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Antibiotic Stewardship in Patients with Viral Upper Respiratory Illness: Improving Quality Measures in Retail Health

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Antibiotic Stewardship in Patients with Viral Upper Respiratory Illness: Improving Quality Measures in Retail Health

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BACKGROUND

- Over 10 million people worldwide will die from antibiotic-resistant bacterial infections over next 30 years.
- Retail health clinic providers are pivotal in this global epidemiological problem, evidenced by millions of antibiotics prescribed in US.
- 30% of outpatient antibiotic prescriptions in US are estimated to be unnecessary.
- Antibiotic stewardship must balance ethical values and risks versus benefits, and advanced practice providers are morally obligated to do their part to be good stewards of available antibiotic resources.

LOCAL PROBLEM

- Setting includes 15 retail health clinics within Walgreens stores operated by Vanderbilt University Medical Center in Middle Tennessee
- Provider education to decrease barriers to antibiotic stewardship, patient engagement, and signed commitment pledges by advanced practice providers in the retail health setting was implemented to mitigate antibiotic resistance and reduce healthcare costs.
- Reliable measurements would demonstrate improvements in antibiotic stewardship.

METHODS

- Using the Evidence-Based Practice Improvement Model, a Quality Improvement project was implemented to decrease inappropriate antibiotic prescriptions for viral illnesses in the retail health setting.
- Plan-Do-Study-Act (PDSA) cycles were used over 6 weeks to evaluate the project's efficacy compared to the same time period 1 year prior.
- Provider education included encouraging all providers to voluntarily sign a commitment pledge to antibiotic stewardship. Additional recommendations were to delay prescription of antibiotics for viral illnesses until a repeat evaluation is performed in 3-5 days and provide patient education packets when indicated.

Antibiotics are not indicated for viral upper respiratory infections. Unnecessary antibiotics contribute to antibiotic resistance and death worldwide from antibiotic resistant bacterial infections.

Number of Patient Education Packets Used by Clinic: 0-1

•Antibiotic Prescriptions Written – 25.3%

Number of Patient Education Packets Used by Clinic: 2+

•Antibiotic Prescriptions Written – 22.5%



SCAN ME

INTERVENTIONS

- Provider and medical assistant education was conducted in person and virtually with 15 providers and 15 medical assistants.
- Twenty patient engagement packets were placed in each clinic for provider use
- Redcap survey was sent to all providers at the end

RESULTS

- Clinics that used 2 or more patient education packets had a clinically significant decrease in antibiotic prescriptions written.
- Overall, clinics prescribed antibiotics for viral illnesses less than 30% of the time.
- Redcap survey results indicated that most providers used the patient engagement packets and pledged to commit to antibiotic stewardship.
- There was an increase in antibiotic prescriptions written and overall sick visits in the second study period which was associated with an increase in documented bacterial upper respiratory infections.

CONCLUSIONS

- Key strengths were majority of providers supported antibiotic stewardship and commitment to safe and proper prescribing
- Implications for practice include: novice providers may benefit from an orientation in-service on antibiotic stewardship and having patient engagement packets available.
- All providers can benefit from continuing conversations surrounding antibiotic stewardship and the importance of educating patients.
- There is potential for quality improvement in antibiotic stewardship in retail health.