Intermountain Project ECHO
Antimicrobial Stewardship

QUINOLONE REDUCTION
(An Antibiotic Adventure)

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I knew to be successful I would need to take a multidisciplinary approach. We reached out to nursing, quality, medical staff and the infectious disease team.
We wanted to look at the indication to make sure we had the right drug for what we were treating and that there were not safer alternatives available. We wanted to make sure that the dosage was appropriate for each individual patient, especially for renally compromised patients. We wanted to make sure the duration was sufficient but not excessive. And we also wanted to make sure that we optimized the route whenever possible (IV to PO).
John Veillette came to our facility to introduce the infectious disease team and shared with me some opportunities for improvement that were specific to our facility.
EXPECTED OUTCOME

Decrease in quinolone use per 1,000 patient days

Ideally, we wanted to get our facility in line with the average of the other small facilities across the corporation. At the very least we wanted to affect a downward trend in quinolone use.
I knew I would need good data in order to select the right targets in order to make a meaningful change. I also realized that buy-in from the medical staff was going to be crucial. The antibiotic stewardship dashboard would provide the data I needed in order to monitor progress. The expertise of the infectious disease department was invaluable to this project.
I knew the first obstacle I would face would be getting the buy-in from some of the physicians on our medical staff. Once again, John Veillette and Dr. Stenejhem were gracious enough to take time and join us by telepresence to give our medical staff some education on quinolones, their place in therapy, their potential side effects and adverse reactions and the increasing resistance to them. John Veillette also did an in-depth chart review of several patients who received quinolones from our facility. From his findings it became obvious that uncomplicated bacteuria would be our “low hanging fruit”. Working with the medical staff we decided to focus mainly on UTIs and try to find a suitable agent other than a quinolone whenever possible.
In the spirit of antibiotic stewardship we will probably continue to track quinolone use going forward for sometime. To see if our lead measure was affecting our lag measure we decided to do a monthly chart review of ALL quinolone orders, using the criteria that Dr. Viellette used in his review, and bring the findings back to medical staff. In addition a quarterly antibiotic stewardship report would be given in our quality meetings.
As you can see, there is a downward trend overall. An important data point to note is the one just after September 2017. That was our meeting with Dr Veillette and Dr Stenejhem. We will continue to remind the physicians about limiting the quinolone use where we can and providing recommendations for other agents where appropriate.
References/Resources


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Questions/Comments/Concerns