Abstract

Background: Antibiotics are routinely used in the hospital. In accordance with antimicrobial stewardship principles, it is important to ensure appropriate use of antibiotics. Inappropriate antibiotic use can lead to untreated infections, adverse effects, and antimicrobial resistance. In November 2019, an antimicrobial indication system was implemented in the electronic medical record requiring providers to choose an indication for each antimicrobial ordered. This mandatory indication system aimed to improve communication between healthcare providers and clearly identify the indication for an antibiotic order. **Methods:** This is a retrospective chart review study using data from April 1 –April 30, 2020 at a 450-bed community teaching hospital in central Illinois. All patients between the ages of 0-99 who received an antibiotic during that timeframe were included in the study. Each indication selected by a provider using the electronic health record was paired with the corresponding indication that was described or listed in the patient's documentation or diagnosis code. Pairings were labeled as either a match or not match and were deemed as appropriate or inappropriate, respectively. Based on these numbers, the percentages of antimicrobials deemed appropriate and inappropriate were calculated. **Results:** A total of 4178 antimicrobials were administered during the timeframe and included in study population. Of these orders, 715 (17.1%) did not match the selected indication. The most common indication in which discrepancies were noted was 'other' accounting for 43.5% (311/715) of discrepancies. This was followed by 'ID consult' with a 12.45% (89/715) rate of inconsistency. **Conclusion:** In conclusion, 82.9% of the antibiotics ordered were appropriately matched to the documented indication. However, some indications had inconsistencies. For this reason, some changes may need to be made to the indication options available for providers to select from and further education may also be necessary for ordering providers.