational retrospective analytical cross-sectional study of 399 pediatric oncology patients selected through a consecutive non-probability sampling technique to review the turnaround time (TAT) of children with cancer diagnosed 12 months before (manual referral system) and 12 months after implementation of the e-RS.

Results Of the 399 pediatric oncology patients diagnosed between January 2014 and December 2015, 59.91% were male and 40.09% were female, with a median age for both sexes of 5.0 years (IQR 2.5–9.0 years). 96.3% of the patients were Saudi and 3.7% were non-Saudi. The median processing time of the manual referral system was 1075 minutes (IQR 145–1498) while the median processing time for e-RS was 125 minutes (IQR 53–1013). By applying a Mann-Whitney test of significance, the TAT between the two systems was significant (p=0.0001).

Conclusion Implementing an e-RS improved referral TAT. As a result, pediatric oncology patients had improved timely access to cancer care at PNOC based on TAT standards. The impact of this improvement on outcomes will be reported separately.